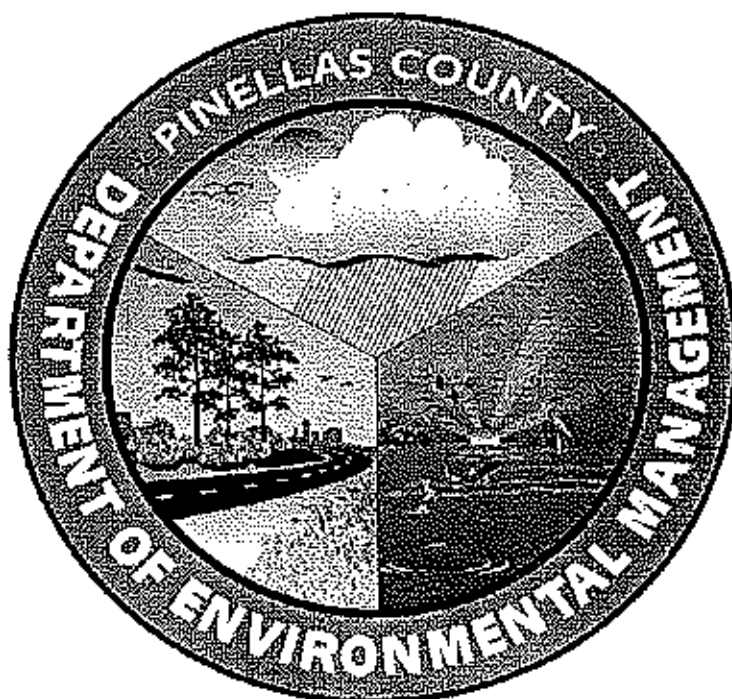


# **SHELL KEY PRESERVE MANAGEMENT PLAN**

APPROVED PLAN



prepared by

**THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
Division of Environmental Lands

October 17, 2000

## TABLE OF CONTENTS

INTRODUCTION.....	1
PURPOSE AND SCOPE OF PLAN.....	8
MANAGEMENT PROGRAM OVERVIEW.....	9
Management Authority and Responsibility.....	9
Management Coordination.....	11
Other Designations.....	12
Optimum Boundary.....	13
Existing Use of Adjacent Lands.....	13
Planned Use of Adjacent Lands.....	14
RESOURCE MANAGEMENT COMPONENT.....	15
INTRODUCTION.....	15
RESOURCE DESCRIPTION AND ASSESSMENT.....	15
Natural Resources.....	15
Soils.....	15
Minerals.....	17
Hydrology.....	17
Natural Communities.....	17
Wildlife and Designated Species.....	20
Special Natural Features.....	23

Cultural Resources.....	25
RESOURCE MANAGEMENT PROGRAM.....	25
Management Needs and Objectives.....	25
Resource Management Goals and Actions.....	28
PUBLIC USE COMPONENT.....	36
INTRODUCTION.....	36
PUBLIC USE DESCRIPTION AND ASSESSMENT.....	36
Public Use Goals and Actions.....	38
OPTIMUM CARRYING CAPACITY.....	41

## **LIST OF FIGURES**

Figure 1 - Location Map.....	2
Figure 2 - Vicinity Map.....	3
Figure 3 - Aerial Photograph.....	4
Figure 4 - Ownership Map.....	6
Figure 5 - Soil Map.....	16
Figure 6 - Natural Communities Map.....	18
Figure 7 - Pinellas County Barrier Islands.....	24
Figure 8 - Map of Resource and Public Use Areas.....	31
Figure 9 - Public Use and Bird Protection Areas on Shell Key.....	39

## **LIST OF TABLES**

Table 1 - Nesting, Resting Migrant and Wintering Birds at Shell Key.....	20
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## **LIST OF ADDENDA**

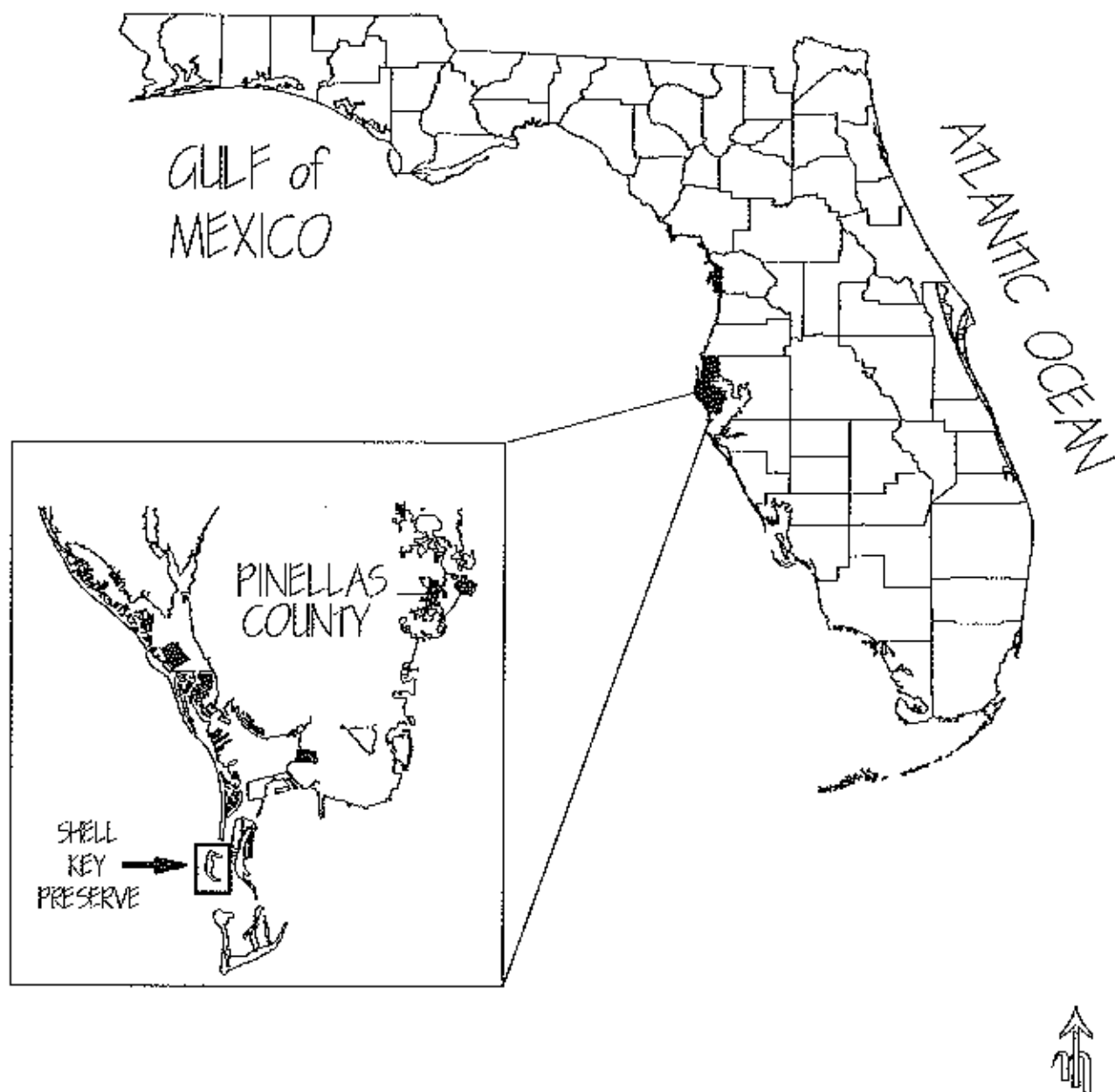
ADDENDUM 1 - Legal Description and Deeds.....	A1-1
ADDENDUM 2 - Lease and Management Agreements.....	A2-1
ADDENDUM 3 - Shell Key Preserve Advisory Committee.....	A3-1
ADDENDUM 4 - Meeting Notes.....	A4-1
ADDENDUM 5 - References Cited.....	A5-1
ADDENDUM 6 - Soil Types.....	A6-1
ADDENDUM 7 - FNAI Natural Community Descriptions.....	A7-1
ADDENDUM 8 - Shell Key Species Lists.....	A8-1
ADDENDUM 9 - Final Approvals.....	A9-1

## INTRODUCTION

The Shell Key Preserve is located in the Gulf of Mexico, immediately west of Tierra Verde in southern Pinellas County (see Figure 1). It includes a barrier island and several mangrove islands as well as the surrounding seagrass beds and sandflats. In the past, the barrier island consisted of both Shell Key and an unnamed key to the south. These two have since merged into one island which is referred to as Shell Key for the purposes of this document. Many of the mangrove islands within the Shell Key Preserve are named, such as God's Island, Panama Key, Sawyer Key, Summer Resort Key and Sister Key, although there are also a number of unnamed mangrove islands of various sizes. The total size of the preserve is 1755 acres and Shell Key itself covers approximately 180 acres with a linear distance of approximately 2.6 miles (northeast tip to southeast tip, following the center of the island). The island, however, is very dynamic and has changed dramatically over the years. Extensive seagrass beds lie to the east of Shell Key. Access to Shell Key is by boat only although it may occasionally be accessed by swimmers or waders.

All of the Shell Key Preserve is located within Pinellas County. Its southern boundary is Bunces Pass. Immediately south of the pass is the Ft. DeSoto Park Aquatic Habitat Management Area (managed by Pinellas County as a seagrass protection area) and Ft. DeSoto Park, a Pinellas County park. The surrounding area to the north and east of the preserve is heavily urbanized. To the west is the open Gulf of Mexico. Figure 2 is the vicinity map and Figure 3 is an aerial photograph of the preserve. A legal description of the area and any available deeds are included in Addendum 1.

# FIGURE 1. LOCATION MAP



# FIGURE 2. VICINITY MAP

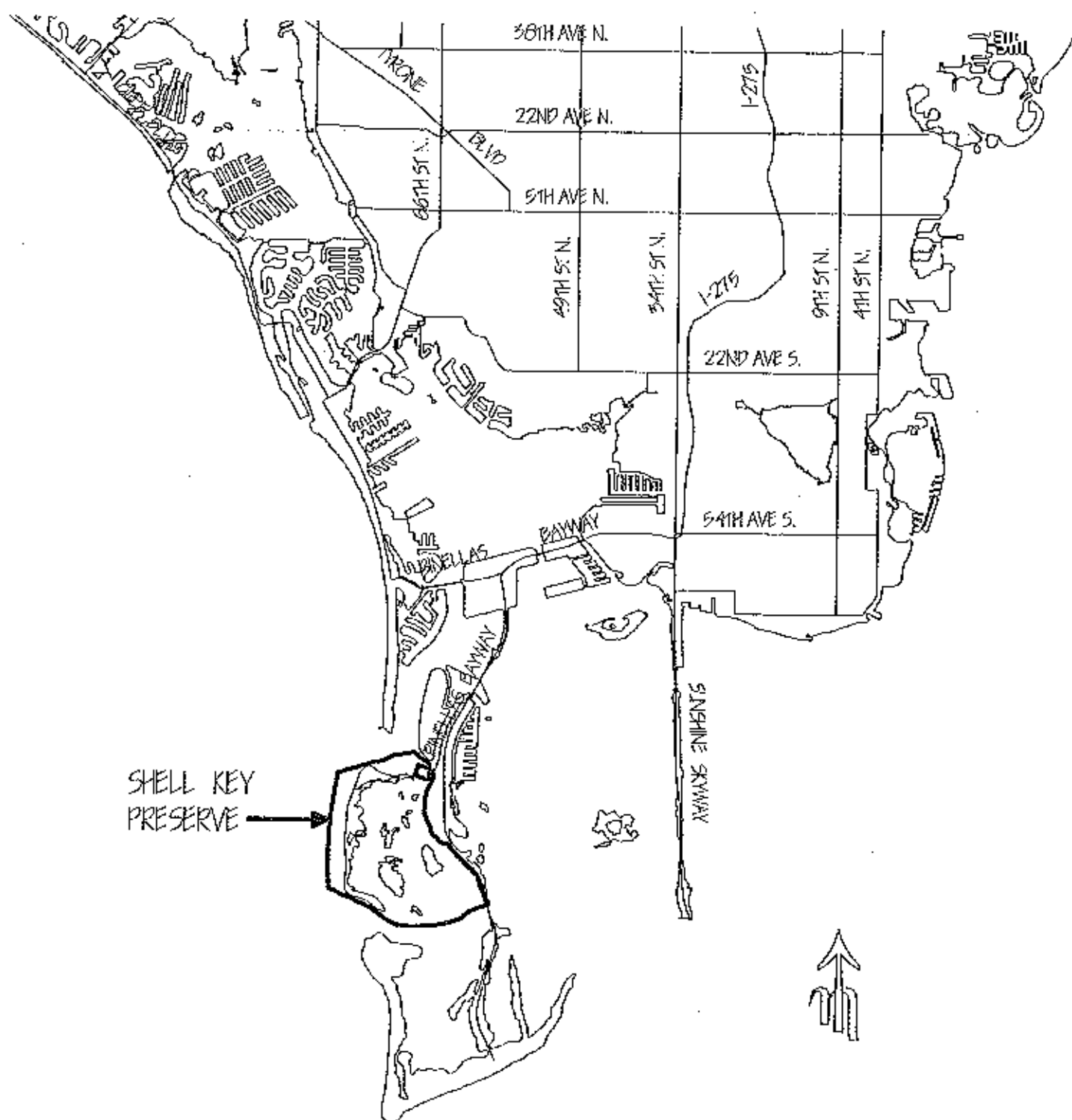
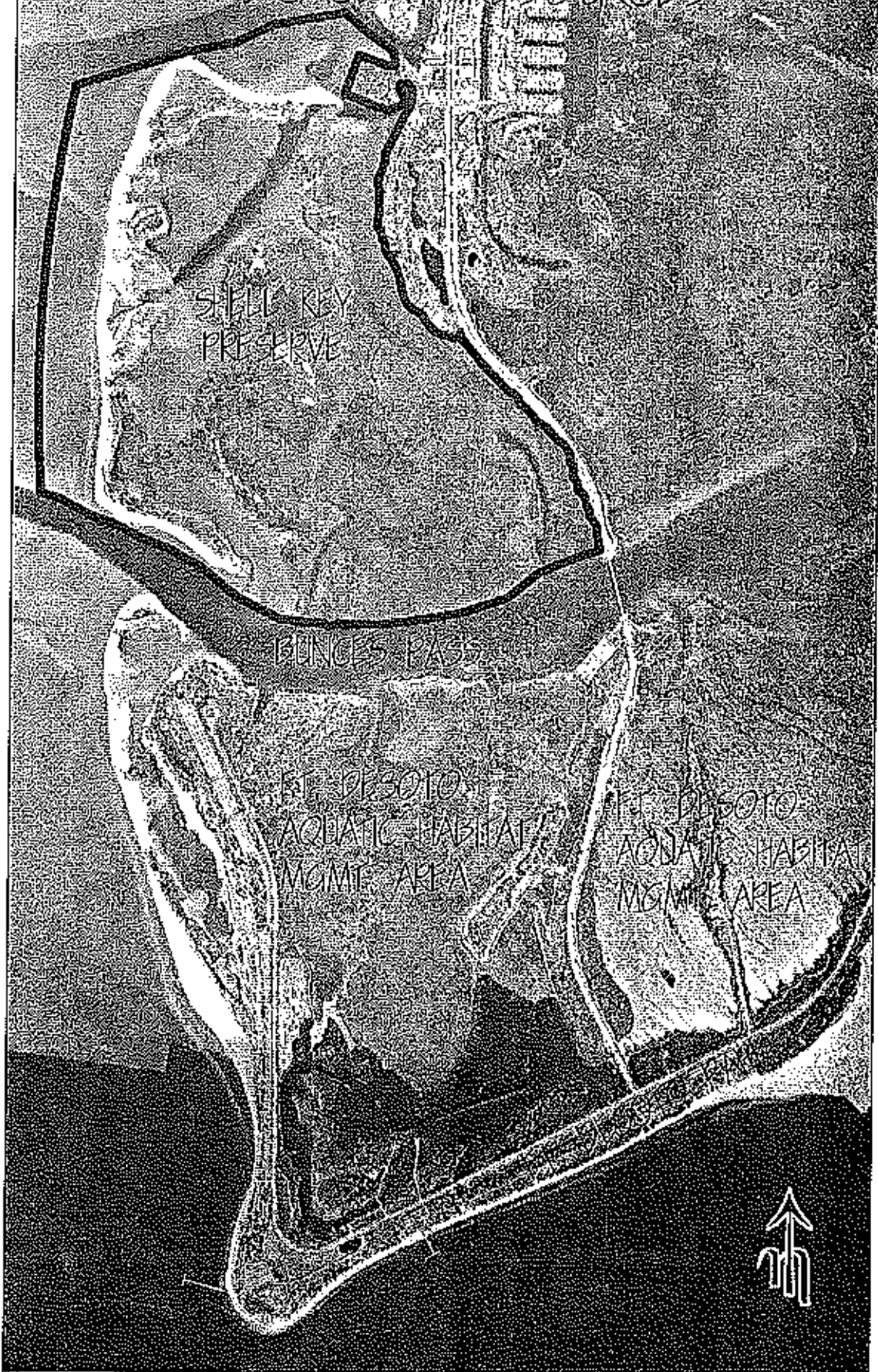


FIGURE 13. AERIAL PHOTOGRAPH OF  
SHELL KEY PRESERVE AND  
ADJACENT RESOURCES





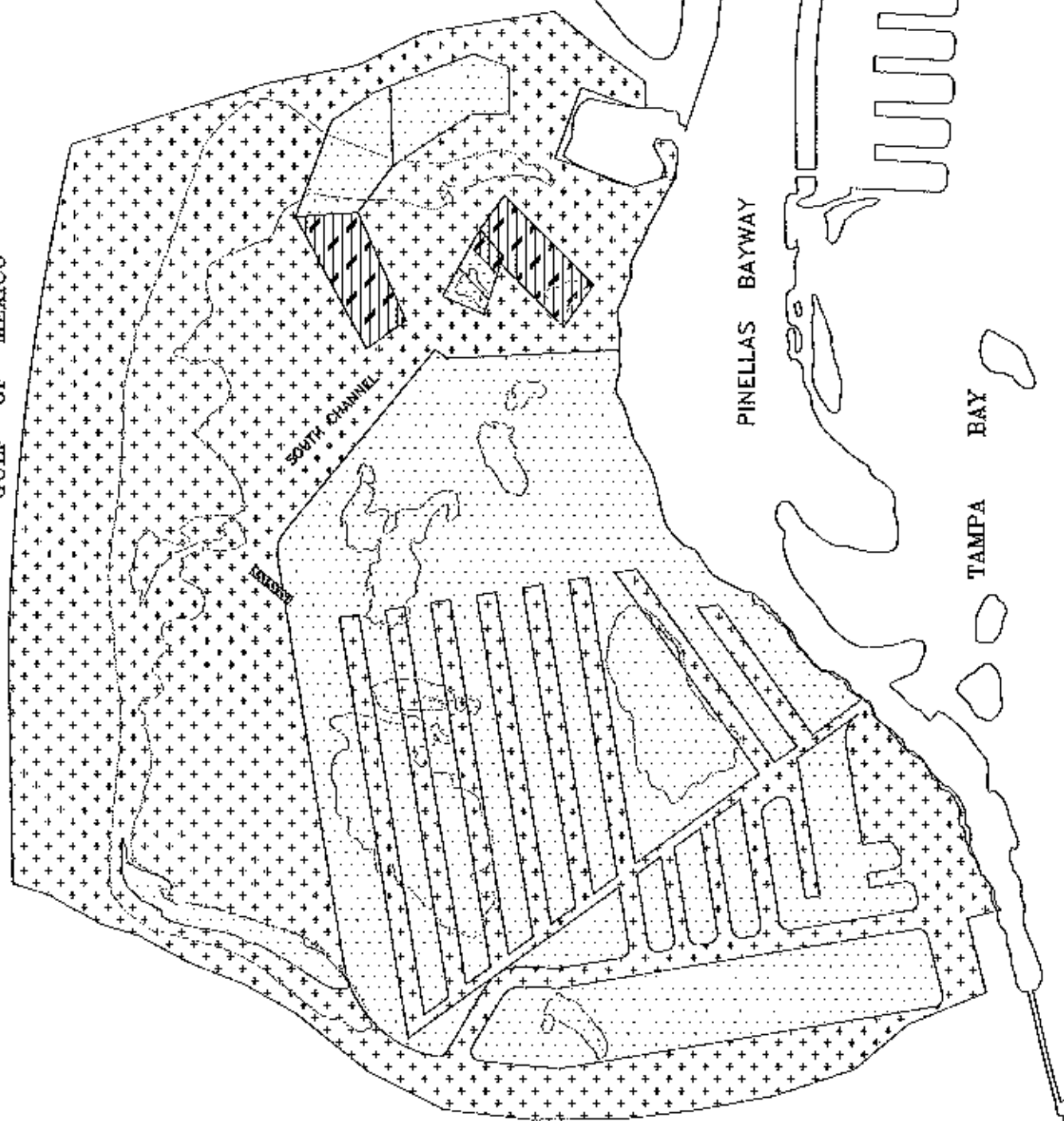
The preserve is managed by the Pinellas County Board of County Commissioners through the Pinellas County Department of Environmental Management, Division of Environmental Lands. Also key to the success of this plan is the involvement of local volunteers, such as the St. Petersburg and National Audubon Societies which have been involved with the protection of birds on Shell Key since 1992. Technical assistance is provided by the Florida Fish and Wildlife Conservation Commission and the Florida Department of Environmental Protection. Enforcement is provided primarily by the Pinellas County Sheriff's Department although the Florida Marine Patrol also has jurisdiction.

Most of the land within the preserve is within public ownership. A large portion of the property is owned by the State of Florida and was acquired in 1845 from the U. S. Government as sovereign lands when Florida acquired statehood. The State-owned areas are leased to Pinellas County under Lease No. 4228 (see Addendum 2) or placed under management agreement. The remaining public property belongs to Pinellas County and was acquired with endangered lands funds. There are a few scattered privately held lands within the preserve boundary and Pinellas County will continue to evaluate these for potential purchase. Figure 4 shows ownership within the preserve.

The most unique feature of the preserve is Shell Key itself, an undeveloped barrier island. This type of habitat has become extremely rare in Florida and is critical to the survival of a number of wildlife species that depend on coastal systems. Some of the same natural features that attract wildlife to Shell Key also attract thousands of human visitors annually. In response to the combination of heavy public and wildlife uses, Shell Key has been identified within the State as the area "most in need of conservation actions to protect wintering shorebirds" (Sprandel 1995), as well as other wildlife groups. Consequently, public activities are also addressed in the management plan. Permitted uses are primarily of a passive nature, related to the aesthetic, educational and public

# FIGURE 4. OWNERSHIP MAP



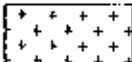
GULF OF MEXICO



## LEGEND

BUNCES PASS

### OWNERSHIP

	PINELLAS COUNTY	(660 acres - 38%)
	PRIVATE	(34 acres - 2%)
	STATE of FLORIDA	(1061 acres - 60%)

-6-



JANUARY 14, 2000

enjoyment of the area, although other compatible uses may be permitted in limited amounts. Management emphasis is placed on enhancement of the natural ecosystems within the Shell Key Preserve, however, it also recognizes public uses which are consistent with the management plan.

Improvements within the preserve are restricted to the minimum necessary for ensuring resource protection, enhancement and sustainability, while affording limited access, user safety, and compatible public uses.

There are no legislative or executive directives that constrain the use of this property other than the lease agreement with the State of Florida which requires that the property be managed **“only for the conservation and protection of natural and historical resources and for resource-based public outdoor activities and education which are compatible with the conservation and protection of these public lands”**. The lease also includes five specific conditions that establish the minimum standards for the management plan.

1. The primary purpose of the lease shall be to ensure management compatible with the protection and conservation of wintering and nesting shorebirds.
2. The management plan shall delineate core areas for the protection of shorebirds within the greater Shell Key area.
3. Critical bird habitat within the core area shall be posted to prohibit trespass and minimize human disturbance to wintering, nesting, and migrating shorebirds. The posted boundaries should remain flexible and reflective of bird use and changes in island geography and topography.
4. Pinellas County leash laws shall be enforced on Shell Key.
5. Beach raking and mechanical cleaning activities shall be prohibited during shorebird nesting season and turtle nesting season.

In addition to the lease requirements, the area is subject to appropriate local, State and Federal laws as well as the policies of the Board of Trustees of the Internal Improvement Trust Fund regarding state-owned lands and the Pinellas County Board of County Commissioners regarding county-owned or managed properties.

## **PURPOSE AND SCOPE OF PLAN**

This plan serves as the basic statement of policy and direction for the administration of the Shell Key Preserve. It identifies the objectives, criteria and standards that guide each aspect of the management of this ecosystem, and sets forth the specific management actions that will be implemented to meet management goals. The plan shall meet the requirements of Section 253.034, Florida Statutes, Chapter 18-2, Florida Administrative Code, and is intended to be consistent with the State Lands Management Plan. No significant development and resource alteration is planned, however, any such activities are subject to the granting of appropriate permits, easements, licenses and other required legal instruments. Approval of the management plan does not constitute an exemption from complying with the rules and guidelines of appropriate local, state or federal agencies. This plan also is intended to meet the requirements for beach and shore preservation, as defined in Chapter 161, Florida Statutes and Chapter 62B-33, Florida Administrative Code. The plan also is consistent with Pinellas County's adopted Comprehensive Plan approved pursuant to Chapter 163, Florida Statutes, and this is confirmed in the report from the Pinellas County Local Planning Agency which is included in Addendum 2.

The management plan consists of two interrelated components. The "Resource Management Component" provides a detailed inventory and assessment of the area's natural and cultural

resources. Resource management problems and needs are identified, and specific management actions are prescribed. These cover issues such as wildlife protection, exotic species control, and seagrass protection. The "Public Use Component" is the plan for the types and levels of public activities within the preserve. Existing public uses are reviewed and their compatibility with the management of the site are discussed within this plan. Use of the property for mining, silviculture, range management or other consumptive or commercial purposes, are not considered compatible with the management plan. Exceptions to the commercial restriction, such as passive ecotourism operations, are evaluated on a case-by-case basis for compatibility with the plan's public use and resource preservation elements.

In the development of this plan, the multiple-use management potential of the property was analyzed and it was determined that the most appropriate management for the preserve was to provide for resource protection and passive public outdoor use. Secondary uses of the property may be approved if they do not conflict with the public use and conservation purposes which the property is intended to serve.

The potential for generating revenue to enhance management also was analyzed. It was determined that multiple-use management activities would not be appropriate as a means of generating revenues for land management. Grants will be sought where appropriate.

## **MANAGEMENT PROGRAM OVERVIEW**

### **Management Authority and Responsibility**

The Pinellas County Department of Environmental Management, Division of Environmental Lands, is charged with the responsibility of administering the Shell Key Preserve Management Plan. In fact, the Department of Environmental Management created the Division of Environmental Lands

for the purpose of managing important natural areas for their beneficial functions and for the public's enjoyment of those resources. The Shell Key Preserve is managed in accordance with these principles. The Division of Environmental Lands includes three sections - Land Management, Education and Research, and all three are utilized in managing the preserve. This division currently manages many environmental lands within Pinellas County, such as the 8500-acre Brooker Creek Preserve and the 1500-acre Weedon Island Preserve.

The Department of Environmental Management also includes the technical support of several other sections that are involved in the implementation of this plan. Staff for the Pinellas County Water and Navigation Control Authority are housed within the same Department and they provide personnel experienced in coastal and submerged ecosystems. The Authority was created by Special Act 31182, Laws of Florida, and brings its powers to this plan as well. In addition, the Department of Environmental Management also includes sections that can assist with any permitting required to implement this plan and sections that can assist with any water quality issues that may arise. The Pinellas County Department of Real Estate Management also supports this plan with staff to research and implement any land purchases and the Pinellas County Department of Coastal Management within Public Works assists with the placement of any signage or channel markers within the waterway. Decisions regarding management of the preserve are made in accordance with the resource management and public use components of this plan. Concurrence from other agencies, such as the Florida Department of Environmental Protection or the Florida Fish and Wildlife Conservation Commission, and other user groups, such as the St. Petersburg or National Audubon society and recreational boaters, will be sought where appropriate.

### **Management Coordination**

The Shell Key Preserve is managed by Pinellas County in accordance with this management plan and all applicable Florida Statutes and administrative rules as well as in conformance with Pinellas County laws and policies for public lands. The vast majority of the preserve is within public ownership, being owned by either Pinellas County or the Board of Trustees of the Internal Improvement Trust Fund. Agencies and groups having a role in the management of this area are discussed below.

The Florida Department of Environmental Protection approves this management plan and all activities within the leased areas outside of the scope of the management plan. The Florida Fish and Wildlife Conservation Commission assists Pinellas County in determining and posting appropriate boundaries of the core bird protection areas. In addition, both above agencies provide technical expertise to assist in managing the preserve. The St. Petersburg and National Audubon Societies currently assist in providing volunteer staffing and expertise for the installation of signage or barriers and the monitoring of the island. The Tampa Bay Estuary Program currently assists with grant money for seagrass signage (a project that was underway and subsequently delayed to coincide with this management plan) and the Pinellas County Sheriff's Department Marine Unit is the primary agency for enforcement. The Florida Marine Patrol also has jurisdiction within this area. When possible, other volunteer groups are solicited for assistance in managing the preserve.

A great deal of emphasis was placed on involving all user groups in the drafting of this plan. A list of groups and individuals represented on the original Shell Key Preserve Advisory Committee is included in Addendum 3. This group was convened in order to assist with the drafting of a management plan that represents as many interests as possible. In order to summarize the progress of the plan and the types of comments received, minutes from the committee meetings are included

in Addendum 4 along with a chart summarizing the major issues addressed in the drafting of the plan.

The Anclote Key State Preserve Unit Management Plan, approved in 1998 by the State of Florida, was used as a template for the drafting of the Shell Key Preserve Management Plan. Due to the similarity in ecosystems and uses, much of the information and format was taken from that plan. Approval of this management plan by the Trustees in no way waives the authority and/or jurisdiction of any state or government entity that may have an interest in this project.

### **Other Designations**

The Shell Key Preserve is not designated as a Critical Wildlife Area as defined in Section 380.05, Florida Statutes. It was recommended for this designation by staff of the Florida Fish and Wildlife Conservation Commission, however, it was decided to first attempt to protect the natural resources of the area through the Aquatic Preserve program and a management plan. The site lies completely within the Boca Ciega Bay Aquatic Preserve which was designated as an aquatic preserve under the provisions of the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

Most of the waters within the preserve are designated as Outstanding Florida Waters, pursuant to Chapter 62-302 Florida Administrative Code. Administered by the Department of Environmental Protection, this program was created by Section 403.061, Florida Statutes, to address water bodies that are "worthy of special protection because of their natural attributes".

The Land Use Map in the Pinellas County Comprehensive Plan identifies Shell Key as a Preservation Area to remain in essentially a natural state. In addition, the submerged lands within the preserve are managed consistent with the laws and policies of the Fort DeSoto Aquatic Habitat Management Area where natural resource protection is the main objective, but where public uses consistent with resource initiatives are also allowed.



Other significant land and water resources exist in the vicinity of the preserve to the south in Ft. DeSoto Park and in the Ft. DeSoto Park Aquatic Management Area. The Pinellas National Wildlife Refuge, managed by the U. S. Fish and Wildlife Service, is within one mile east of the Shell Key Preserve, however, the urbanized island of Tierra Verde lies between it and Shell Key. The aerial photograph in Figure 3, shows the resources immediately surrounding the preserve.

### **Optimum Boundary**

As additional needs are identified through use, development, and research, and as adjacent land uses change on private properties, modification of the preserve's boundary may occur for the enhancement of natural and cultural resources, public uses and management efficiency. At this time, there is no plan to extend the boundary for the Shell Key Preserve shown in Figure 3 and which is currently believed to be the optimum boundary for managing this area. This boundary was established to provide for cohesive management of an ecologically sensitive area which has natural boundaries from the mainland to the east, Bunces Pass to the south and the Gulf of Mexico to the west. The northern boundary is set by Collany Island and existing boating channels. The preserve is intended to border and compliment the Ft. DeSoto Aquatic Habitat Management Area to the south and its boundaries were placed to allow for appropriate management of activities affecting the barrier island and surrounding habitat and to accommodate changes in the geomorphology of Shell Key.

No surplus lands have been identified within the preserve.

### **Existing Use of Adjacent Lands**

An assessment of the conditions that exist beyond the boundaries of the preserve can identify any special development problems or opportunities that exist because of the area's unique setting or environment. This also provides an opportunity to deal systematically with various planning issues such as location, adjacent land uses and the area's interaction with other facilities.

The adjoining portion of Tierra Verde to the east is developed with single-family residential properties. At the north end of the preserve, there is commercial property that is mostly undeveloped at this time. This includes an existing restaurant, Collany Island (a mostly undeveloped island) and an undeveloped tract for which a high-and-dry marina is currently proposed. North of this is the heavily urbanized areas of Tierra Verde and Passe-a-Grille Beach. Overall, Tierra Verde is heavily developed and consists mainly of single-family and multi-use residential properties with some commercially developed areas. Two large marinas are located to the north of the preserve. The southern boundary of the preserve is bordered by Bunces Pass and south of the pass lies the Ft. DeSoto Aquatic Management Area, a large seagrass protection zone managed by Pinellas County. South of this is Ft. DeSoto Park, a Pinellas County Park, that contains an extremely active boat ramp, campground and fishing piers. The park also has a strong historical element. To the west of Shell Key is the open Gulf of Mexico.

Within the preserve itself, there is no development except for a structure on Panama Key that houses the Pinellas Marine Institute.

#### **Planned Use of Adjacent Lands**

Land uses surrounding the preserve are not expected to change drastically. Approximately 50% of the single-family lots on the shoreline to the east are currently vacant and these can be expected to be developed in the near future. In association with this, approximately ten to fifteen more single-family docks can be expected on this shoreline. It is expected that the vacant commercial tracts at the north end of the preserve will be developed with some type of commercial water-dependent use. Most of the rest of Tierra Verde is near build out.

The waterways surrounding the preserve are heavily used by recreational boaters. Recreational boating in Pinellas County has grown tremendously over the years and is expected to

continue to increase. Currently, there are over 55,000 boats registered in Pinellas County. It is expected that the Shell Key area will continue to be a popular destination for boaters.

## **RESOURCE MANAGEMENT COMPONENT**

### **Introduction**

This component of the management plan describes the natural and cultural resources of the Shell Key Preserve and identifies the actions employed to manage them. When necessary to support statements made in this plan, published and non-published sources have been cited. These references are contained in Addendum 5.

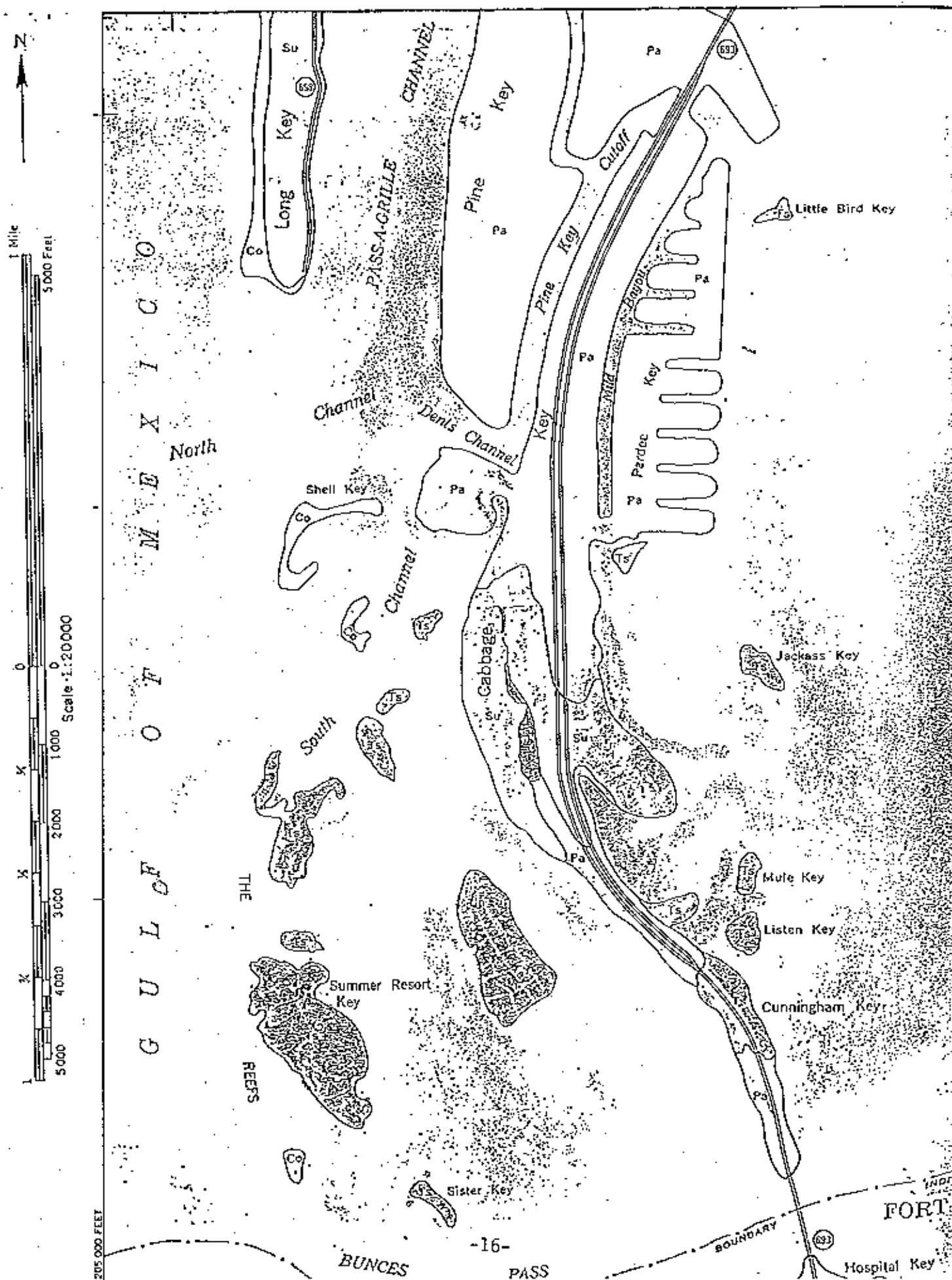
### **Resource Description and Assessment**

#### **Natural Resources**

##### Soils

The Shell Key Preserve is located in Pinellas County and information on soils is drawn from the *Soil Survey of Pinellas County, Florida* produced by the United States Department of Agriculture Soil Conservation Service in 1972. Two types of soil are found within the management area (see Figure 5), "Tidal Swamp" (Ts) and "Coastal Beaches" (Co). Addendum 6 contains detailed descriptions of these two soil types. There are no soil conservation or soil erosion issues within the preserve. Shell Key has shifted in size, configuration and location over the years as is typical of barrier islands. The figures used for this document are based on aerial photography from February of 1997 and there are already changes in the island since that time.

Figure 5. Soil Map. Source: *Soil Survey of Pinellas County*. USDA Soil Conservation Service



### Minerals

There are no known mineral resources within the Shell Key Preserve.

### Hydrology

There are no permanent surface water bodies on any of the islands within the preserve and hydrology is not a source of concern for this site.

### Natural Communities

The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI). The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition of an area, and that areas which are similar with respect to these factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, despite similar physical conditions. In other instances, physical factors are substantially different, yet the species compositions are quite similar and this often necessitates different management programs.

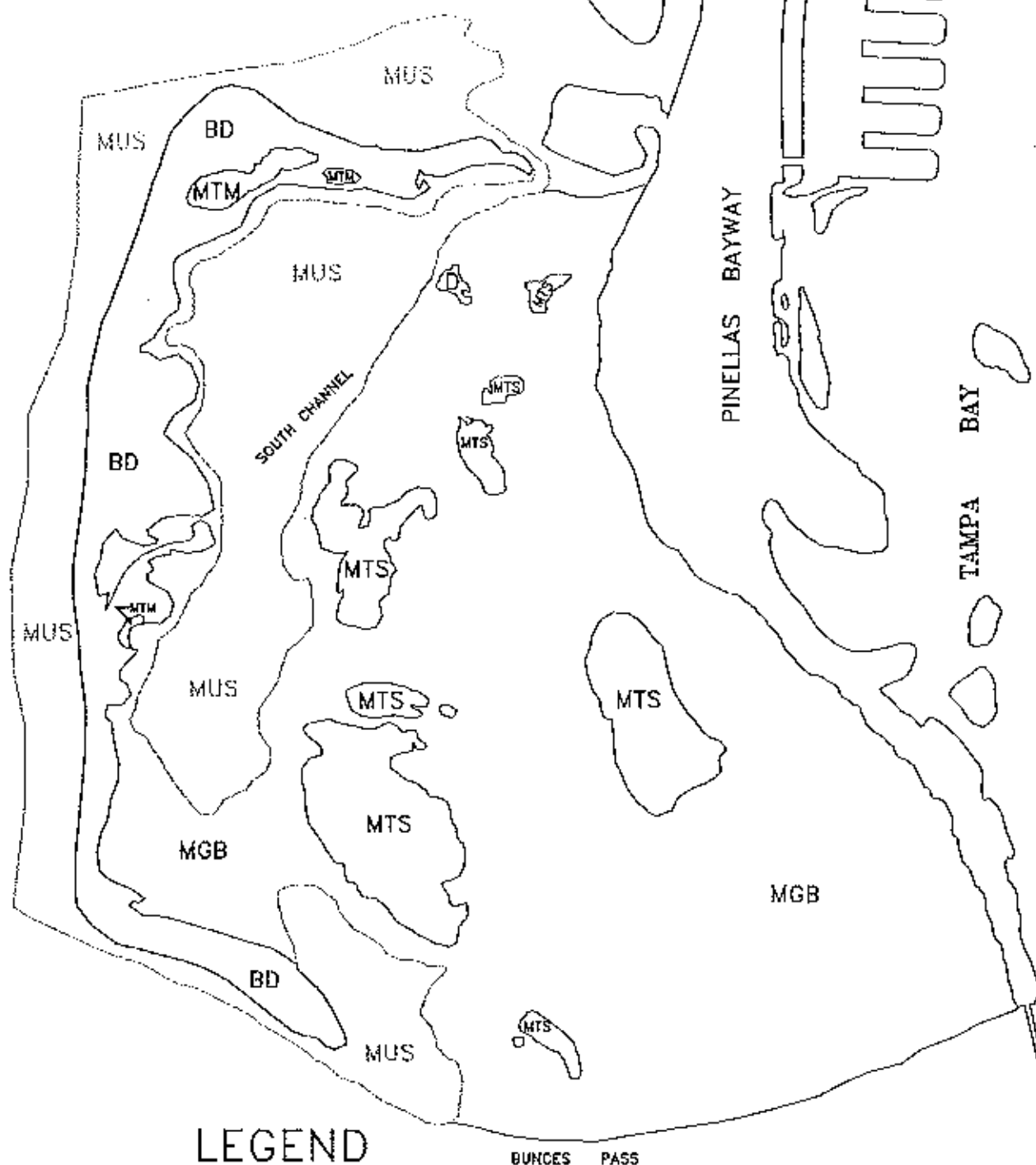
The Shell Key Preserve contains five distinct natural communities in addition to a few developed areas (see Figure 6). The approximate acreage for each natural community is also reflected on Figure 6. Specific assessments of the natural communities are provided below. FNAI descriptions of these natural communities as well as correspondence from the FNAI are contained in Addendum 7.

Marine Tidal Marsh - This community is dominated by smooth cordgrass (*Spartina alterniflora*) and occurs along the relatively flat, low wave energy eastern shoreline of Shell Key.

Marine Tidal Swamp - This community, dominated by mangrove trees, dominates the majority of the islands within the preserve excluding Shell Key itself. Marginal fringes of

# FIGURE 6. NATURAL COMMUNITIES MAP

GULF OF MEXICO



## LEGEND

BD (BEACH DUNE)	177.4 acres	- 10.3%
D (DEVELOPED)	1.6 acres	- <0.1%
MGB (MARINE GRASS BED)	984.3 acres	- 57.4%
MUS (MARINE UNCONSOLIDATED SUBSTRATE)	418.5 acres	- 24.4%
MTM (MARINE TIDAL MARSH)	9.2 acres	- 0.5%
MTS (MARINE TIDAL SWAMP)	124.7 acres	- 7.3%



mangroves exist on the shorelines surrounding the preserve on Collany Island and Tierra Verde.

Beach Dune - This is comprised of wind-deposited foredune and wave-deposited upper beach, and is one of the most dynamic communities recognized. This is the dominant community on Shell Key. In a few areas, this has been invaded by Australian pines to the extent that the exotic is influencing the dynamics and succession of the beach dune community.

Marine Unconsolidated Substrate - The acreage of this very dynamic community fluctuates from year to year. This community type also includes the subtidal, intertidal and supratidal beach habitat below the Beach Dune community. This is a zone of sparse vegetation but, similar to mudflats, it is a rich feeding zone for wading birds and shorebirds which are able to probe below the surface for infaunal organisms that include isopods, amphipods, polychaetes, mollusks, and crustaceans. These feeding grounds support many of the significant bird colonies on Shell Key.

Marine Grass Beds - Seagrass beds fill in the majority of the area east of Shell Key. This zone is densely vegetated and is also a rich feeding zone for wintering , nesting and resting migrant birds as well as for resident bird species.

Developed - There are some developed areas at the eastern and northern boundaries of the preserve. At the northern end of the site, just south and east of Collany Island there is a dredged basin which connects to a dredged channel which runs along the eastern boundary of the preserve. These areas are likely to be permanently altered and therefore probably preclude the development of a completely natural system. Also, there are several commercial docks in the small basin to the north and numerous boats and marinas north of the site. In addition, the eastern boundary of the preserve is bordered by single-family homes where some shoreline alteration has occurred and where there are a number of single-family private docks.

### Wildlife and Designated Species

Although the Shell Key Preserve provides habitat for a great diversity of wildlife species, it is especially important to migratory birds with the island of Shell Key itself being very significant. To date, 122 species of birds have been documented on Shell Key (Blair, 1999), including fifteen which are listed by the Florida Fish and Wildlife Conservation Commission as endangered, threatened or species of special concern. Of these, there are several groups that are highly dependent upon undeveloped barrier islands for their survival. These are the shorebirds, wading birds and seabirds that depend on the barrier island and surrounding flats for nesting, wintering or resting during migration. These birds are listed in Table 1, although a complete list of birds documented in the preserve can be found in Addendum 8.

**Table 1: Nesting, Wintering and Resting Migrant Birds of Shell Key**

		Resting Migrant	Wintering	Nesting
<b>Shorebirds:</b>	Black-bellied Plover	✓	✓	
	Snowy Plover (T)	✓	✓	✓
	Wilson's Plover	✓	✓	✓
	Semipalmated Plover	✓	✓	
	Piping Plover (T)	✓	✓	
	American Oystercatcher (SSC)		✓	✓
	Willet	✓	✓	✓
	Marbled Godwit	✓	✓	
	Ruddy Turnstone	✓	✓	
	Red Knot	✓	✓	
	Sanderling	✓	✓	
	Semipalmated Sandpiper	✓		
	Western Sandpiper	✓	✓	



		Resting Migrant	Wintering	Nesting
	Least Sandpiper	✓	✓	
	Dunlin	✓	✓	
	Short-billed Dowitcher	✓	✓	
<b>Seabirds:</b>	Laughing Gull	✓	✓	✓
	Ring-billed Gull	✓	✓	
	Herring Gull	✓	✓	
	Royal Tern	✓	✓	
	Sandwich Tern	✓	✓	
	Common Tern	✓		
	Forster's Tern	✓	✓	
	Least Tern (T)	✓		✓
	Black Tern	✓		
	Black Skimmer		✓	✓
<b>Wading Birds:</b>	Great Blue Heron		✓	
	Great Egret		✓	
	Snowy Egret		✓	
	Little Blue Heron (SSC)		✓	
	Tricolored Heron (SSC)		✓	
	Reddish Egret (SSC)		✓	
	White Ibis (SSC)		✓	
	Roseate Spoonbill (SSC)		✓	
	Wood Stork (E)		✓	

T = Threatened SSC = Species of Special Concern E = Endangered Source: Blair, P. 1999.

Shell Key is a very significant nesting site for shorebirds on a state-wide basis (Douglass 1997), ranking second in the State (Sprandel 1995). Twelve species of birds (mottled duck, clapper rail, snowy plover, black skimmer, American oystercatcher, least tern, Wilson's plover, willet, laughing gull, fish crow, red-winged blackbird and common ground dove) use the island for breeding and four of these are State listed species (Blair 1999). Some of these nesting species, such as the snowy plover, least tern, American oystercatcher, and black skimmer are among the most vulnerable bird species in the State (Paul 1997).

The use of Shell Key as a wintering and resting area for migrant birds such as the piping plover also is very important. In 1996, the site held 12.8% of the piping plover population censused in the State (Owens 1996). These species depend on areas where they can remain undisturbed to replenish body weight and energy needed for migration and successful breeding.

The Shell Key Preserve also encompasses a large area of seagrass beds and sandflats that are heavily used by wading and shore birds for foraging. Many of these, such as the snowy egret, little blue heron, tricolored heron, reddish egret, white ibis, and roseate spoonbill, are listed as Species of Special Concern by the State of Florida and the wood stork is listed as Endangered. Other listed species, such as the brown pelican, bald eagle and peregrine falcon are also observed using this area.

Listed species are those which are designated by the Florida Natural Areas Inventory (FNAI), U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission, and the Florida Department of Agriculture and Consumer Services (FDA) as endangered, threatened or of special concern. Listed species also include those which are under review for inclusion in one of

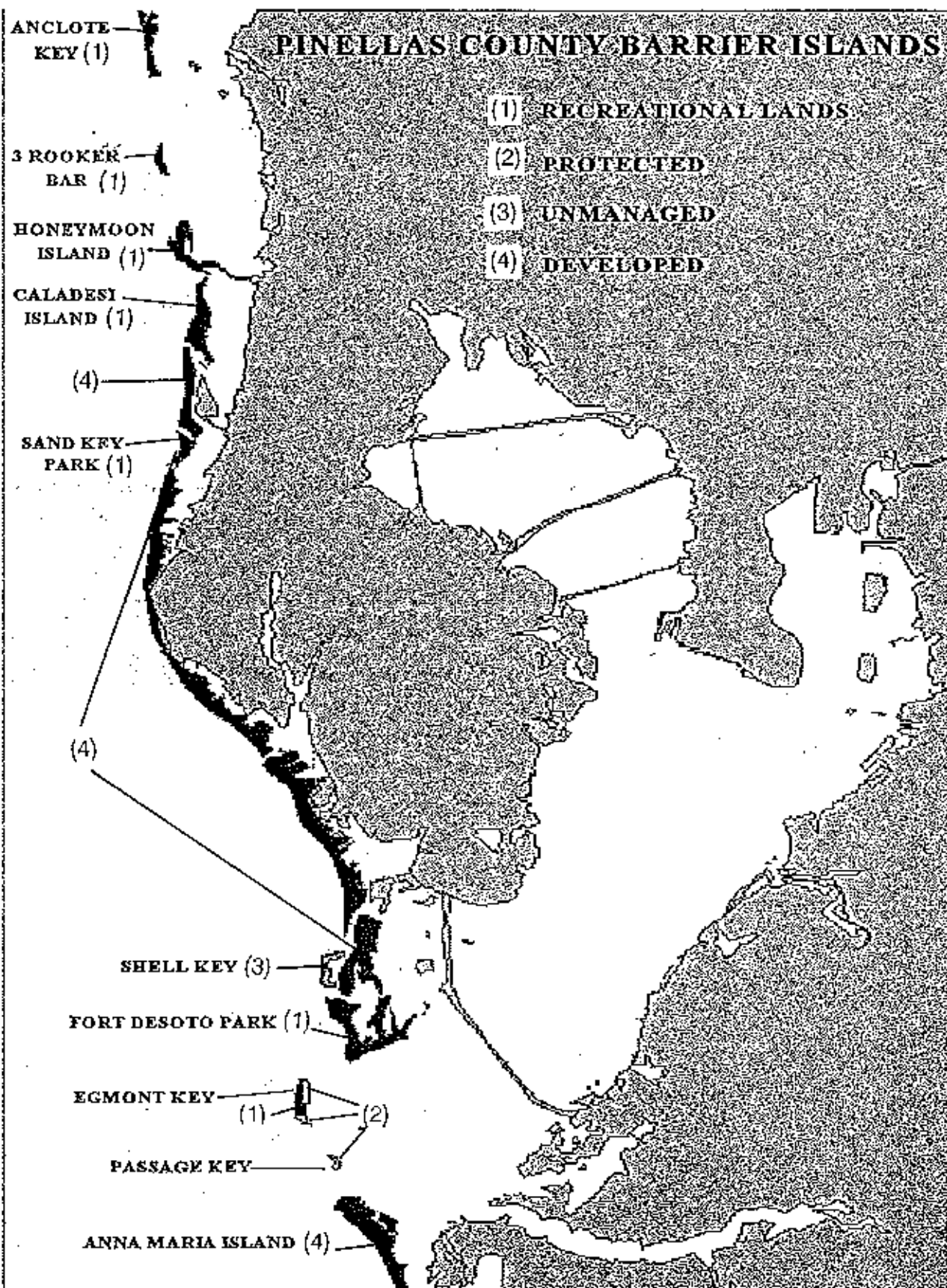
the above categories, and those species which are regulated by the Convention on International Trade in Endangered Species (CITES). The welfare of listed species is an important consideration of this plan. In many cases, these species will benefit most from proper management of their natural communities. At times, however, additional management measures are needed because of the poor condition of some communities, or because of unusual circumstances which aggravate the particular problems of a species. Addendum 8 contains a list of plant and bird species documented at Shell Key and their designated status.

Although many aspects of the management plan specific to Shell Key itself are directed at bird species, it is not intended to discount the other wildlife that exist within the preserve. Although detailed surveys of non-avian groups have not been performed on site, the preserve hosts an array of wildlife associated with seagrass beds, sandflats, mangroves and barrier islands. Several species that could be expected to occur, such as the mangrove salt marsh snake and ornate diamondback terrapin, are rare in Pinellas County. In addition, larger pelagic species of fish and marine mammals, such as bottlenose dolphins and manatees, also use the preserve. Shell Key also supports low-level nesting of loggerhead sea turtles (Meylan 1999).

#### Special Natural Features

The Shell Key Preserve does not possess any natural features that are unique to this type of system. The uniqueness of this area lies in the fact that undeveloped barrier islands are extremely rare in Florida; especially so within Pinellas County. Figure 7 shows the barrier island system stretching from Anclote Key at the north end of the County to Anna Maria Island south of Tampa Bay. Within this area, almost all of the barrier islands are either developed or set aside as public use areas. Passage Key and a few small areas on Egmont Key are the only bird protection areas posted against trespass. In addition, some nesting areas on Three Rooker Bar and within State and County

Figure 7. Pinellas County Barrier Islands



parks are seasonally posted. Shell Key is the only island that is both unmanaged and undeveloped in the chain, although seasonal posting of main nesting areas has occurred for the past ten years.

#### **Cultural Resources**

There are no known historical or archaeological resources located within the preserve, however, a comprehensive survey of all the islands within the preserve has not been done. Pinellas County will consult with the Division of Historical Resources before any ground disturbances or taking actions that may adversely affect archaeological or historic resources.

### **RESOURCE MANAGEMENT PROGRAM**

#### **Management Needs and Objectives**

A significant management need in the preserve is enhanced protection of nesting, wintering and resting migrant bird colonies on and around Shell Key. This type of barrier island habitat and the bird colonies that it supports are of statewide significance. The same area is extremely popular with the boating public. Birds prefer these islands because they are usually free of terrestrial predators and because they are near tidal flats, salt marsh and seagrass beds which are important feeding areas. Human visitors are attracted to the Gulf beaches and aesthetic qualities of a natural environment. These two uses can often conflict and lead to nesting failures, nestling mortality and prevention of successful migration.

The main objective of bird protection is to provide sufficient separation of human visitors from colonies of nesting, resting migrant and wintering birds to preclude the birds from expending energy and leaving nests unprotected due to human disturbances. Wintering birds can expend as much as 10% of their body weight in one weekend responding to disturbance by human visitors (Below, 1997) and they need protected areas where they can rest and feed without disturbance. Research has shown the importance of several factors in disturbing birds, including distance from the birds, speed and direction of approach, and noise. Weight loss due to disturbance can be

especially critical at times when birds are replenishing their fat reserves for continued migration and the next mating season. In addition, parent birds must be allowed to remain on the nest to protect eggs. It takes just a few minutes for temperatures to destroy eggs or nestlings when the parent bird is chased off the nest. Direct and overhead approaches to birds have been found to be more significant disturbances than a lateral approach. Likewise, speedier and noisier approaches are more significant than slow and quiet ones. Protection also must address the problem of disturbance caused by dogs as birds flush in the presence of dogs even more rapidly than they do for humans. Nesting areas must also be protected from physical damage to eggs and nestlings which are often virtually invisible to humans.

The St. Petersburg Audubon Society has been posting nesting sites and monitoring the island since 1992. This program has met with some success, especially those species that use the interior, more vegetated portions of the dune system which are less popular with the public. Other species, however, such as the black skimmer, snowy plover, least tern, and Wilson's plover are more unpredictable and choose nest sites more vulnerable to human disturbance (King 1997). These are also some of the listed species most in need of protection and that have suffered breeding failures. Also, the use of signs and rope is effective only for conscientious visitors, and the activities of even one careless or uninformed user or loose dog can cause significant adverse impacts to wildlife and management efforts. Consequently, further steps must be taken to protect bird colonies. In addition, due to the dynamic nature of the island, the management plan must be designed to incorporate changes in habitat, wildlife and public uses in a manner that is compatible with the natural resource elements of the plan. The success of management actions upon populations of breeding, resting migrant and wintering birds must subsequently be monitored so that amendments to this plan can be made as necessary.

A second threat to the Shell Key ecosystem involves impacts to the seagrass beds east of Shell Key. Seagrasses provide important habitat for a wide diversity of marine organisms that are important in the marine food chain. This food chain supports many of the bird and fish species that the public is most familiar with. A large portion of the seagrasses are located in extremely shallow water and boating pressures on this area have increased dramatically over the past few years. This has lead to heavy prop scarring of seagrass beds as well as disturbances to feeding birds. With minimal damage to rhizomes, plant recovery may occur within a year. Where damage is severe, recovery can take up to ten years or more. The objective here is to provide protection for seagrass habitat and minimize disturbances to the foraging activities of birds.

In addition, the shallow sandflats on the leeward side of Shell Key are important feeding areas for a variety of birds. As previously discussed, replenishment of body weight is critical for wintering and migrating birds and therefore birds using these areas must also be protected from human disturbance. Many species of shorebirds are also dependent upon the intertidal beachfront of Shell Key for feeding and require undisturbed areas of this type of habitat for hatchlings to feed.

Another threat to the natural system is the presence of exotics. Exotic species are those plants or animals which are not native to Florida, but were introduced as a result of human-related activities. Exotics have fewer natural controls and often outcompete native species. Thus, the policy of the Pinellas County Comprehensive Plan is to remove exotic species from natural communities. The most prominent exotic plant species problem on Shell Key is the Australian pine. Australian pines readily colonize beach dune habitat and subsequently alter natural beach and dune development. For the most part, Australian pines have already been killed on the northern and central portions of the island. The south end, however, contains a mature forest of Australian pines.

The objective for Australian pines is to gradually eliminate them so that professional managers and volunteers can maintain control thereafter. Some minor Brazilian pepper tree growth has also occurred on Shell Key and this has already been eradicated, however, any future Brazilian pepper plants will also need to be removed.

In some years, raccoons have had a significant presence on the island. Nest predation needs to be closely monitored and management actions need to be developed that enhance nesting success.

It is also important to continually monitor the natural and physical conditions of the Shell Key Preserve. The island itself can change drastically within a short time period and birds may colonize different areas from year to year. By closely monitoring the conditions on and around the island, problems can be identified and protective measures and management changes can be implemented if they prove warranted.

The goal of land acquisition is to acquire properties that enhance the overall area's natural resources and help to prevent future development which could have negative impacts on the preserve. It is the intent of Pinellas County to thoroughly consider placing any available private lands inside the preserve within public ownership.

### **Resource Management Goals and Actions**

#### **RESOURCE MANAGEMENT GOAL 1: Protect Sensitive Natural Resources Within the Shell Key Preserve.**

**Action 1: Provide appropriate signage.** Education and interpretation will be the most important tool in gaining understanding and cooperation from most visitors of our conservation goals. Key areas within the preserve will be posted with appropriate signage to direct usages and behaviors and to educate visitors.



- Action 2: Provide enforcement.** Regular patrols and enforcement of the law may be necessary to fully ensure compliance of regulations and resource management goals. The Pinellas County Department of Environmental Management will contract with the Pinellas County Sheriff's Office to provide for additional law enforcement coverage of this area.
- Action 3: Remove nuisance exotic plant species.** Invasive plant species will be removed from within the preserve and a preventative maintenance and control program will be initiated. Plant removal at Shell Key mostly involves the removal of mature Australian pine trees along the southern portion of the island. These trees, however, provide shade for recreational users and therefore, they will be removed gradually over time (as much as ten years). Site conditions, such as elevation, soil type, etc., will be evaluated and every effort will be made to replant the area with native species that will provide shade. The remaining exotic plant species on Shell Key are not a significant problem and will be dealt with as they occur. The mangrove islands scattered throughout the preserve do not appear to have problems with exotic species at this time, but removal efforts will be directed there should problems occur. Volunteer groups may be sought to assist with exotic plant removal actions.
- Action 4: Protect native plant and wildlife species.** Existing laws will be enforced to ensure the protection of native flora and fauna. Additional protection will be directed at sensitive species such as nesting and wintering birds and marine mammals. Channels and boating areas east of Shell Key will be posted as "Seagrass Caution" zones. Informational signs will be placed

within the preserve to alert boat operators about the presence of manatees. The County will coordinate with the Florida Department of Transportation to manage access to the preserve from the Pinellas Bayway in order to prevent damage to shoreline vegetation. The mangrove islands within the preserve will be cleaned of trash and debris, especially monofilament line, in order to promote wildlife usage.

#### **RESOURCE MANAGEMENT GOAL 2: Preserve Wildlife Resources on Shell Key**

**Action 1:**     **Monitor wildlife populations and nesting success on Shell Key.** Since 1992, the St. Petersburg Audubon Society has been monitoring bird populations on Shell Key. Limited monitoring of nesting sea turtles also has occurred using volunteers. These monitoring efforts must be continued in order for the management plan to remain effective in the future. Pinellas County will provide staff assistance for this, however, volunteer efforts, such as that by St. Petersburg Audubon, are crucial.

**Action 2:**     **Identify and protect core bird areas.** Core bird protection areas have been identified (see Figure 8) and these will be posted against trespass. Signs, posts and barriers will be maintained throughout the year. It is intended to keep signage at the minimum necessary to achieve protection of the core bird areas and not interfere with the aesthetic enjoyment of the island. Currently, the area is only posted during the nesting season and this offers no protection for wintering and migrating birds during the rest of the year. Exceptions for access into the restricted core bird protection areas will be granted by Pinellas County where appropriate for activities such as educational

# FIGURE 8. RESOURCE AND PUBLIC USE AREAS



programs, monitoring efforts, resource management, or research. Written permission from Pinellas County must be obtained prior to access into the restricted areas and such permission may include special conditions (such as the presence of trained guides) to ensure that the activity does not conflict with the resource protection elements of this plan.

**Action 3: Protect birds from disturbances by dogs.** On Shell Key, dogs will be limited to the area east of the northern fence shown on Figure 8 and south of the southern fence. Pinellas County Code, Section 14-63, will be enforced. This will be monitored and reviewed after two years.

**Action 4: Monitor and remove problematic nest predators.** Raccoons have the potential of seriously impacting the nesting success of wildlife on Shell Key. This animal is one of the major threats to sea turtles in Florida, destroying 70% of the nests on some uninhabited beaches (Johnson and Barbour, 1990). Raccoons also are significant threats to the nesting success of birds on Shell Key. Nest predation on Shell Key will need to be monitored and appropriate management actions taken to ensure the best possible nesting success.

**Action 5: Manage Shell Key as a barrier island.** Since most of the wildlife targeted for protection at Shell Key depends on a barrier island ecosystem, the natural movement of the island will need to be monitored. Dredging will be studied as an option to maintain the passes which separate Shell Key from the mainland, especially at the northern tip. Any proposed dredging will be subject to State and Federal dredge and fill regulations.

### **RESOURCE MANAGEMENT GOAL 3: Protect Seagrass Beds.**

**Action 1: Post shallow seagrasses and create internal combustion engine restriction zones.** Extensive seagrass beds occur in the shallow waters east of Shell Key. Prop scars are evident throughout much of this area. Signs will be posted to alert boaters of areas where seagrass beds occur in shallow waters and extremely shallow areas will be posted as zones where the use of internal combustion engines is prohibited (see Figure 8) to prevent damage to seagrasses (and disturbance to feeding birds). Boat access by sailing, poling, rowing or trolling motors will still be allowed in those areas. This will be accomplished by local ordinance as was done to the south in the Ft. DeSoto Aquatic Habitat Management Area.

**Action 2: Identify boating channels.** Channels within the preserve will be appropriately marked.

**Action 3: Provide information to boaters about seagrass protection efforts.** Informational signs will be placed within the preserve and at local boat ramps and marinas to alert boat operators about the presence of seagrasses and about internal combustion engine restrictions and "Seagrass Caution" zones.

### **RESOURCE MANAGEMENT GOAL 4: Continue to Pursue Appropriate Land Acquisition.**

**Action 1: Evaluate and pursue appropriate land purchases.** The majority of the land within the preserve is currently within public ownership. Pinellas County has been in the process of obtaining parcels of privately held lands, most of which consist solely of submerged property. The County will continue to evaluate parcels currently under private ownership for potential purchase.

**RESOURCE MANAGEMENT GOAL 5: Provide Education for the Public Concerning the Natural Resources of the Shell Key Preserve and the Importance of the Management Actions Undertaken.**

**Action 1:**     **Continue to participate in interpretive programs.** Interpretive programs that promote a better understanding of the elements outlined in the management plan are important to the success of management efforts. In addition to County staff, volunteer groups, such as the St. Petersburg and National Audubon Societies, will be enlisted for educating the general public about the importance of this area. All education initiatives will be coordinated through the education section of the Division of Environmental Lands.

**Action 2:**     **Provide public education outreach.** Education of the public concerning the importance of the natural resources and management of the Shell Key Preserve will not be confined only to signage and programs within the preserve. The educational staff of the Environmental Lands Division will conduct public educational outreach. Information concerning Shell Key will be placed on the Division's Web page once it is available. In addition, the County will place informational signage that explains the resources and management actions at local boat ramps, marinas and other appropriate locations.

**RESOURCE MANAGEMENT GOAL 6: Maintain and Improve the Effectiveness of the Shell Key Preserve Management Plan.**

- Action 1: Review the management plan.** The management plan will be reviewed two years after adoption and thereafter every five years. Amendments will be made as warranted. The advisory committee will be reconvened to assist with the management plan review.
- Action 2: Monitor the preserve.** Staff will monitor the preserve for changes in island topography, wildlife usage and public uses. The management plan will be amended as necessary to ensure compliance with the natural resource and public use components.
- Action 3: Encourage and coordinate research activities.** The primary research need for this area is to monitor the effectiveness of management actions so that they can be continually refined for best management of the resources. The success of resource conservation will be critical information to gauge the success of management efforts. In addition, it will be important to periodically monitor public opinion concerning the management of Shell Key. Shell Key also provides a unique opportunity to further study and understand bird populations and other barrier island populations and dynamics. Research in the preserve will be encouraged and coordinated through the research section of the Division of Environmental Lands.

## **PUBLIC USE COMPONENT**

### **Introduction**

Land use planning and management decisions for the Shell Key Preserve are based on the dual goals of preserving natural Florida and providing opportunities for public use of the island. The general planning and design process begins with an analysis of the natural resources of the preserve and then proceeds through the creation of a conceptual land use plan to provide for public uses. Input to the plan is provided by experts in environmental sciences, cultural resources, environmental lands management and operation as well as representatives from affected industries, environmental and user groups. In this case, a committee was established (see Addendum 3) in order to assist with the drafting of a management plan. With this approach, the objective is to provide a high quality plan that allows for resource-based public uses with a high level of sensitivity to the management of natural resources on and around Shell Key.

### **Public Use Description and Assessment**

Effective planning requires a thorough understanding of the preserve's natural and cultural resources as well as its uses. Past and present uses are assessed for their effects on the property and compatibility with the natural resource elements of this plan.

Shell Key currently contains approximately 3 miles of natural sandy beach along its outer fringes and points. In addition, there are narrower fringes of beaches scattered on the leeward side of the island. The island is completely undeveloped and consequently has a high scenic value as well. It has become an extremely popular boating destination and receives considerable visitation, especially on weekends and holidays.



The major human activities at Shell Key are associated with the natural sandy beaches and include swimming, sunbathing, shelling, picnicking, etc. Boating and fishing are popular activities in the waters around Shell Key. Most vessels anchor along the northern tip of the island, however, some boats also anchor on the southern tip and on the eastern side of the island where there is wave protection. Very few boats anchor on the western, high-energy side of the island. Opportunities for bird watching, nature study and ecotourism are excellent and primitive camping occurs mainly on the southern and northern tips of Shell Key. A number of shuttles and charter boats bring visitors to Shell Key. Parties are also held on the island and several local businesses (such as hotels and restaurants) also bring out groups. Other activities in the preserve include the use of personal watercraft, airboats, and ultra-light seaplanes which offer short aerial tours. Recreational and commercial fishing (especially shrimp trawling) occur in the waters east of Shell Key.

There are no sanitary facilities on Shell Key and the only permanent structures within the preserve house the Pinellas Marine Institute on Panama Key.

There are no known archaeological or historic features within the Shell Key Preserve.

During the development of the management plan for the Shell Key Preserve, potential impacts to natural resources from human uses were assessed and the compatibility of activities with the resource component of this plan were discussed. It is the intention of this plan to allow for and appropriately manage human uses. These should be low-impact and must be compatible with resource management objectives. All activities also must be compatible with appropriate local, state and Federal laws.

## **Public Use Goals and Actions**

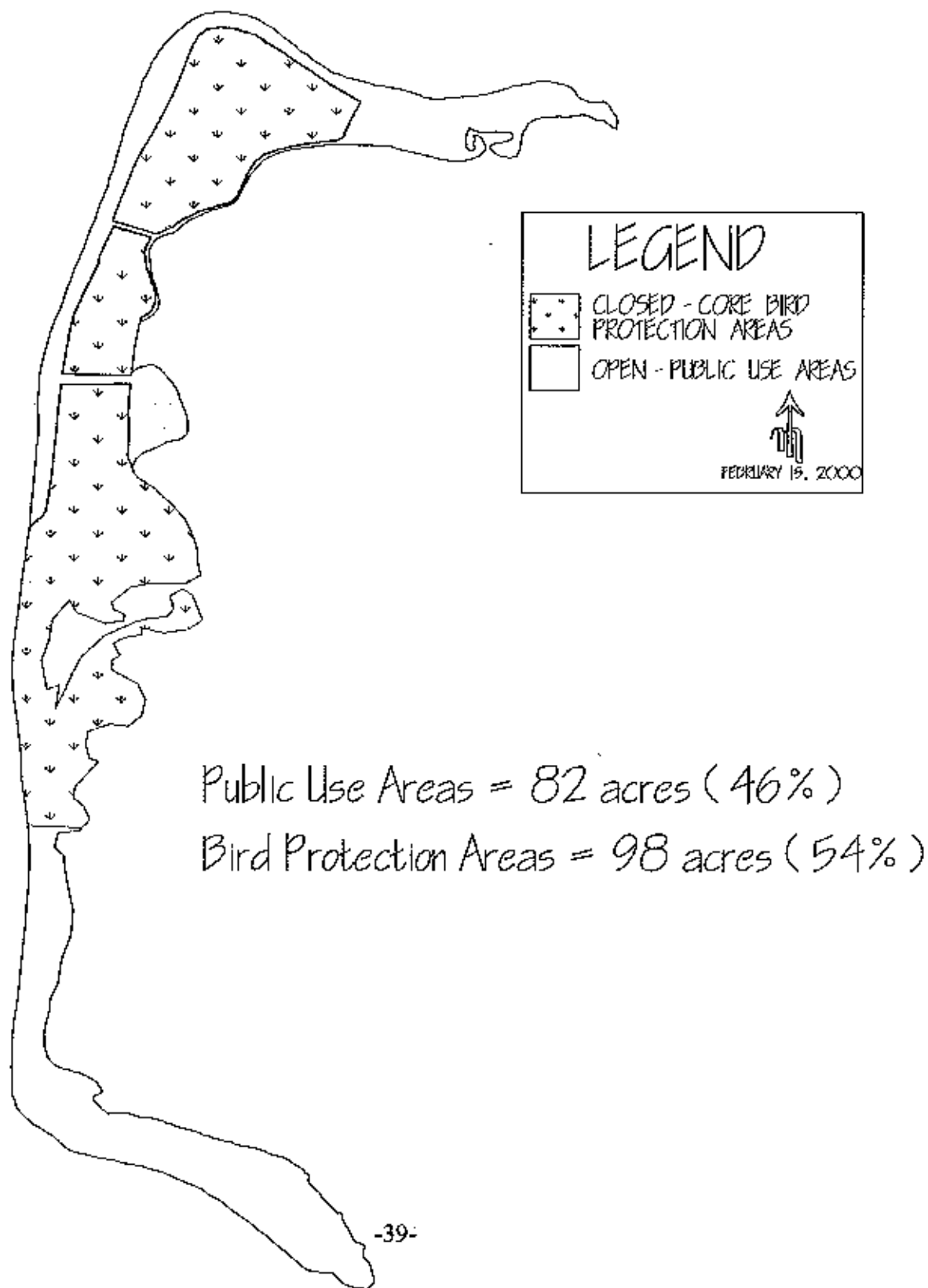
**PUBLIC USE GOAL 1: Support Passive Public Uses Within the Shell Key Preserve that do not Conflict with the Natural Resource Objectives of the Management Plan.**

**Action 1: Maintain public use areas.** Recreation is a legitimate use within the Shell Key Preserve and it will be maintained for as long as this management plan remains in effect. The island has traditionally been used by recreational boaters and the surrounding waters have been used by recreational and commercial fisherman. In depth discussions were held with representatives of the public familiar with important wildlife areas and important public use areas. Very little overlap was found between the two areas and public use areas were established accordingly. Figure 8 shows those areas set aside for public use in the entire preserve, and Figure 9 delineates the public use areas on the island of Shell Key itself. Significant changes to these boundaries will not be made except in the event of major changes to the island (such as from storms), in which case the committee will be reconvened to reevaluate the boundaries of the public use and wildlife areas.

**Action 2: Review future management decisions for impact on public uses.** All management decisions should create the minimum impact necessary on appropriate public uses within the preserve while also meeting the resource component of this plan.

**Action 3: Prohibit liveaboard vessels within the boundaries of the Shell Key Preserve.** These are defined as vessels moored within the preserve for more

FIGURE 9. PUBLIC USE AND BIRD PROTECTION AREAS ON SHELL KEY



than fourteen days in any 30 day period, excluding those at permitted docks. These vessels can cause environmental damage by mooring in one place for long periods of time and can cause sanitation problems.

**Action 4: Enforce Pinellas County noise standards.** In order to provide for an enjoyable experience for all user groups and to protect nearby residential properties from excessive noise, all activities within the preserve must comply with the Pinellas County Code, Article XII, pertaining to noise. In addition, loud and raucous noise is prohibited within the preserve at any time.

**Action 5: Prohibit commercial activities on Shell Key.** Commercial uses on the island of Shell Key are not allowed unless permitted by a concession or other appropriate permit obtained from Pinellas County for use specifically within the Shell Key Preserve and consistent with the management plan.

**PUBLIC USE GOAL 2: Balance Public Uses of Shell Key With Conservation of Significant Natural Resources.**

**Action 1: Provide for overnight activities on Shell Key.** Since the presence of humans near the core bird protection areas is more disruptive to birds at night and since enforcement is more difficult after dark, all overnight activities are limited to the southern and northern extremes of the island. Visitors to Shell Key between the hours of sunset and sunrise are allowed only in those areas shown on Figure 8 as "Overnight Use Areas".

**Action 2: Prohibit the possession or consumption of alcoholic beverages on Shell Key.** The possession or consumption of alcoholic beverages is prohibited on the island of Shell Key. Alcohol use in the remainder of the preserve is

subject to existing laws governing alcohol consumption and safe boat handling. Law enforcement agencies have indicated that most problems encountered in managing public uses on public lands are alcohol related.

**Action 3: Manage large groups visiting Shell Key.** Groups of 50 or more people visiting the island must obtain written approval from Pinellas County. Such approval may include specific conditions such as limiting the duration of the event, security provisions, sanitation provisions, trash removal or lighting restrictions to ensure that the activity is consistent with the resource management component of this plan.

### **Optimum Carrying Capacity**

Carrying capacity is an estimate of the number of users a resource or facility can accommodate while also providing a high quality experience for visitors and preserving the natural values of the site. In the case of Shell Key, controlling the numbers of visitors to the island is not practical since there are several miles of shoreline in an area with a huge boating population. At this time, it is not intended to restrict access to the island other than to the core bird protection areas as outlined in this plan, but rather to monitor the results of the Resource Management and Public Use Programs previously described to determine if they are sufficiently protecting natural resources. The management plan will be revisited and amended if it is found that conservation methods are not effective or if specific public activities are found to be inconsistent with natural resource management.

## **ADDENDUM 1**

### **Legal Description and Deeds**

# EXHIBIT "A"

## LEGAL DESCRIPTION

### SHELL KEY MANAGEMENT AREA: STATE OF FLORIDA TRACT DESCRIPTION

An irregular shaped parcel, being comprised of both upland and submerged lands, lying within the Gulf of Mexico, the same lying north of "Dunbar Pass", lying south of "Florida Channel", and lying west of the Pinellas Bayway (State Road 679), Pinellas County, Florida, being described as follows:

Commencing at the East 1/4 Corner of Fractional Section 30, Township 32 South, Range 16 East, run S 09°30'34"W along the South line of Government Lot 1, said Fractional Section 30, 816.46 ft. to on the Mean High Water Line of the Gulf of Mexico, the same being a point on the West line of PARCEL "A", TWO Subdivisions, according to plat thereof, as recorded in Plat Book 82, Pages 65-69, public records of Pinellas County, for a PORT OF RECEPTION; thence S 06°43'05"W along the North line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4928, Pages 24-37, EXHIBIT D, TRACT 2, public records of Pinellas County, 1534.55 ft.; (002) thence N 50°30'21"W along a Northeast line of said TRACT 2, 150.00 ft.; (003) thence S 39°23'39"W along a Northwest line of said TRACT 2, 2417.55 ft. to the most Northerly point of that certain tract, as conveyed to said Pinellas County, as recorded in said O.R. 4928, Pages 24-37, PARCEL "A", the same being a Point of Curvature; (004) thence southeasterly and southerly, 341.52 ft. along the arc of a curve, the same being the West line of said PARCEL "A", concave to the southeast, having a radius of 305.23 ft., through a central angle of 40°52'04", a chord bearing S 14°37'24"W, 302.17 ft. to a Point of Tangency; (005) thence S 09°28'34"E along said West line, 314.06 ft. to a Point of Intersection with the Northeast line of lands, as described in O.R. 4130, Page 407, public records of Pinellas County; (006) thence S 50°30'21"W along said Northeast line, 137.04 ft. to the most easterly corner thereof; (007) thence S 39°23'39"W along the Southeast line thereof, 27.12 ft. to the most southerly corner thereof; (008) thence N 50°30'21"W along the Southwest line thereof, 30.00 ft. to a Point of Intersection with said West line of PARCEL "A"; (009) thence S 09°28'34"E along said West line of PARCEL "A", 3778.20 ft. to a Point of Curvature; (010) thence southeasterly, 1432.75 ft. along the arc of a curve, the same being said West line of PARCEL "A", concave to the northeast, having a radius of 1175.53 ft., through a central angle of 69°49'50", a chord bearing S 43°45'43"E, 1345.70 ft. to a Point of Curvature; (011) thence southeasterly, southerly and southeasterly, 119.43 ft. along the arc of a curve, departing said West line of PARCEL "A", concave to the northeast, having a radius of 300.00 ft., through a central angle of 68°25'42", a chord bearing N 64°44'17"E, 112.46 ft. to a Point of Tangency; (012) thence N 50°30'21"W, 727.44 ft. to a Point of Curvature; (013) thence southeasterly and easterly, 454.16 ft. along the arc of a curve, concave to the southeast, having a radius of 420.00 ft., through a central angle of 62°00'00", a chord bearing N 61°31'26"E, 431.63 ft. to a Point of Tangency; (014) thence S 87°20'34"E, 349.77 ft.; (015) thence N 80°34'26"E, 550.12 ft. to a Point of Curvature; (016) thence easterly, northeasterly and northerly, 157.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 55°31'26"E, 141.12 ft. to a Point of Tangency; (017) thence N 09°28'34"W, 621.93 ft. to a Point of Intersection with a Northwest line of said PARCEL "A"; (018) thence S 53°57'25"W along said Northwest line, 2855.37 ft.; (019) thence N 03°28'14"W, 4380.89 ft.; (020) thence N 80°31'26"E, 200.00 ft.; (021) thence S 09°28'34"E, 4169.12 ft.; (022) thence N 80°31'26"E, 307.46 ft.; (023) thence N 09°28'34"W, 4031.68 ft.; (024) thence N 80°31'26"E, 200.00 ft.; (025) thence S 09°28'34"E, 2931.65 ft.; (026) thence N 53°57'25"E, 307.46 ft.; (027) thence N 09°28'34"W, 3794.14 ft.; (028) thence N 80°31'26"E, 200.00 ft.; (029) thence S 09°28'34"E, 3614.13 ft.; (030) thence N 53°57'25"E, 307.46 ft.; (031) thence N 09°28'34"W, 3556.82 ft.; (032) thence N 80°31'26"E, 200.00 ft.; (033) thence S 09°28'34"E, 3450.61 ft.; (034) thence N 53°57'25"E, 307.46 ft.; (035) thence N 09°28'34"W, 3310.10 ft.; (036) thence N 80°31'26"E, 200.00 ft.; (037) thence S 09°28'34"E, 3210.09 ft.; (038) thence N 53°57'25"E, 307.46 ft.; (039) thence N 09°28'34"W, 3081.50 ft.; (040) thence N 80°31'26"E, 200.00 ft.; (041) thence S 09°28'34"E, 2981.57 ft.; (042) thence N 53°57'25"E, 1579.63 ft.; (043) thence N 36°02'35"W, 2543.77 ft.; (044) thence N 09°28'34"W, 1579.63 ft.; (045) thence S 36°02'35"E, 2443.74 ft.; (046) thence N 53°57'25"E, 275.00 ft.; (047) thence N 36°02'35"W, 1747.22 ft.; (048) thence N 80°31'26"E, 223.61 ft.; (049) thence S 36°02'35"E, 1647.21 ft.; (050) thence N 53°57'25"E, 632.73 ft. to a point on the approximate mean high water line of the Gulf of Mexico, said point hereinafter being referred to as REFERENCE POINT "D"; thence along the approximate Mean High Water Line of the Gulf of Mexico, the following course calls (051) through (094): (051) S 53°39'00"E, 78.07 ft.; (052) thence S 35°43'47"E, 54.74 ft.; (053) thence S 35°13'42"E, 27.24 ft.; (054) thence S 09°28'00"E, 63.99 ft.; (055) thence S 35°13'42"E, 51.23 ft.; (056) thence S 51°37'56"E, 76.84 ft.; (057) thence S 35°06'24"E, 51.90 ft.; (058) thence S 23°36'20"E, 25.80 ft.; (059) thence S 35°13'42"E, 87.10 ft.; (060) thence S 48°44'36"E, 61.41 ft.; (061) thence S 37°09'13"E, 108.60 ft.; (062) thence S 43°44'34"E, 63.73 ft.; (063) thence S 37°21'63"E, 62.37 ft.; (064) thence S 33°30'54"E, 71.11 ft.; (065) thence S 47°50'40"E, 61.03 ft.; (066) thence S 43°30'27"E, 95.28 ft.; (067) thence S 38°18'14"E, 94.88 ft.; (068) thence S 72°08'15"E, 58.60 ft.; (069) thence S 52°27'37"E, 40.71 ft.; (070) thence S 53°11'07"E, 06.91 ft.; (071) thence S 42°04'10"E, 07.34 ft.; (072) thence S 02°31'20"W, 117.70 ft.; (073) thence S 21°28'14"E, 98.24 ft.; (074) thence S 02°31'20"E, 102.24 ft.; (075) thence S 42°04'10"E, 33.84 ft.; (076) thence S 40°30'27"E, 43.08 ft.; (077) thence S 12°04'17"W, 62.08 ft.; (078) thence S 33°25'50"E, 55.83 ft.; (079) thence S 17°25'07"W, 15.62 ft.; (080) thence S 28°24'22"W, 0.03 ft.; (081) thence S 34°20'36"E, 25.39 ft.; (082) thence S 04°39'11"E, 21.01 ft.; (083) thence S 40°51'39"E, 38.61 ft.; (084) thence S 78°21'44"W, 8.39 ft.; (085) thence S 20°13'29"E, 33.84 ft.; (086) thence N 07°20'30"E, 21.47 ft.; (087) thence S 14°04'37"E, 99.32 ft.; (088) thence S 39°34'37"E, 44.93 ft.; (089) thence S 30°34'43"E, 194.90 ft.; (090) thence S 23°15'12"E, 37.60 ft.; (091) thence S 38°03'35"E, 60.40 ft. to a Point of Intersection with the West line

of the Pinellas Bayway, said point hereafter being referred to as REFERENCE POINT "C", the same being S 33°26'48"E, 2597.02 ft. from said REFERENCE POINT "B".

(095)Thence S 75°23'22"W along said West line, 353.16 ft. to a point being hereafter referred to as a REFERENCE POINT "D".

(096)Thence continuing along said West line S 14°36'38"E, 786.50 ft.

(097)Thence S 67°47'43"W departing said West line, 674.82 ft.

(098)Thence S 40°47'13"W, 715.21 ft.

(099)Thence S 79°44'14"W, 610.65 ft.

(100)Thence S 60°31'35"W, 820.23 ft.

(101)Thence N 83°05'08"W, 768.00 ft.

(102)Thence S 60°31'35"W, 820.23 ft.

(103)Thence N 83°05'08"W, 768.00 ft.

(104)Thence N 69°30'46"W, 508.07 ft.

(105)Thence N 68°35'29"W, 609.73 ft.

(106)Thence N 61°44'22"W, 583.94 ft.

(107)Thence N 72°53'24"W, 417.37 ft.

(108)Thence N 61°35'48"W, 643.35 ft.

(109)Thence N 73°33'13"W, 368.07 ft. to a Point on Curve, a radial to said point being, S 88°03'40"W.

(110)Thence northwesterly, 7654.38 ft. along the arc of a curve, concave to the east, having a radius of 26000 ft., through a central angle of 16°20'14", a chord bearing N 03°10'12"E, 7620.80 ft. to a Point of Non-Tangency.

(111)Thence N 72°30'31"E, 2110.36 ft.

(112)Thence N 63°51'31"E, 776.82 ft.

(113)Thence S 80°00'50"E, 583.45 ft.

(114)Thence N 76°42'48"E, 835.28 ft.

(115)Thence S 80°00'50"E, 583.45 ft.

(116)Thence N 68°37'35"E, 1333.57 ft.

(117)Thence S 80°00'50"E, 583.45 ft.

(118)Thence N 55°04'29"E, 680.10 ft.

(119)Thence S 80°00'50"E, 583.45 ft. to the Northeast corner of Unit certain tract, as described in O.R. 8075, Pgs. 1115-1118, public records of Pinellas County.

(120)Thence N 70°00'00"W along the North line thereof, 115.04 ft.

(121)Thence S 70°00'00"W along the Southwest line thereof, 550.32 ft. to the most northerly corner thereof.

(122)Thence S 20°00'00"W along the Northwest line thereof, 770.00 ft. to the most westerly corner thereof.

(123)Thence S 70°00'00"E along the Southwest line thereof, 409.84 ft. to a Point of Intersection with a Southwest line of lands, as described in O.R. 8075, Pages 1113-1115, public records of Pinellas County.

(124)Thence S 64°58'12"E along said Southwest line of lands, as described in O.R. 8075, Pages 1113-1115, 249.33 ft.

(125)Thence S 78°37'07"E along said Southwest line of lands, as described in O.R. 8075, Pages 1113-1115, 190.78 ft. to a Point of Intersection with said Southwest line of lands, as described in O.R. 8075, Pgs. 1116-1118.

(126)Thence S 53°58'15"E along said Southwest line, 7.70 ft. to the most southerly corner of said lands, as described in O.R. 8075, Pgs. 1116-1118.

(127)Thence N 73°05'06"E along the Southeast line thereof and along the Southeast line of said lands, as described in O.R. 8075, Pages 1113-1115, 365.83 ft. to the Southeast corner of that certain Island No. 9, as shown on BULKHEAD PLAT BOOK 1, Page 14, public records of Pinellas County.

Thence along the Bulkhead line, according to said BULKHEAD PLAT BOOK 1, Page 14, the following course calls (128) through (140):

(128)Thence West, 34.42 ft. to a Point on Curve, a radial to said point being S 45°54'48"E.

(129)Thence northwesterly, northwesterly and northwesterly, 102.29 ft. along the arc of a curve, concave to the west, having a radius of 80.00 ft., through a central angle of 73°15'31", a chord bearing N 07°27'24"E, 95.46 ft. to a Point of Tangency.

(130)Thence N 29°06'38"W, 238.00 ft. to a Point of Curvature.

(131)Thence northwesterly, northwesterly and northwesterly, 20.57 ft. along the arc of a curve, concave to the east, having a radius of 25.00 ft., through a central angle of 47°08'10", a chord bearing N 05°32'37"W, 19.90 ft. to a Point of Tangency.

(132)Thence N 16°01'24"E, 44.39 ft. to a Point of Curvature.

(133)Thence northwesterly and northwesterly, 32.82 ft. along the arc of a curve, concave to the southeast, having a radius of 25.00 ft., through a central angle of 75°12'36", a chord bearing N 35°32'50"E, 30.51 ft. to a Point of Tangency.

(134)Thence S 08°45'57"E, 130.72 ft. to a Point of Curvature.

(135)Thence easterly and southeastwesterly, 22.14 ft. along the arc of a curve, concave to the southwest, having a radius of 25.00 ft., through a central angle of 50°43'39", a chord bearing S 61°23'45"E, 21.42 ft. to a Point of Tangency.

(136)Thence S 36°01'42"E, 77.07 ft. to a Point of Curvature.

(137)Thence southwestwesterly, 13.02 ft. along the arc of a curve, concave to the southwest, having a radius of 25.00 ft., through a central angle of 29°49'53", a chord bearing S 21°06'48"E, 12.87 ft. to a Point of Tangency.

(138)Thence S 06°11'44"E, 90.53 ft. to a Point of Curvature.

(139)Thence southwesterly, 6.84 ft. along the arc of a curve, concave to the west, having a radius of 25.00 ft., through a central angle of 19°40'51", a chord bearing S 01°38'25"W, 6.02 ft. to a Point of Tangency.

(140)Thence S 09°20'40"W, 215.70 ft. to that certain POINT "A", TIERRA VERDE UNIT TWO Subdivision, according to plat thereof, as recorded in Plat Book 62, Pages 63-69, public records of Pinellas County.

Thence along the Mean High Water line of the Gulf of Mexico, the same being the West line of said TIERRA VERDE UNIT TWO Subdivision, the following course calls (141) through (156):

(141)Thence S 29°10'31"W, 154.26 ft.

(142)Thence S 27°28'27"W, 87.20 ft.

(143)Thence S 25°18'14"W, 95.90 ft.

(144)Thence S 27°30'40"W, 161.72 ft.

(145)Thence S 24°10'40"W, 85.28 ft.

(146)Thence S 23°47'03"W, 188.32 ft.

(147)Thence S 29°14'00"W, 189.80 ft.

(148)Thence S 00°01'03"W, 101.58 ft.

(149)Thence S 08°30'20"E, 77.30 ft.

(150)Thence S 28°03'42"W, 71.15 ft.

(151)Thence S 13°00'14"W, 99.50 ft.

(152)Thence S 24°38'03"W, 183.42 ft.

(153)Thence S 01°02'06"E, 103.40 ft.

(154)Thence S 12°41'26"E, 147.04 ft.

(155)Thence S 10°15'25"W, 24.32 ft.

(156)Thence S 03°35'43"W, 123.65 ft. to the POINT OF BEGINNING.

LESS AND EXCEPT that portion thereof, lying within SAWYER KEY, said SAWYER KEY being also known as Government Lot 1, Fractional Section 31, Township 32 South, Range 16 East, Pinellas County, together with Government Lot 2, Fractional Section 32, Township 32 South, Range 16 East, Pinellas County.

#### LESS AND EXCEPT PARCEL ONE:

Commencing at previously established REFERENCE POINT "A", N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "G", a distance of 223.81 ft. to POINT OF BEGINNING, PARCEL ONE:

(157)Thence continuing along said Northwest line N 53°57'25"E, 307.46 ft. to a point hereafter referred to as REFERENCE POINT "B".

(158)Thence S 09°20'40"E, 803.45 ft. to a Point of Curvature.

(159)Thence southwesterly, westwesterly and southwestwesterly, 157.00 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 80°00'00", a chord bearing S 35°31'20"W, 141.42 ft. to a Point of Tangency.

(160)Thence S 80°31'28"W, 100.00 ft. to a Point of Curvature.

(161)Thence southwestwesterly, westwesterly and northwestwesterly, 157.00 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 80°00'00", a chord bearing N 54°20'34"W, 141.42 ft. to a Point of Tangency.

(162)Thence N 09°20'34"W, 725.93 ft. to the POINT OF BEGINNING.



ALSO LESS AND EXCEPT PARCEL TWO:

Commencing at previously established REFERENCE POINT "D", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "D", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL TWO:

- (163)thence continue along said Northwest line N 53°57'25"E, 307.46 ft. to a point hereinafter referred to as REFERENCE POINT "E";  
(164)thence S 00°28'34"E, 1000.46 ft. to a Point of Curvature;  
(165)thence southwesterly, westerly and southwestwardly, 157.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing S 35°31'26"W, 141.42 ft. to a Point of Tangency;  
(166)thence S 80°31'26"W, 100.00 ft. to a Point of Curvature;  
(167)thence southwesterly, westerly and northwesterly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;  
(168)thence N 09°28'34"W, 030.45 ft. to the POINT OF BEGINNING.

ALSO LESS AND EXCEPT PARCEL THREE:

Commencing at previously established REFERENCE POINT "E", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "E", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL THREE:

- (169)thence continue along said Northwest line N 53°57'25"E, 339.42 ft. to a point hereinafter referred to as REFERENCE POINT "F";  
(170)thence S 09°28'34"E, 1313.48 ft. to a Point of Curvature;  
(171)thence southwesterly, westerly and southwestwardly, 157.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing S 35°31'26"W, 141.42 ft. to a Point of Tangency;  
(172)thence S 80°31'26"W, 100.00 ft. to a Point of Curvature;  
(173)thence southwesterly, westerly and northwesterly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;  
(174)thence N 09°28'34"W, 1163.47 ft. to the POINT OF BEGINNING.

ALSO LESS AND EXCEPT PARCEL FOUR:

Commencing at previously established REFERENCE POINT "F", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "F", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL FOUR:

- (175)thence continue along said Northwest line N 53°57'25"E, for a distance of 761.48 ft. to a Point on Curve, a radius to said point being N 35°02'35"W;  
(176)thence southwesterly and southwardly, 332.63 ft. along the arc of a curve, concave southeast, having a radius of 300.00 ft., through a central angle of 63°25'59", a chord bearing S 22°14'26"E, 313.43 ft. to a Point of Tangency;  
(177)thence S 09°28'34"E, 1000.75 ft. to a Point of Curvature;  
(178)thence N 09°28'34"E, 228.56 ft. to a Point of Curvature;  
(179)thence easterly and southeastwardly, 115.84 ft. along the arc of a curve, concave to the south, having a radius of 100.00 ft., through a central angle of 66°22'27", a chord bearing S 85°17'21"E, 109.47 ft. to a Point of Compound Curvature;  
(180)thence southeastwardly, 113.07 ft. along the arc of a curve, concave to the southwest, having a radius of 100.00 ft., through a central angle of 03°20'44", a chord bearing S 31°25'45"E, 113.66 ft. to a Point of Compound Curvature;  
(181)thence southeastwardly, southwardly, and southwestwardly, 192.48 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 110°16'49", a chord bearing S 25°23'01"W, 164.13 ft. to a Point of Tangency;  
(182)thence S 09°28'34"E, 208.07 ft. to a Point of Curvature;  
(183)thence N 09°28'34"E, 150.00 ft. to a Point of Curvature;  
(184)thence N 09°28'34"E, 380.42 ft. to a Point of Curvature;  
(185)thence easterly, and southeastwardly, 141.30 ft. along the arc of a curve, concave to the southeast, having a radius of 100.00 ft., through a central angle of 40°57'42", a chord bearing S 90°39'43"E, 128.04 ft. to a Point of Compound Curvature;  
(186)thence southwesterly, 186.33 ft. along the arc of a curve, concave to the southeast, having a radius of 1848.79 ft., through a central angle of 03°07'46", a chord bearing S 18°56'39"E, 106.32 ft. to a Point of Compound Curvature;  
(187)thence southwesterly, southwardly and southwestwardly, 167.39 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 95°54'32", a chord bearing S 32°34'10"W, 148.52 ft. to a Point of Tangency;  
(188)thence S 80°31'26"W, 1230.79 ft. to a Point of Curvature;  
(189)thence southwesterly, westerly and northwesterly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;  
(190)thence N 09°28'34"W, 1120.08 ft. to a Point of Curvature;  
(191)thence northwardly and northeastwardly, 110.71 ft. along the arc of a curve, concave to the southeast, having a radius of 100.00 ft., through a central angle of 63°25'59", a chord bearing N 22°14'26"E, 105.14 ft. to a Point of Tangency;  
(192)thence N 53°57'25"E, 111.41 ft. to a Point of Curvature;  
(193)thence northwesterly, easterly and southeastwardly, 203.45 ft. along the arc of a curve, concave to the southwest, having a radius of 100.00 ft., through a central angle of 116°31'01", a chord bearing S 67°45'34"E, 170.13 ft. to a Point of Tangency;  
(194)thence S 09°28'34"E, 970.08 ft. to a Point of Curvature;  
(195)thence N 80°31'26"E, 150.00 ft. to a Point of Curvature;  
(196)thence N 09°28'34"W, 1438.51 ft. to the POINT OF BEGINNING, PARCEL FOUR.

ALSO LESS AND EXCEPT PARCEL FIVE:

Commencing at previously established REFERENCE POINT "G", run S 67°42'10"W, 450.83 ft. for POINT OF BEGINNING, PARCEL FIVE:  
(197)thence S 14°39'55"E along an East line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "G", a distance of 622.55 ft. to a Point of Curvature;  
(198)thence southwesterly, southwardly and southwestwardly, 168.14 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 95°11'21", a chord bearing S 32°51'46"W, 147.68 ft. to a Point of Tangency;

- (199)thence S 00°31'26"W along a South line of said PARCEL "G", 3764.69 ft. to a Point of Curvature;  
(200)thence westwardly, continuing along said South line, 301.24 ft. along the arc of a curve, concave to the north, having a radius of 1150.85 ft., through a central angle of 15°00'00", a chord bearing S 85°01'26"W, 300.30 ft. to a Point of Tangency;  
(201)thence continuing along said South line N 84°28'34"W, 652.07 ft. to a Point of Curvature;  
(202)thence (departing said South line, northwesterly, northwardly and northeastwardly, 200.71 ft. along the arc of a curve, concave to the east, having a radius of 100.00 ft., through a central angle of 116°00'00", a chord bearing N 26°58'34"W, 160.88 ft. to a Point of Tangency;

- (203) thence N 50°31'26"E, 503.00 ft. to a Point of Curvature;  
 (204) thence northwesterly and easterly, 238.00 ft. along the arc of a curve, concave to the southeast, having a radius of 220.00 ft., through a central angle of 82°00'00", a chord bearing N 61°31'24"E, 220.00 ft. to a Point of Tangency;  
 (205) thence S 87°20'34"E, 370.00 ft.;  
 (206) thence N 50°31'26"E, 370.00 ft. to a Point of Curvature;  
 (207) thence easterly and southwesterly, 148.02 ft. along the arc of a curve, concave to the southwest, having a radius of 100.00 ft., through a central angle of 84°40'30", a chord bearing S 57°04'15"E, 134.07 ft. to the POINT OF BEGINNING, PARCEL FIVE.

ALSO LESS AND EXCEPT:

That certain tract, as conveyed in T.I.F. DEED NO. 19966, the same being conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in D.R. 4929, Pages 23-37, public records of Pinellas County, and being described as follows:

The unsurveyed and most southerly island in the group of islands known as the Reefs, north of and across Dunas Pass from the most northeasterly point of Mabel Key and the southwest of Summer Resort Key, lying and being in what would be it surveyed, Township 32 South, Ranges 15 and 16 East, containing approximately 3.05 acres.  
 Further described as:  
 Latitude 27°39'00" North,  
 Longitude 82°41'34" West,  
 Approximate dimensions:  
 Length 850 feet northwest and southeast,  
 Width Average 172 feet northeast and southwest.

ALSO LESS AND EXCEPT:

That certain tract, as conveyed in T.I.F. DEED NO. 21073, the same being conveyed, as recorded in D.R. 4310, Pages 407-409, public records of Pinellas County, and being described as follows:

From the Southeast corner of Section 30, Township 32 South, Range 16 East, run S 89°27'24"W, 2560 feet; thence N 00°03'30"W, 2440 feet to a line section with the High Water Line of the Gulf of Mexico with Easterly Shore line of the northernmost key of "The Reefs", known as Panama Key, as shown on U.S. Coast and Geodetic Survey Chart No. 586, dated January 1944, said Key lying south of and adjacent to the "South Channel", and opposite end south of "Shot Key"; thence N 50°33'30"W, 150 feet; thence S 39°27'W, 2800 feet to a Point of Beginning; thence S 30°33'E, 500 feet; thence S 39°27'W, 87.12 feet; thence N 50°33'W, 500 feet; thence N 39°27'E, 87.12 feet to the Point of Beginning, lying and being in Sections 30 and 31, Township 32 South, Range 16 East, Pinellas County, Florida.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in D.R. 3092, Pages 387-388, public records of Pinellas County, being described as follows:

A tract of land in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows:

From the East 1/4 Corner of said Section 30, said quarter section corner being the southeast corner of Government Lot 1 of said Section 30, run West 080°45'12" thence N 75°18'18"W, 1409.62 ft. to a Point of Beginning; thence N 66°30'00"W, 468.10 ft.; thence N 20°57'51"E, 709.47 ft.; thence S 40°13'30"E, 365.51 ft.; thence S 17°42'00"W, 620.05 ft. to the Point of Beginning.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in D.R. 7047, Pages 777-779, public records of Pinellas County, Florida, being described as follows:

A tract of upland and submerged land in Boca Ciega Bay in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows:

From the East 1/4 Corner of said Section 30, said quarter section corner being the southeast corner of Government Lot 1 of said Section 30, run West along the South line of said mean high water mark of Boca Ciega Bay; thence N 67°42'07"W, a distance of 802.00 ft. to the P.O.B. of the parcel hereinafter described; thence N 17°42'00"E, a distance of 811.09 ft.; thence N 35°07'30"E, a distance of 80.33 ft.; thence N 40°13'30"W, a distance of 365.51 ft.; thence N 35°07'30"E, a distance of 430.00 ft.; thence S 44°30'34"E, a distance of 1285.04 ft.; thence S 35°07'30"W, a distance of 530.00 ft. to the P.O.B.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in Deed Book 1117, Pages 589-590, public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 8, Township 32 South, Range 10 East, Pinellas County, Florida, run S 08°45'37"E, 21.000 ft.; thence S 70°20'W, 300 ft.; thence S 01°50'E, 480 ft.; thence S 80°10'W, 400 ft.; thence S 50°35'W, 950 ft.; S 35°40'W, 600 ft. for a Point of Beginning; thence from said Point of Beginning run S 24°14'E, 1220 ft.; thence S 54°50'W, 500 ft.; thence N 26°22'W, 1340 ft.; thence N 86°01'48"E, 451.20 ft. to the Point of Beginning, and being in Section 30, Township 32 South, Range 10 East.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in O.R. 4640, Page 1653, public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 0, Township 32 South, Range 16 East, Pinellas County, Florida, run S 08°40'37"E, 21,060 ft.; thence S 60°51'46"W, 911.90 ft. for a Point of Beginning; thence S 02°11'00"E, 815.36 ft.; thence S 36°40'00"W, 600 ft.; thence S 85°01'49"W, 846.20 ft.; thence N 20°30'00"E, 1056 ft.; thence N 50°20'00"E, 540 ft.; thence N 60°51'46"E, 159.65 ft. to the Point of Beginning.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in O.R. 10255, Page 140, public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run S 08°40'37"E, 21,060 ft. for a Point of Beginning; thence S 70°20'00"E, 380 ft.; thence S 01°50'00"E, 400 ft.; thence S 88°10'00"W, 400 ft.; thence S 86°35'00"W, 950 ft.; thence N 02°11'00"W, 815.36 ft.; thence N 60°51'46"E, 911.90 ft. to the Point of Beginning.



4/2/99

CHARLES R. NORWOOD, P.L.S.

DATE

Florida Registered Professional Land Surveyor  
Certificate No. 3914.

Pinellas County Public Works  
Land Survey Division

22211 U.S. Hwy. 19 North  
Clearwater, Florida 33765

Phone: (727)464-8904



SEAL

DRAWING NO.: sketch1.dwg

FILE NO.: 930

SHEET 01 OF 02

SoF 6  
Prepared By and Return To:  
LuLu Xayasono-Hunter  
Fidelity National Title Insurance Company of New York  
5142 Gulfport Boulevard South  
Gulfport, FL 33707

File No. 99-019-1100280

Property Appraiser's Parcel I.D.(folio) Number(s)  
30-32-16-00000-220-0100

99-310 2 SPT-20-1999 5:21PM  
PINELLAS CO BK 10865 PG 1019  
FIDELITY NATIONAL TITLE INSURANCE COMPANY

01 Cash 11 Chg  
40 Rec 15.00  
41 DS 2,625.00  
43 Int  
Tot 2,640.00

## WARRANTY DEED

THIS WARRANTY DEED dated ~~August~~ <sup>September 16th</sup> 1999, by Mark E. Harrison, as Trustee of the Shell Island Trust under Declaration of Trust dated 24th day of February, 1999 hereinafter called the grantor, to Pinellas County, a political subdivision of the State of Florida whose post office address is 201 Rogers Street, Clearwater, FL 33756 hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all the certain land situated in Pinellas County, Florida, viz:

SEE EXHIBIT ONE ATTACHED HERETO AND MADE A PART HEREOF

Subject to easements, restrictions, reservations, and limitations of record, if any:

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in any wise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 1998.

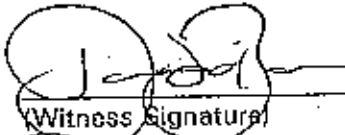
PAGES 3  
ACCT 150  
REC 150  
DR219 2625.00  
DS \_\_\_\_\_  
INT \_\_\_\_\_  
FEES \_\_\_\_\_  
MTF \_\_\_\_\_  
P/C \_\_\_\_\_  
REV \_\_\_\_\_  
TOTAL 2640.00  
- CK BAL \_\_\_\_\_  
CHG AMT \_\_\_\_\_

Documentary Tax Pd. \$ 2625.00  
Intangible Tax Pd. \_\_\_\_\_  
Karlson E. De Blaker, Clerk, Pinellas County  
by [Signature] Deputy Clerk

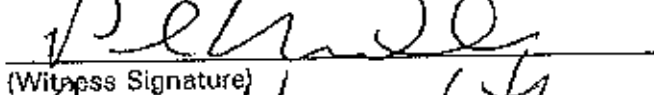
KARLEEN F. DE BLAKER, CLERK OF COURT  
PINELLAS COUNTY, FLORIDA  
50130270 09-20-1999 17:21:12 WJB  
51-00-DEB-HARRISON  
0000000000  
RECORDING 003 PAGES 1 \$15.00  
DOC STAMP - DR219 3 \$2,625.00  
TOTAL: \$2,640.00  
P CHECK AMT. TENDERED: \$2,640.00  
CHANGE: \$.00  
BY \_\_\_\_\_ DEPUTY CLERK

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

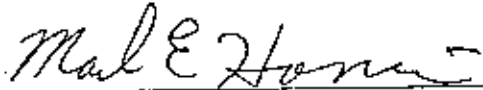
Signed, sealed and delivered in the presence of:

  
(Witness Signature)

David A. Bacon  
(Print Name of Witness)

  
(Witness Signature)

Paul Hornslett  
(Print Name of Witness)



Mark E. Harrison, as Trustee of the  
Shell Island Trust under Declaration of Trust  
dated 24th day of February, 1999

14041 HAPPY HILL ROAD  
DADE CITY, FL 33525

(Address and Phone Number)

STATE OF Florida

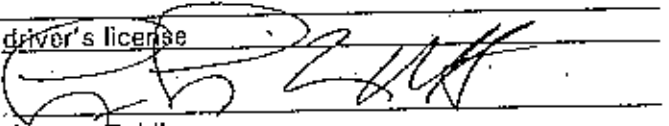
COUNTY OF Pinellas

Sworn to and subscribed before me the 16th

September  
day of August, 1999

by Mark E. Harrison

or who was/were personally known to me or who presented driver's license  
as identification.



Notary Public

My Commission Expires:



Lulu Xydasone-Hunter  
MY COMMISSION # CC688442 EXPIRES  
October 19, 2001  
BONDED THROUGH TROY FARM INSURANCE, INC

## EXHIBIT ONE

From the Northwest corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run South 08 degrees 46' 37" East 21,060 feet; thence South 68 degrees 51' 46" West 911.98 feet for a Point of Beginning; thence South 02 degrees 11' 00" East 815.36 feet; thence South 36 degrees 40' 00" West 600 feet; thence South 86 degrees 01' 49" West 641.20 feet; thence North 20 degrees 30' 00" East 1050 feet; thence North 56 degrees 20' 00" East 540 feet; thence North 68 degrees 51' 46" East 159.65 feet to the Point of Beginning . . . . .

**Property Appraiser's Parcel I.D.(folio) Number(s)**  
30-32-16-00000-220-0100

99-310844 SPT-20-1999 5:21 PM  
PINELLAS CO BK 10665 PG 1018

01 Cash 11 Chg  
40 Rec 15.00  
41 DS \_\_\_\_\_  
43 Int \_\_\_\_\_  
Tel 15.00

## WARRANTY DEED

**THIS WARRANTY DEED** dated September 16, 1999, by Mark E. Harrison, a single man, hereinafter called the grantor, to Pinellas County, a political subdivision of the State of Florida whose post office address is 201 Rogers Street, Clearwater, FL 33756 hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys, and confirms unto the grantee, all the certain land situated in Pinellas County, Florida, viz:

SEE EXHIBIT ONE ATTACHED HERETO AND MADE A PART HEREOF

Subject to easements, restrictions, reservations, and limitations of record, if any.

5. **TOGETHER** with all the tenements, hereditaments and appurtenances thereto belonging or in any wise appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

DOC STAMPS HAVE BEEN AFFIXED ON THE FIRST DEED.

**AND** the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 1998.


KARLEEN F. DE BLAKER, CLERK OF COURT  
PINELLAS COUNTY, FLORIDA  
56130271 09-20-1999 17:21:36 WJB  
51 DEB-HARRISON  
0000000000  
RECORDING 003 PAGES 1 \$15.00  
-----  
TOTAL: \$15.00  
P CHECK AMT. TENDERED: \$15.00  
EXCHANGE: \$.00  
BY DEPUTY CLERK

PAGES	<u>3</u>
ACCT	<u>          </u>
REC	<u>1500</u>
DR219	<u>          </u>
DS	<u>          </u>
INT	<u>          </u>
FEES	<u>          </u>
MTF	<u>          </u>
P/C	<u>          </u>
REV	<u>          </u>
TOTAL	<u>1500</u>
- CK BAL	<u>          </u>
CHG AMT	<u>          </u>

A1 - 10

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

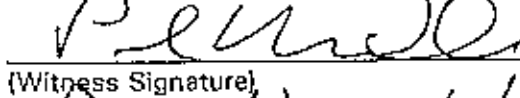
Signed, sealed and delivered in the presence of:



(Witness Signature)

DAVID A. BACON

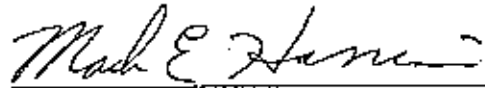
(Print Name of Witness)



(Witness Signature)

Paul Horaslet

(Print Name of Witness)



Mark E. Harrison

14041 HAPPY HILL ROAD

DADR CITY, FL 33525

(Address and Phone Number)

352-567-0105

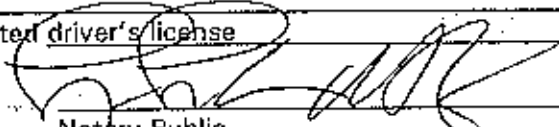
STATE OF Florida

COUNTY OF Pinellas

Sworn to and subscribed before me the 16th day of September, 1999

by Mark E. Harrison

or who was/were personally known to me or who presented driver's license  
as identification.

  
Notary Public

My Commission Expires:



Ida Kayanne Hunter  
MY COMMISSION # CC086442 EXPIRES  
October 19, 2001  
BONDED THRU TROY FAIR INSURANCE, INC.



## EXHIBIT ONE

From the Northwest corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run South 08 degrees 46' 37" East 21,060 feet; thence South 68 degrees 51' 46" West 911.98 feet for a Point of Beginning; thence South 02 degrees 11' 00" East 815.36 feet; thence South 36 degrees 40' 00" West 600 feet; thence South 86 degrees 01' 49" West 641.20 feet; thence North 20 degrees 30' 00" East 1050 feet; thence North 56 degrees 20' 00" East 540 feet; thence North 68 degrees 51' 46" East 159.65 feet to the Point of Beginning

Name: LOU ANNE TRNAVSKY  
FIDELITY NATIONAL TITLE  
Address: 4200 4TH STREET NORTH, SUITE C  
ST. PETERSBURG, FLORIDA 33703  
Property Appraiser Parcel I.D. (Polo) Number(s):  
30/32/16/00000/210/0100

WARRANTY DEED  
NOV. TO NOV.

INST # 98-314393  
OCT 1, 1998 3:19PM

PINELLAS COUNTY FLA.  
OFF REC BK 10255 PG 149

Grantee(s) S.S. # (s):

REC FEE \$ 2.00  
DOC STAMP \$ 9.00  
INT TAX \$ 0.00  
TOTAL \$ 270.00

30119003 PRL 10-01-1998 15:15:58  
OL REP COLLARY  
RECORDING 1 15.00  
DOC STAMP 3 1194.60  
REVENUE 13 11.00  
TOTAL: 1201.60  
CHECK AMT. TENDERED: 1201.60  
CHANGE: \$ .00

THIS WARRANTY DEED Made the 27th day of August A.D. 19 98 by  
W. R. COLLARY A/K/A RANDY COLLARY A/K/A W. RANDY COLLARY  
141 Lake Otis Road Southeast, Winter Haven, FL 33884

hereinafter called the grantor, to PINELLAS COUNTY, a political subdivision of the State of  
Florida

whose postoffice address is 201 Rogers Street, Clearwater, FL 33756  
hereinafter called the grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and  
their heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of \$ 10.00 and other  
valuable consideration, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, assigns, remises,  
releases, conveys and confirms unto the grantee, all that certain land situate in PINELLAS  
County, Florida, viz: FROM THE NORTHWEST CORNER OF SECTION 6, TOWNSHIP 32 SOUTH, RANGE 16  
EAST, PINELLAS COUNTY, FLORIDA, runs S. 08.46°37' E., 21,060 feet for a Point of  
Beginning: thence S. 70.20°00' E., 380 feet; thence S. 01.50°00' E., 480 feet;  
thence S. 88.10°00' W., 400 feet; thence S. 56.35°00' W., 950 feet; thence N.  
2.11°00' W., 815.36 feet; thence N. 60.51°46' E., 911.98 feet to the Point of \*  
GRANTOR(S) HEREBY STATE that the above-described property is not their homestead  
under the laws and the constitution of the state of FLORIDA.

\* Beginning.

Subject to easements, restrictions, reservations, and limitations of record, if any.

TOGETHER with all the tenements, hereditaments and appurtenances thereto belonging or in anywise  
appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple;  
that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully  
warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that  
said land is free of all encumbrances, except taxes accruing subsequent to December 31, 19 97.

IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above  
written.

Signed, sealed and delivered in our presence:

Lou Anne Trnavsky  
Witness Signature  
LOU ANNE TRNAVSKY  
Witness Printed Name

W. Randy Collary  
Grantor Signature  
L.S.  
W. RANDY COLLARY  
Grantor Printed Name

Monica L. Johnson  
Witness Signature  
MONICA L. JOHNSON  
Witness Printed Name

Monica L. Johnson  
Grantor Signature  
L.S.  
MONICA L. JOHNSON  
Grantor Printed Name

STATE OF FLORIDA  
COUNTY OF PINELLAS

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to  
take acknowledgements, personally appeared  
W. R. COLLARY A/K/A RANDY COLLARY A/K/A W. RANDY COLLARY

to me known to be the person(s) described in or has/have produced his Florida drivers license as identification  
and who executed the foregoing instrument and he/she/they acknowledged before me that he/she/they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 27 day of August A.D. 19 98

My Commission Expires: 10/1/99  
LOU ANNE TRNAVSKY  
Notary Public, State of Florida  
Commission No. 00345648  
My Commission Expires 05/1/2000

Lou Anne Trnavsky  
Notary Signature  
LOU ANNE TRNAVSKY  
Printed Notary Name  
A1-13

0 Rec N.C.  
1 St 346.50  
2 Sur \_\_\_\_\_  
3 Int \_\_\_\_\_  
Tot 346.50 off

88193043

OR6807PG0747

# Warranty Deed

(STATUTORY FORM — SECTION 689.02 F.S.)

This Indenture, Made this

day of

19 Between

PINELLAS MARINE INSTITUTE, INC., A FLORIDA NOT FOR PROFIT CORPORATION

, grantor\*, and

PINELLAS COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA  
ATTN: GENERAL SERVICE DEPT. 315 COURT ST. CLEARWATER, FL. 34616.

, grantee\*.

Witnesseth, That said grantor, for and in consideration of the sum of Ten (\$10.00) Dollars, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in PINELLAS County, Florida, to-wit:

A tract of submerged land in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southeast corner of Government Lot 1 of said Section 30, run West 829.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run N. 75 deg. 15' 19" W., 1408.62 feet for a Point of Beginning; thence run N. 66 deg. 39' 00" W., 466.18 feet; thence run N. 28 deg. 57' 51" E., 337.83 feet; thence S. 43 deg. 27' 50" E., 454.25 feet; thence S. 17 deg. 42' 00" W., 158.13 feet to the Point of Beginning.

Also known as Parcel #30/32/16/00000/240/0100.

Subject to easements, restrictions and reservations of record.  
Subject to taxes for the year 1988 and subsequent years.

Document for Pin. Co. #30/32/16/00000/240/0100	14027230	GEN 08-08-88	12:09:49
Subscribed by: Joseph T. Lettelier			
Subscribed by: Clerk, Pinellas County	STAPPS	2	\$346.50
TOTAL:			\$346.50
CHANGE:			\$0.00

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.  
\*Grantor\* and \*grantee\* are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

PINELLAS MARINE INSTITUTE, INC., A  
FLORIDA NOT FOR PROFIT CORPORATION

BY:

JOSEPH T. LETTELIER  
CHAIRMAN OF THE BOARD

88 AUG - 8 AM 11:52  
KAREN DEBLAKER  
CLERK OF CIRCUIT COURT  
PINELLAS COUNTY, FL.

STATE OF  
COUNTY OF

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared

JOSEPH T. LETTELIER, CHAIRMAN OF THE BOARD FOR  
PINELLAS MARINE INSTITUTE, INC., A FLORIDA NOT FOR PROFIT CORPORATION

to me known to be the person described in and who executed the foregoing instrument and acknowledged before me that he executed same.

WITNESS my hand and official seal in the County and State last aforesaid this 5<sup>th</sup> day of August

My commission expires: 5/16/91

Notary Public

A1 - 14

PREPARED BY:  
STEWART FIDELITY TITLE COMPANY  
1120 PINELLAS BAYWAY, NO. 205 & 206  
P.O. BOX 58097  
CLEARWATER, FL 34615

AFFIDAVIT AS TO DEBTS AND LIENS

STATE OF  
COUNTY OF

FILE NO.: 88080165TV  
DATE: AUGUST 05, 1988

PINELLAS MARINE INSTITUTE, INC., A FLORIDA NOT FOR PROFIT CORPORATION

being first duly sworn, deposes and says that:

1. Affiant is the owner of those premises known as:

VACANT LAND,

Legally described as: TRACT OF SUBMERGED LAND IN SECTION 30, TOWNSHIP  
30 SOUTH, RANGE 16 EAST

2. Affiant has possession of the property and there is no other person in possession who has any right in the property.

3. No "Notice of Commencement" has been recorded affecting the property, and there are no labor, mechanics, or materialmens liens against the property, and no material has been furnished to or labor of services performed upon the property which has not been paid for in full.

4. There are no unrecorded easements, unpaid bills, liens or assessments, for sewers, paving or other public utilities or improvements made by any governmental authority, and that no notice has been received for any public hearing regarding future or pending assessments for improvements by any governmental instrumentality which are now unpaid against the property.

5. Affiant is the owner of, and there are no claims whatsoever of any kind or description against the furniture, fixtures, equipment and other personal property located on or in the property.

6. There are no existing contracts for sale of the property, other than the contract being closed.

7. There are no loans, mortgages, or other leases, recorded or unrecorded, on any of said property except:

ROBERT T. MORAN, SR.

If NONE, so state

8. That all due and payable ad valorem (real estate) taxes and tangible personal property taxes have been paid and that I have (have not) applied for homestead exemption for 19\_\_ taxes on said property.

THIS AFFIDAVIT is made for the purpose of inducing Fidelity Title Company, a Florida Corporation, and Stewart Title Guaranty Company, a Texas Corporation, to issue a title insurance policy on the above described property, and to disburse funds held by Fidelity Title Company, as Escrow Agent.

("AFFIANT" is used herein for singular or plural)

WITNESSES

*Karen L. Moran*

PINELLAS MARINE INSTITUTE, INC. (SEAL)

(SEAL)

(SEAL)

(SEAL)

Sworn to and subscribed before me this 5th day of August, 1988.

A1-15

*Karen L. Moran*  
Notary Public

Photo. Gen. Services Real Estate

0 Reg  
1 St  
2 Sur  
3 Int  
Tot

N.C.  
558.25

88193066

BR6807PG0808

# Warranty Deed

(STATUTORY FORM - SECTION 689.02 F.S.)

This Indenture, Made this

5TH

day of

AUGUST

1988, Between

WILLIAM C. MOORE, A SINGLE MAN

, grantor\*, and

PINELLAS COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA  
ATTN: GENERAL SERVICE DEPT. 315 COURT ST., CLEARWATER, FL. 34616

, grantee\*,

Witnesseth, That said grantor, for and in consideration of the sum of Ten (\$10.00) Dollars, and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in PINELLAS County, Florida, to-wit:

SEE ATTACHED EXHIBIT "A"

See attached Exhibit "A" for legal description.

Grantor herein reserving a life estate for and during his natural life and then unto the Grantee herein in fee simple in accordance with the terms as set forth in attached Exhibit "B".

Also known as Parcel #30/32/16/00000/240/0200.

Subject to easements, restrictions and reservations of record.  
Subject to taxes for the year 1988 and subsequent years.

KARLENE F. DE BLAKER  
CLERK OF CIRCUIT COURT  
PINELLAS COUNTY, FL.  
88 AUG - 8 AM 11:54

558.25  
Pinellas County, Florida  
Notary Public

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.  
\*Grantor\* and \*grantee\* are used for singular or plural, as context requires.

In Witness Whereof, Grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

*James A. Simon*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*William C. Moore*  
WILLIAM C. MOORE (Seal)

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

STATE OF FLORIDA  
COUNTY OF PINELLAS

I HEREBY CERTIFY that on this day before me, an officer duly qualified to take acknowledgments, personally appeared

WILLIAM C. MOORE, A SINGLE MAN

to me known to be the person described in and who executed the foregoing instrument and acknowledged before me that he executed same.

WITNESS my hand and official seal in the County and State last aforesaid this 5TH day of AUGUST 19 88

My commission expires: 5/16/91

*James A. Simon*  
Notary Public

A1 - 16

PREPARED BY:  
STEWART FIDELITY TITLE COMPANY  
1120 PINELLAS BAYWAY, NO. 205 & 206  
P.O. BOX 58097

Hold - General Services - Real Estate

## EXHIBIT "A"

A tract of submerged land in Section 30, Township 22 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southwest corner of Government Lot 1 of said Section 30, run West 200.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run North 75 deg. 15' 19" West, 400.00 feet to the Point of Beginning; thence run North 66 deg. 30' 00" West, 466.18 feet; thence run North 28 deg. 57' 51" East, 327.00 feet; thence run South 40 deg. 13' 30" East, 200.00 feet; thence run South 17 deg. 42' 00" West, 626.05 feet to the Point of Beginning.

## LESS AND EXCEPT THE FOLLOWING:

A tract of submerged land in Section 30, Township 22 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southwest corner of Government Lot 1 of said Section 30, run West 200.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run N. 75 deg. 15' 19" W., 400.00 feet; thence N. 17 deg. 42' 00" East, 426.05 feet to the Point of Beginning; thence N. 43' 24" W., 401.40 feet; thence N. 28 deg. 57' 51" E., 327.00 feet; thence S. 40 deg. 13' 30" E., 200.00 feet; thence S. 17 deg. 42' 00" W., 200.00 feet to the Point of Beginning.

## ALSO LESS AND EXCEPT:

A tract of submerged land in Section 30, Township 22 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southwest corner of Government Lot 1 of said Section 30, run West 200.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run N. 75 deg. 15' 19" W., 400.00 feet to the Point of Beginning; thence run N. 66 deg. 30' 00" W., 466.18 feet; thence run N. 28 deg. 57' 51" E., 327.00 feet; thence S. 40 deg. 13' 30" E., 200.00 feet; thence S. 17 deg. 42' 00" W., 626.05 feet to the Point of Beginning.

W.C.M.

EXHIBIT "A"

Also described as:

A tract of submerged land in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southeast corner of Government Lot 1 of said Section 30, run West 829.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run N. 75 deg. 15' 19"W., 1408.62 feet for a Point of Beginning; thence run N. 66 deg. 39' 00"W., 466.18 feet; thence run N. 28 deg. 57' 51"E., 589.46 feet; thence S. 42 deg. 43' 24"E., 401.04 feet; thence S. 17 deg. 42' 00"W., 426.05 feet to the Point of Beginning;

LESS THE FOLLOWING:

A tract of submerged land in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows: From the East quarter corner of said Section 30, said quarter section corner being the Southeast corner of Government Lot 1 of said Section 30, run West 829.45 feet, more or less, to the mean high water mark of Boca Ciega Bay; thence run N. 75 deg. 15' 19"W., 1408.62 feet for a Point of Beginning; thence run N. 66 deg. 39' 00"W., 466.18 feet; thence run N. 28 deg. 57' 51"E., 337.83 feet; thence S. 43 deg. 27' 50"E., 454.25 feet; thence S. 17 deg. 42' 00"W., 158.13 feet to the Point of Beginning.

W. O. M.

## EXHIBIT "B"

a. Upon the death of the Life Tenant, the life estate shall terminate and title to the property and all improvements thereto, including all fixtures now or hereafter attached to any buildings on the property shall vest in and become the property of the Remainderman.

b. Life Tenant may insure any improvements he places on the property sufficient to protect his interest therein.

c. Life Tenant shall keep and repair the property in as good a condition as at the time of creation of this life estate; provided, however Life Tenant need not restore or replace buildings on the property that may be destroyed by fire or other casualty not the fault of Life Tenant. Life Tenant shall make all repairs to improvements located on the property which Life Tenant deems necessary to maintain the property for Life Tenant's use, at Life Tenant's expense. Any improvements to the property, including new construction or renovation of existing improvements, shall be at Life Tenant's sole expense and, at the death of Life Tenant, shall become the property of Remainderman. Remainderman shall not owe any compensation to Life Tenant for any improvements that Life Tenant places on the property.

d. Life Tenant shall not commit or permit waste of the property and shall be liable to Remainderman for any such waste, or any loss or reduction in value of the property which is the result of fraud or gross and willful negligence on the part of the Life Tenant.

e. Life Tenant shall use the property for non-commercial recreational and temporary residential purposes only. It is the intent of the parties hereto that Life Tenant shall not during his life tenancy unreasonably increase the burden of his use of the property beyond that in existence as of the time of creation of his life tenancy, without Remainderman's prior written consent. Life Tenant shall not use the property for any illegal use. Life Tenant shall, at all times, comply with all applicable federal, state and local laws, rules, regulations and ordinances relating to the use of the property. Any and all improvements to the property shall be in compliance with said laws, rules, regulations and ordinances.

f. Life Tenant shall not lease the property without Remainderman's prior written consent.



g. Life Tenant shall have no power or authority to sell, mortgage, pledge, convey or otherwise encumber the remainderman's interest in the property. If Life Tenant sells, mortgages, pledges, conveys or encumbers the remainderman's interest in the property, or if any attempt is made to subject the remainderman's interest in the property to liability for payment of Life Tenant's debts or the debts of his wife and children, if any, then his life estate shall immediately terminate and the property and all improvements thereto shall pass to Remainderman.

h. If Life Tenant becomes insolvent or bankrupt, whether such bankruptcy is voluntary or involuntary, then the life estate shall terminate and the property and all improvements thereto shall pass to Remainderman.

i. Life Tenant shall not excavate or mine the property for the purpose of production of oil, gas or any other minerals underlying the property.

j. If, after closing, the property becomes subject to a special assessment for public improvements which benefits the the remainder of the property, the assessment shall be apportioned between the Life Tenant and Remainderman with the Life Tenant paying that portion of the assessment equal to the ratio of his remaining life expectancy at the time of construction of the public improvement divided by the estimated life of the improvement.

k. Life Tenant shall be responsible for payment of any taxes and assessments, subject to subparagraph (j), on the property when due.

If Life Tenant fails to pay such taxes and/or assessments when due, the life estate shall terminate and the property and all improvements thereto shall pass to Remainderman.

l. At all times during his life tenancy, Life Tenant shall maintain the following insurance coverage:

Comprehensive General Liability covering liability assumed under indemnification provisions of this Agreement, with Combined Single limits of liability for property damage and personal injury and/or bodily injury, including death, of not less than \$100,000 per person and not less than \$300,000 each occurrence. Coverage shall be on an "occurrence" basis, and the policy shall include Broad Form Property Damage coverage. Limits may be provided by any combination of Primary and Excess coverage so long as minimum coverages and limits are provided without gaps.

A Certificate of insurance shall be filed and maintained with the Pinellas County Department of Risk Management during the term of the life estate; and Life Tenant shall notify Remainderman with twenty-four (24) hours after receipt of any notice of expiration, cancellation, non-renewal or material change in coverage. Companies issuing the insurance policy or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which are at the sole responsibility and risk of Life Tenant. The Pinellas County Board of County Commissioners shall be endorsed to the required policy or policies as an additional insured. The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by County, to any such future coverage, or to County's Self-Insured Retentions of whatever nature.

m. Life Tenant agrees to indemnify and save harmless the Remainderman from and against all loss or expense (including costs and attorney's fees) by reason of liability imposed by law upon Remainderman for damages (including any strict or statutory liability and any liability under Worker's Compensation Laws) because of bodily injury, including death, at the time therefrom, sustained by any person or persons, or damage to property, including loss of use thereof, arising out of or in consequence of the use of the property, whether such injuries to persons or damage to property is due or claimed to be due to the negligence of the Life Tenant, his sub-contractors, the Remainderman, their agents or employees, except only such injury or damage as shall have been occasioned by the sole negligence of the Remainderman.

## **ADDENDUM 2**

### **Lease and Management Agreements**

BOARD OF TRUSTEES OF THE INTERNAL  
IMPROVEMENT TRUST FUND OF THE  
STATE OF FLORIDA

LEASE AGREEMENT  
SHELL KEY

Lease No. 4228

THIS LEASE AGREEMENT, made and entered into this 8th day  
of December, 2000, by and between the BOARD OF TRUSTEES OF  
THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA  
hereinafter referred to as "LESSOR," and PINELLAS COUNTY, FLORIDA  
hereinafter referred to as "LESSEE."

LESSOR, for and in consideration of mutual covenants and  
agreements hereinafter contained, does hereby lease to said  
LESSEE, the lands described in paragraph 2 below, together with  
the improvements thereon, and subject to the following terms and  
conditions:

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and  
obligations herein shall be exercised by the Division of State  
Lands, Department of Environmental Protection.
2. DESCRIPTION OF PREMISES: The property subject to this lease,  
is situated in the County of Pinellas, State of Florida and is  
more particularly described in Exhibit "A" attached hereto and  
hereinafter called the "leased premises".
3. TERM: The term of this lease shall be for a period of fifty  
(50) years commencing on December 8, 2000 and ending on  
December 8, 2050 unless sooner terminated pursuant to the  
provisions of this lease.
4. PURPOSE: LESSEE shall manage the leased premises only for  
the conservation and protection of natural and historical  
resources and for resource based public outdoor activities and  
education which are compatible with the conservation and  
protection of these public lands, as set forth in subsection  
259.032(11), Florida Statutes, along with other related uses  
necessary for the accomplishment of this purpose as designated in  
the Management Plan required by paragraph 8 of this lease.

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.
6. UNAUTHORIZED USE: LESSEE shall, through its agents and employees, will use every reasonable effort to prevent the unauthorized use of the leased premises or any use thereof not in conformity with this lease.
7. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR, which consent shall not be unreasonably withheld. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.
8. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with subsection 18-2.021(4), Florida Administrative Code, within twelve months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands, Department of Environmental Protection. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. LESSEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LESSEE shall give LESSOR reasonable notice of the application for and receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit

applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at LESSEE'S own risk. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

9. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

10. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited without the prior written approval of LESSOR, which approval shall not be unreasonably withheld. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

11. RIGHT OF INSPECTION: LESSOR or its duly authorized agents, representatives or employees shall have the right to reasonably inspect the leased premises and the works and operations of LESSEE in any matter pertaining to this lease.

12. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures and improvements shall be constructed in accordance with plans that are in accordance with the approved Management Plan or shall require the prior written approval of LESSOR as to purpose, location and design which approval shall not be unreasonably withheld. Further, no trees, other than non-native species, shall be removed or major land alterations done without

the prior written approval of LESSOR. Removable equipment and removable improvements placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE before or upon termination of this lease.

13. INSURANCE REQUIREMENTS: LESSEE shall provide written evidence that Pinellas County is self-insured pursuant to Section 768.28(15) Florida Statutes prior to the effective date of this lease to the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. The certificate of self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements.

14. LIABILITY: Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees and agents thereof. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 768.28, Florida Statutes, as amended from time to time, or any other law providing limitations on claims.

15. PAYMENT OF TAXES AND ASSESSMENTS: LESSEE shall assume full responsibility for and shall pay all taxes, assessments, liens or other similar liabilities that accrue to the leased premises or to the improvements thereon arising after this lease commences including any and all ad valorem taxes and drainage and special assessments or personal property taxes of every kind and all construction or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises subsequent to the effective date of this lease. In no event

shall the LESSEE be held liable for such liabilities which arose prior to the effective date of this lease.

16. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms or conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

17. TIME: Time is expressly declared to be of the essence of this lease.

18. NON-DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

19. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having the utilities turned off when the leased premises are surrendered.

20. MINERAL RIGHTS: This lease does not cover petroleum or petroleum products or minerals and does not give the right to LESSEE to drill for or develop the same.

21. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease, and LESSOR shall have the right to audit such records at any reasonable time during the term of this lease. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or



received in conjunction with this lease, pursuant to the provisions of Chapter 119, Florida Statutes.

22. CONDITION OF PREMISES: LESSOR assumes no liability or obligation to LESSEE with reference to the conditions of the leased premises. The leased premises herein are leased by LESSOR to LESSEE in an "as is" condition, with LESSOR assuming no responsibility for the care, repair, maintenance or improvement of the leased premises for the benefit of LESSEE.

23. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the State of Florida or the United States or of any political subdivision or agency of either.

24. NOTICE: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to Section 253.04, Florida Statutes, to the last address of the party to whom notice is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Department of Environmental Protection  
Division of State Lands  
Bureau of Public Land Administration, M. S. 130  
3900 Commonwealth Boulevard,  
Tallahassee, Florida 32399-3000

LESSEE: Pinellas County  
Real Estate Management Division  
General Services Department  
201 Rogers Street  
Clearwater, Florida 33756

Pinellas County  
Department of Environmental Management  
315 Court Street  
Clearwater, Florida 33756

25. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE

breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty days of receipt of written notice, LESSOR may either terminate this lease and shall enjoy such other rights available under Florida laws to recover any damages.

26. DAMAGE TO THE PREMISES: (a) LESSEE shall not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises or adjacent properties, any act which may result in damage or depreciation of value to the leased premises or adjacent properties, or any part thereof. (b) LESSEE shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants, or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the leased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this lease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE's failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required

closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and (2) all off-site ground and surface waters and lands affected by LESSEE's such failure to comply, as may be necessary to bring the leased premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. LESSEE'S obligations set forth in this paragraph shall survive the termination or expiration of this lease. This paragraph shall not be construed as a limitation upon LESSEE'S obligations as set forth in paragraph 14 of this lease, nor upon any other obligations or responsibilities of LESSEE as set forth herein but neither shall this paragraph be construed as a waiver of sovereign immunity. Nothing herein shall relieve LESSEE of any responsibility or liability proscribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by LESSEE'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state or federal law, ordinance, code, rule, regulation, order or decree relating to the generation, storage, production, placement, treatment, release or discharge of any contaminant, LESSEE shall report such violation to all applicable governmental agencies having jurisdiction, and to LESSOR, all within the reporting periods of the applicable governmental agencies. This paragraph shall not be deemed to apply to any conditions existing prior to the effective date of this lease.

27. ENVIRONMENTAL AUDIT: At LESSOR'S discretion, LESSEE shall provide LESSOR with a current Phase I environmental site assessment conducted in accordance with the Department of

Environmental Protection, Division of State Land's standards prior to termination of this lease, and if necessary a Phase II environmental site assessment.

28. SURRENDER OF PREMISES: Upon termination or expiration of this lease, LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, LESSEE shall give written notification to the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of any or all of the leased premises. Notification shall include a legal description, this lease number, and an explanation of the release. The release shall only be valid if approved by LESSOR through the execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon termination or expiration of this lease, all permanent/capital improvements, including both physical structures and modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises a representative of the Division of State Lands, Department of Environmental Protection, shall perform an on-site inspection and the keys to any building on the leased premises shall be turned over to the Division.

29. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.018(2)(h), Florida Administrative Code, which have been selected, developed, or

approved by LESSOR, LESSEE or other land managing agencies for the protection and enhancement of the leased premises.

30. PUBLIC LANDS ARTEROPOD CONTROL PLAN: LESSEE shall identify and subsequently designate to the respective arthropod control district or districts within one year of the effective date of this lease all of the environmentally sensitive and biologically highly productive lands contained within the leased premises, in accordance with Section 388.4111, Florida Statutes and Chapter 5E-13, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.

31. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

32. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this lease shall be ruled by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

33. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Chapter 18-2 Florida Administrative Code, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the

archaeological and historic sites and properties on the leased premises.

34. SOVEREIGNTY SUBMERGED LANDS: This lease authorizes the use of any lands located landward and waterward of the mean or ordinary high water line of any lake, river, stream, creek, bay, estuary, or other water body or the waters or the air space thereabove.

35. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

36. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and the improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter to the extent practicable, meeting all building and safety codes for the location situated, maintaining the planned improvements as set forth in the approved Management Plan and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this lease, reasonable wear and tear excepted; provided, however, that any removal, closure, etc, of the above improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection, enhancement, or safety of the natural and historical resources within the leased premises and with the approved Management Plan.

37. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida.

38. SIGNS: LESSEE shall ensure that the area is identified as being publicly owned and operated as a public facility in all signs, literature and advertising. If federal grants or funds are used by LESSEE for any project on the leased premises LESSEE

shall erect signs identifying the leased premises as a federally assisted project.

39. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

40. ADMINISTRATIVE FEE: LESSEE shall pay LESSOR an annual administrative fee of \$300. The initial annual administrative fee shall be payable within thirty days from the date of execution of this lease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this lease agreement, the fiscal year shall be the period extending from July 1 to June 30. Each annual payment thereafter shall be due and payable on July 1 of each subsequent year.

41. SPECIAL CONDITIONS: The following special conditions shall apply to this lease:

- 1) The primary purpose of this lease shall be to ensure management compatible with the protection and conservation of wintering and nesting shorebirds and set forth in subsection 259.032(11) Florida Statutes.
- 2) The management plan required by this lease agreement shall delineate core areas for the protection of shorebirds within the greater Shell Key area. The Florida Game and Fresh Water Fish Commission (Commission) staff has agreed to assist in mapping these core areas.
- 3) Critical bird habitat within the core area shall at minimum be posted to prohibit trespass and minimize human disturbance to wintering, nesting, and migrating

shorebirds. Because the exact location of critical bird habitat on the island shifts somewhat from year to year, the posted boundaries should remain flexible and reflective of bird use and changes in island geography and topography. Commission staff will be available to meet with Pinellas County in November and January of each year to plan and coordinate posting for wintering and nesting shorebirds respectively.

- 4) Pinellas County leash laws shall be enforced on Shell Key.
- 5) Beach raking and mechanical cleaning activities shall be prohibited on Shell Key during shorebird nesting season (March 1<sup>st</sup> - August 1<sup>st</sup>) and marine turtle nesting season (May 1<sup>st</sup> - October 31<sup>st</sup>).



IN WITNESS WHEREOF, the parties have caused this lease to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL  
IMPROVEMENT TRUST FUND OF THE  
STATE OF FLORIDA

Judy Woodard  
Witness

Judy Woodard  
Print/Type Witness Name

[Signature]  
Witness

Lelissa Vickers  
Print/Type Witness Name

By: Gloria C. Nelson (SEAL)  
GLORIA C. NELSON, OPERATIONS  
AND MANAGEMENT CONSULTANT  
MANAGER, BUREAU OF PUBLIC  
LAND ADMINISTRATION,  
DIVISION OF STATE LANDS  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

"LESSOR"

STATE OF FLORIDA  
COUNTY OF LEON

8th The foregoing instrument was acknowledged before me this  
day of December 2004, by Gloria C. Nelson,  
Operations and Management Consultant Manager, Bureau of Public  
Land Administration, Division of State Lands, Department of  
Environmental Protection, as agent for and on behalf of the Board  
of Trustees of the Internal Improvement Trust Fund of the State  
of Florida, who is personally known to me or who has produced  
as identification.

Florence L. Davis  
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:



Florence L. Davis  
MY COMMISSION # 0021860 EXPIRES  
October 11, 2004  
BONDED THROUGH FLSA INSURANCE, INC.

Approved as to  
Form and Legality

By: Sam H. Hise  
DEP Attorney

PINELLAS COUNTY, FLORIDA, through  
its BOARD OF COUNTY COMMISSIONERS

By: Robert B. Stewart

ROBERT B. STEWART

Print/Type Name

Title: Chairman

Witness

Hien Tran

Print/Type Name

D. Elaine Cox

Witness

D. Elaine Cox

Print/Type Name

OFFICIAL SEAL

ATTEST:

Karlson F. De Blaker

Clerk of the Circuit Court

By: Sandra A. DeBlaker

Deputy Clerk

"LESSEE"

STATE OF FLORIDA  
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 30 day of November, 2000,  
by Robert B. Stewart and Robert B. DeBlaker, as Chairman  
and Deputy Clerk, respectively, on behalf of the Board of County  
Commissioners of Pinellas County, Florida, who is/are personally known to me or who have  
produced as identification.

Huyen Kim Hahn  
Notary Public, State of Florida

Huyen Kim Hahn  
Type Notary Name

Commission Number:



Huyen Kim Hahn  
MY COMMISSION # 06510732 EXPIRES  
April 15, 2001  
BONDED THIRD PARTY INSURANCE, INC.

Commission Expires:

APPROVED AS TO FORM  
OFFICE OF COUNTY ATTORNEY  
By Sandra A. DeBlaker  
Attorney

# EXHIBIT "A" LEGAL DESCRIPTION

## SHELL KEY MANAGEMENT AREA STATE OF FLORIDA TRACT DESCRIPTION

An irregular shaped parcel, being comprised of both upland and submerged lands, lying within the Gulf of Mexico, the same being north of "Bassess Pass", 1/2 mile south of "North Channel", and being west of the Panama Bayway (State Road 472), Pinellas County, Florida, being described as follows:

Commencing at the East 1/4 Corner of Fractional Section 30, Township 32 South, Range 18 East, run S 87°36'34" E along the South East of Government Lot 1, said Fractional Section 30, 816.61 ft. to on the West High Water Line of the Gulf of Mexico, the same being a point on the West Line of TERRA VERDE UNIT TWO Subdivision, according to Plat thereof, as recorded in Plat Book 87, Pages 85-89, public records of Pinellas County, for a POINT OF BEGINNING;

(001) thence S 85°13'03" E along the North East of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PUBLIC RECORDS, TRACT 2, public records of Pinellas County, 1834.55 ft.

(002) thence N 50°22'17" E along a Northwest line of said TRACT 2, 130.00 ft.

(003) thence S 30°13'39" E along a Northwest line of said TRACT 2, 2117.83 ft. to the most Northerly point of that certain tract, as conveyed to said Pinellas County, as recorded in said O.R. 4929, Pages 29-37, PARCEL "B", the same being a Point of Curvature;

(004) thence southeasterly and southerly, 311.52 ft. along the arc of a curve, the same being the West Line of said PARCEL "B", concave to the south, having a radius of 303.75 ft. through a central angle of 48°52'04", a chord bearing S 11°37'28" W, 307.17 ft. to a Point of Tangency;

(005) thence S 07°23'34" E along said West Line, 316.86 ft. to a Point of Intersection with the Northwest line of said tract, as described in O.R. 4139, Page 467, public records of Pinellas County;

(006) thence S 50°36'21" E along said Northwest line, 137.84 ft. to the most Easterly corner thereof;

(007) thence S 37°21'31" E along the Southeast line thereof, 87.17 ft. to the most Southerly corner thereof;

(008) thence N 50°36'21" E along the Southeast line thereof, 36.00 ft. to a Point of Intersection with said West Line of PARCEL "B";

(009) thence S 07°23'34" E along said West Line of PARCEL "B", 377.820 ft. to a Point of Curvature;

(010) thence southeasterly, 1452.73 ft. along the arc of a curve, the same being said West Line of PARCEL "B", concave to the northeast, having a radius of 1173.52 ft. through a central angle of 87°41'55", a chord bearing S 43°15'43" E, 1345.70 ft. to a Point of Compound Curvature;

(011) thence southeasterly, southerly and and southeasterly, 119.43 ft. along the arc of a curve, departing said West Line of PARCEL "B", concave to the northwest, having a radius of 100.00 ft. through a central angle of 85°23'41", a chord bearing N 84°41'17" E, 112.46 ft. to a Point of Tangency;

(012) thence N 30°31'24" E, 777.44 ft. to a Point of Curvature;

(013) thence northeasterly and easterly, 454.45 ft. along the arc of a curve, concave to the northeast, having a radius of 470.00 ft. through a central angle of 87°00'00", a chord bearing N 81°31'29" E, 432.03 ft. to a Point of Tangency;

(014) thence S 87°28'34" E, 341.77 ft.

(015) thence N 80°31'24" E, 458.17 ft. to a Point of Curvature;

(016) thence easterly, northeasterly and northerly, 137.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft. through a central angle of 170°00'00", a chord bearing N 55°31'24" E, 141.42 ft. to a Point of Tangency;

(017) thence N 87°25'17" E, 125.83 ft. to a Point of Intersection with a Northwest line of said PARCEL "B";

(018) thence S 52°57'25" E along said Northwest line, 2635.37 ft.

(019) thence N 07°28'14" E, 4100.92 ft.

(020) thence N 07°21'24" E, 200.00 ft.

(021) thence S 07°28'14" E, 4148.17 ft.

(022) thence N 07°21'24" E, 207.44 ft.

(023) thence N 07°23'17" E, 1031.65 ft.

(024) thence N 07°21'24" E, 200.00 ft.

(025) thence S 07°23'17" E, 3031.43 ft.

(026) thence N 07°21'24" E, 207.18 ft.

(027) thence N 07°28'14" E, 3794.14 ft.

(028) thence N 07°21'24" E, 200.00 ft.

(029) thence S 07°23'17" E, 3691.13 ft.

(030) thence N 07°21'24" E, 207.44 ft.

(031) thence N 07°28'14" E, 3556.87 ft.

(032) thence N 07°21'24" E, 200.00 ft.

(033) thence S 07°28'14" E, 3456.81 ft.

(034) thence N 07°21'24" E, 207.44 ft.

(035) thence N 07°28'14" E, 3312.10 ft.

(036) thence N 07°21'24" E, 200.00 ft.

(037) thence S 07°28'14" E, 3219.63 ft.

(038) thence N 07°21'24" E, 207.44 ft.

(039) thence N 07°28'14" E, 3031.33 ft.

(040) thence N 07°21'24" E, 200.00 ft.

(041) thence S 07°28'14" E, 2841.57 ft.

(042) thence N 07°21'24" E, 207.44 ft.

(043) thence N 07°28'14" E, 2643.78 ft.

(044) thence N 07°21'24" E, 207.44 ft.

(045) thence N 07°28'14" E, 2443.78 ft.

(046) thence N 07°21'24" E, 207.44 ft.

(047) thence N 07°28'14" E, 2243.78 ft.

(048) thence N 07°21'24" E, 207.44 ft.

(049) thence N 07°28'14" E, 2043.78 ft.

(050) thence N 07°21'24" E, 207.44 ft.

(051) thence N 07°28'14" E, 1847.21 ft.

(052) thence N 07°21'24" E, 207.44 ft.

(053) thence N 07°28'14" E, 1647.21 ft.

(054) thence N 07°21'24" E, 207.44 ft.

(055) thence N 07°28'14" E, 1447.21 ft.

(056) thence N 07°21'24" E, 207.44 ft.

(057) thence N 07°28'14" E, 1247.21 ft.

(058) thence N 07°21'24" E, 207.44 ft.

(059) thence N 07°28'14" E, 1047.21 ft.

(060) thence N 07°21'24" E, 207.44 ft.

(061) thence N 07°28'14" E, 847.21 ft.

(062) thence N 07°21'24" E, 207.44 ft.

(063) thence N 07°28'14" E, 647.21 ft.

(064) thence N 07°21'24" E, 207.44 ft.

(065) thence N 07°28'14" E, 447.21 ft.

(066) thence N 07°21'24" E, 207.44 ft.

(067) thence N 07°28'14" E, 247.21 ft.

(068) thence N 07°21'24" E, 207.44 ft.

(069) thence N 07°28'14" E, 47.21 ft.

(070) thence N 07°21'24" E, 207.44 ft.

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of the Pinellas County, said point hereinafter being referred to as REFERENCE POINT "C", the same being S 37°26'45"E, 2597.02 ft. from said REFERENCE POINT "B".

- (109) thence S 73°23'21"W along said West line, 333.18 ft. to a point being hereinafter referred to as REFERENCE POINT "C";
- (109a) thence continuing along said West line, 674.02 ft.;
- (109b) thence S 47°47'43"W departing said West line, 674.02 ft.;
- (109c) thence S 47°47'43"W, 713.21 ft.;
- (109d) thence S 47°47'43"W, 855.06 ft.;
- (109e) thence S 70°42'19"W, 813.55 ft.;
- (109f) thence S 47°47'43"W, 813.55 ft.;
- (109g) thence S 47°47'43"W, 813.55 ft.;
- (109h) thence S 47°47'43"W, 813.55 ft.;
- (109i) thence S 47°47'43"W, 813.55 ft.;
- (109j) thence S 47°47'43"W, 813.55 ft.;
- (109k) thence S 47°47'43"W, 813.55 ft.;
- (109l) thence S 47°47'43"W, 813.55 ft.;
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- (109v) thence S 47°47'43"W, 813.55 ft.;
- (109w) thence S 47°47'43"W, 813.55 ft.;
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- (110w) thence S 47°47'43"W, 813.55 ft.;
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- (111p) thence S 47°47'43"W, 813.55 ft.;
- (111q) thence S 47°47'43"W, 813.55 ft.;
- (111r) thence S 47°47'43"W, 813.55 ft.;
- (111s) thence S 47°47'43"W, 813.55 ft.;
- (111t) thence S 47°47'43"W, 813.55 ft.;
- (111u) thence S 47°47'43"W, 813.55 ft.;
- (111v) thence S 47°47'43"W, 813.55 ft.;
- (111w) thence S 47°47'43"W, 813.55 ft.;
- (111x) thence S 47°47'43"W, 813.55 ft.;
- (111y) thence S 47°47'43"W, 813.55 ft.;
- (111z) thence S 47°47'43"W, 813.55 ft.;
- (112) thence northwesterly, 7834.36 ft. along the arc of a curve, concave to the east, having a radius of 28100 ft., through a central angle of 18°28'14", a chord bearing S 04°18'17"E, 7828.00 ft. to a Point of Tangency;
- (112a) thence N 72°39'31"E, 2110.36 ft.;
- (112b) thence N 70°42'48"E, 835.28 ft.;
- (112c) thence N 53°17'31"E, 776.02 ft.;
- (112d) thence N 50°37'35"E, 1333.57 ft.;
- (112e) thence S 30°00'00"E, 252.35 ft.;
- (112f) thence S 55°04'58"E, 888.10 ft.;
- (112g) thence S 03°00'00"E, 267.29 ft. to the Southeast corner of that certain tract, as described in O.R. 8075, Pgs. 1113-1115, public records of Pinellas County;
- (112h) thence N 50°00'00"E along the North East line thereof, 113.04 ft.;
- (112i) thence N 70°00'00"E along the Northwest line thereof, 390.32 ft. to the most Northerly corner thereof;
- (112j) thence S 20°00'00"E along the Northwest line thereof, 770.00 ft. to the most Westerly corner thereof;
- (112k) thence S 70°00'00"E along the Southwest line thereof, 409.84 ft. to a Point of Intersection with the Southwest line of lands as described in O.R. 8075, Pgs. 1113-1115, public records of Pinellas County;
- (112l) thence S 04°56'12"E along said Southwest line of lands, as described in O.R. 8075, Pgs. 1113-1115, 269.33 ft.;
- (112m) thence S 76°37'07"E along said Southwest line of lands, as described in O.R. 8075, Pgs. 1113-1115, 190.78 ft. to a Point of Intersection with said Southwest line of lands, as described in O.R. 8075, Pgs. 1113-1115;
- (112n) thence S 60°53'45"E along said Southwest line, 7.70 ft. to the most southerly corner of said lands, as described in O.R. 8075, Pgs. 1113-1115;
- (112o) thence N 73°05'06"E along the Southeast line thereof and along the Southeast line of said lands, as described in O.R. 8075, Pgs. 1113-1115, 363.83 ft. to the Southeast corner of that certain Island No. 9, as shown on BULKHEAD PLAT BOOK 1, Page 14, public records of Pinellas County;
- thence along the bulkhead line, according to said BULKHEAD PLAT BOOK 1, Page 14, the following courses call: (120) through (140);
- (120) thence West, 34.47 ft. to a Point on Curve, a radial to said point being S 45°54'42"E;
- (121) thence northwesterly, northwesterly and northwesterly, 102.29 ft. along the arc of a curve, concave to the west, having a radius of 80.00 ft., through a central angle of 73°12'31", a chord bearing N 07°27'24"E, 93.40 ft. to a Point of Tangency;
- (121a) thence N 29°06'33"W, 230.08 ft. to a Point of Curvature;
- (121b) thence northwesterly, northwesterly and northwesterly, 20.37 ft. along the arc of a curve, concave to the east, having a radius of 25.00 ft., through a central angle of 47°00'10", a chord bearing N 05°22'32"W, 19.89 ft. to a Point of Tangency;
- (121c) thence N 10°01'24"E, 44.39 ft. to a Point of Curvature;
- (121d) thence northwesterly and northwesterly, 32.82 ft. along the arc of a curve, concave to the southeast, having a radius of 25.00 ft., through a central angle of 73°12'36", a chord bearing N 53°37'30"E, 50.31 ft. to a Point of Tangency;
- (121e) thence S 04°45'57"E, 130.72 ft. to a Point of Curvature;
- (121f) thence northwesterly and southeastwesterly, 22.14 ft. along the arc of a curve, concave to the southwest, having a radius of 25.00 ft., through a central angle of 50°43'50", a chord bearing S 51°23'45"E, 21.42 ft. to a Point of Tangency;
- (121g) thence S 36°01'42"E, 77.07 ft. to a Point of Curvature;
- (121h) thence southwesterly, 13.02 ft. along the arc of a curve, concave to the southwest, having a radius of 25.00 ft., through a central angle of 24°49'23", a chord bearing S 21°08'48"E, 12.87 ft. to a Point of Tangency;
- (121i) thence S 06°11'44"E, 80.53 ft. to a Point of Curvature;
- (121j) thence southwesterly, 8.04 ft. along the arc of a curve, concave to the west, having a radius of 25.00 ft., through a central angle of 15°40'51", a chord bearing S 01°38'23"W, 6.82 ft. to a Point of Tangency;
- (121k) thence S 08°28'40"W, 215.70 ft. to that certain POINT "A", TERRA VERDE UNIT TWO Subdivision, according to plat thereof, as recorded in Plat Book 82, Page 65-69, public records of Pinellas County;
- thence along the Mean High Water line of the Gulf of Mexico, the same being the West line of said TERRA VERDE UNIT TWO Subdivision, the following courses call:
- (141) thence S 29°10'41"W, 154.26 ft.;
- (142) thence S 27°20'27"W, 87.28 ft.;
- (143) thence S 23°18'14"W, 95.90 ft.;
- (144) thence S 27°30'40"W, 161.72 ft.;
- (145) thence S 24°10'40"W, 63.28 ft.;
- (146) thence S 23°47'00"W, 180.92 ft.;
- (147) thence S 29°14'00"W, 189.90 ft.;
- (148) thence S 06°01'02"W, 191.50 ft.;
- (149) thence S 05°38'29"E, 77.30 ft.;
- (150) thence S 29°03'47"W, 71.13 ft.;
- (151) thence S 13°00'14"W, 99.50 ft.;
- (152) thence S 24°39'03"W, 183.42 ft.;
- (153) thence S 01°02'06"E, 103.48 ft.;
- (154) thence S 12°41'28"E, 147.84 ft.;
- (155) thence S 18°15'25"W, 24.32 ft.;
- (156) thence S 03°35'43"W, 123.65 ft. to the POINT OF BEGINNING.

LESS AND EXCEPT that portion thereof, lying within SAWYER KEY, said SAWYER KEY being also known as Government Lot 1, Fractional Section 31, Township 32 South, Range 18 East, Pinellas County, together with Government Lot 2, Fractional Section 32, Township 32 South, Range 18 East, Pinellas County.

#### LESS AND EXCEPT PARCEL ONE:

- Commencing at previously established REFERENCE POINT "A", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pgs. 29-37, PARCEL "B", a distance of 223.61 ft. for POINT OF BEGINNING, PARCEL ONE;
- (157) thence continue along said Northwest line N 53°57'25"E, 307.46 ft. to a point hereinafter referred to as REFERENCE POINT "B";
- (158) thence S 07°28'34"E, 883.45 ft. to a Point of Curvature;
- (159) thence southwesterly, westerly and southwestwesterly, 137.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing S 35°31'26"W, 141.42 ft. to a Point of Tangency;
- (160) thence S 07°31'28"W, 100.00 ft. to a Point of Curvature;
- (161) thence southwestwesterly, westerly and northwestwesterly, 137.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 34°28'34"W, 141.42 ft. to a Point of Tangency;
- (162) thence N 07°28'34"W, 725.93 ft. to the POINT OF BEGINNING.

#### ALSO LESS AND EXCEPT PARCEL TWO:

Commencing at previously established REFERENCE POINT "D", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "B", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL TWO:

(163) thence continue along said Northwest line N 53°57'25"E, 347.65 ft. to a point hereinafter referred to as REFERENCE POINT "E";

(164) thence S 03°28'34"E, 1068.58 ft. to a Point of Curvature;

(165) thence southeastwardly, westwardly and southwardly, 157.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing S 35°31'26"W, 141.42 ft. to a Point of Tangency;

(166) thence S 03°31'26"W, 100.00 ft. to a Point of Curvature;

(167) thence southwardly, westwardly and northwardly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;

(168) thence N 03°28'34"W, 835.45 ft. to the POINT OF BEGINNING.

#### ALSO LESS AND EXCEPT PARCEL THREE:

Commencing at previously established REFERENCE POINT "E", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "B", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL THREE:

(169) thence continue along said Northwest line N 53°57'25"E, 335.42 ft. to a point hereinafter referred to as REFERENCE POINT "F";

(170) thence S 03°28'34"E, 1313.58 ft. to a Point of Curvature;

(171) thence southeastwardly, westwardly and southwardly, 157.08 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing S 35°31'26"W, 141.42 ft. to a Point of Tangency;

(172) thence S 03°31'26"W, 100.00 ft. to a Point of Curvature;

(173) thence southwardly, westwardly and northwardly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;

(174) thence N 03°28'34"W, 1163.47 ft. to the POINT OF BEGINNING.

#### ALSO LESS AND EXCEPT PARCEL FOUR:

Commencing at previously established REFERENCE POINT "F", run N 53°57'25"E along a Northwest line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "B", a distance of 167.71 ft. for POINT OF BEGINNING, PARCEL FOUR:

(175) thence continue along said Northwest line N 53°57'25"E, for a distance of 761.63 ft. to a Point on Curve, a radial to said point being N 36°02'35"W, concave southeast, having a radius of 332.13 ft. along the arc of a curve, through a central angle of 63°23'59", a chord bearing S 22°14'26"E, 312.43 ft. to a Point of Tangency;

(176) thence S 03°28'34"E, 1050.75 ft. to a Point of Curvature;

(177) thence S 03°31'26"E, 220.56 ft. to a Point of Curvature;

(178) thence eastwardly and southeastwardly, 115.84 ft. along the arc of a curve, concave to the south, having a radius of 100.00 ft., through a central angle of 56°22'27", a chord bearing S 66°17'21"E, 109.47 ft. to a Point of Compound Curvature;

(179) thence southeastwardly, 113.67 ft. along the arc of a curve, concave to the southwest, having a radius of 1946.79 ft., through a central angle of 03°20'44", a chord bearing S 31°25'45"E, 113.66 ft. to a Point of Compound Curvature;

(180) thence southeastwardly, southwardly, and southwestwardly, 192.65 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 110°16'49", a chord bearing S 23°23'01"W, 161.11 ft. to a Point of Tangency;

(181) thence S 03°31'26"W, 268.07 ft. to a Point of Curvature;

(182) thence S 03°28'34"E, 150.00 ft. to a Point of Curvature;

(183) thence N 03°31'26"E, 360.42 ft. to a Point of Curvature;

(184) thence eastwardly, and southeastwardly, 141.30 ft. along the arc of a curve, concave to the southeast, having a radius of 100.00 ft., through a central angle of 80°57'42", a chord bearing S 58°59'43"E, 128.84 ft. to a Point of Compound Curvature;

(185) thence southeastwardly, 106.33 ft. along the arc of a curve, concave to the southwest, having a radius of 1946.79 ft., through a central angle of 03°20'44", a chord bearing S 16°56'59"E, 106.32 ft. to a Point of Compound Curvature;

(186) thence southeastwardly, southwardly and southwestwardly, 187.32 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 95°54'32", a chord bearing S 37°34'10"W, 148.52 ft. to a Point of Tangency;

(187) thence S 03°31'26"W, 1230.79 ft. to a Point of Curvature;

(188) thence southeastwardly, westwardly and northwardly, 157.08 ft. along the arc of a curve, concave to the northeast, having a radius of 100.00 ft., through a central angle of 90°00'00", a chord bearing N 54°28'34"W, 141.42 ft. to a Point of Tangency;

(189) thence N 03°28'34"W, 1128.00 ft. to a Point of Curvature;

(190) thence northwardly and northeastwardly, 140.71 ft. along the arc of a curve, concave to the southeast, having a radius of 100.00 ft., through a central angle of 63°23'59", a chord bearing N 22°14'26"E, 103.14 ft. to a Point of Tangency;

(191) thence N 53°57'25"E, 111.81 ft. to a Point of Curvature;

(192) thence northwardly, eastwardly and southeastwardly, 203.43 ft. along the arc of a curve, concave to the southwest, having a radius of 100.00 ft., through a central angle of 116°34'01", a chord bearing S 67°43'34"E, 170.13 ft. to a Point of Tangency;

(193) thence S 03°28'34"E, 070.00 ft. to a Point of Curvature;

(194) thence N 03°31'26"E, 150.00 ft. to a Point of Curvature;

(195) thence N 03°28'34"W, 1430.31 ft. to the POINT OF BEGINNING, PARCEL FOUR.

#### ALSO LESS AND EXCEPT PARCEL FIVE:

Commencing at previously established REFERENCE POINT "G", run S 65°42'10"W, 450.00 ft. for POINT OF BEGINNING, PARCEL FIVE:

(197) thence S 14°39'55"E along an East line of that certain tract, as conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4929, Pages 29-37, PARCEL "B", a distance of 622.55 ft. to a Point of Curvature;

(198) thence southeastwardly, southwardly and southwestwardly, 166.16 ft. along the arc of a curve, concave to the northwest, having a radius of 100.00 ft., through a central angle of 83°11'21", a chord bearing S 32°53'46"W, 147.63 ft. to a Point of Tangency;

(199) thence S 03°31'26"W along a South line of said PARCEL "B", 3764.53 ft. to a Point of Curvature;

(200) thence westwardly, continuing along said South line, 301.24 ft. along the arc of a curve, concave to the north, having a radius of 1150.63 ft., through a central angle of 15°00'00", a chord bearing S 88°01'28"W, 300.38 ft. to a Point of Tangency;

(201) thence continuing along said South line N 03°28'34"W, 622.67 ft. to a Point of Curvature;

(202) thence departing said South line, northwestwardly, northwardly and northeastwardly, 200.71 ft. along the arc of a curve, concave to the east, having a radius of 100.00 ft., through a central angle of 115°00'00", a chord bearing N 25°28'34"W, 168.68 ft. to a Point of Tangency;

- (203) thence N 30°31'28"E, 593.00 ft. to a Point of Curvature;  
 (204) thence northwesterly and easterly, 230.08 ft. along the arc of a curve, concave to the southwest, having a radius of 230.00 ft., through a central angle of 62°00'00", a chord bearing N 61°31'26"E, 276.82 ft. to a Point of Tangency;  
 (205) thence S 87°28'34"E, 370.00 ft.  
 (206) thence N 50°31'28"E, 3729.41 ft. to a Point of Curvature;  
 (207) thence easterly and southeasterly, 148.02 ft. along the arc of a curve, concave to the southwest, having a radius of 148.00 ft., through a central angle of 84°48'39", a chord bearing S 37°04'15"E, 134.07 ft. to the POINT OF BEGINNING, PARCEL FIVE.

**ALSO LESS AND EXCEPT:**

That certain tract, as conveyed in T.I.L.F. DEED NO. 18964, the same being conveyed to Pinellas County, a political subdivision of the State of Florida, as recorded in O.R. 4928, Pages 29-37, public records of Pinellas County, and being described as follows:

The unsurveyed and most southerly Island in the group of Islands known as The Reefs, north of and across Bunnys Pass from the most northeasterly point of Mullet Key and the Southwest of Summer Resort Key, lying and being in what would be if surveyed, Township 32 South, Range 13 and 16 East, comprising approximately 3.95 acres.  
 Further described as:  
 Latitude 27°39'08" North,  
 Longitude 82°44'34" West,  
 Approximate dimensions:  
 Length 850 feet northwest and southeast  
 Width Average 172 feet northeast and southwest.

**ALSO LESS AND EXCEPT:**

That certain tract, as conveyed in T.I.L.F. DEED NO. 21075, the same being conveyed, as recorded in O.R. 4519, Pages 487-489, public records of Pinellas County, and being described as follows:

From the Southeast corner of Section 30, Township 32 South, Range 16 East, run S 89°27'24"W, 2300 feet; thence N 60°03'32"W, 2440 feet to a Intersection with the High Water Line of the Gulf of Mexico with Easterly Shore line of the northernmost key of "The Reefs", known as Panama Key, as shown on U.S. Coast and Geodetic Survey Chart No. 586, dated January 1944, said Key lying south of and adjacent to the "South Channel", and opposite and south of "Shell Key"; thence N 30°33'11", 130 feet; thence S 39°27'W, 2900 feet to a Point of Beginning; thence S 50°33'E, 500 feet; thence S 39°27'W, 57.12 feet; thence N 50°33'W, 560 feet; thence N 30°27'E, 87.12 feet to the Point of Beginning, lying and being in Sections 30 and 31, Township 32 South, Range 16 East, Pinellas County, Florida.

**ALSO LESS AND EXCEPT:**

That certain tract, as recorded in O.R. 3042, Pages 387-388, public records of Pinellas County, being described as follows:

A tract of land in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows:

From the East 1/4 Corner of said Section 30, said quarter section corner being the southeast corner of Government Lot 1 of said Section 30, run West 828.43 ft.; thence N 75°15'19"W, 1408.62 ft. for a Point of Beginning; thence N 88°39'03"W, 448.18 ft.; thence N 28°57'51"E, 758.47 ft.; thence S 40°13'30"E, 363.51 ft.; thence S 17°42'00"W, 626.03 ft. to the Point of Beginning.

**ALSO LESS AND EXCEPT:**

That certain tract, as recorded in O.R. 7847, Pages 777-778, public records of Pinellas County, Florida, being described as follows:

A tract of upland and submerged land in Boca Ciega Bay in Section 30, Township 32 South, Range 16 East, Pinellas County, Florida, more particularly described as follows:

From the East 1/4 Corner of said Section 30, said quarter section corner being the southeast corner of Government Lot 1 of said Section 30, run West along the South line of said Government Lot 1, a distance of 829.43 ft. more or less to the mean High water mark of Boca Ciega Bay; thence N 67°42'07"W, a distance of 802.00 ft. to the P.O.B. of the parcel hereinafter described; from said P.O.B. run N 43°30'34"W, a distance of 211.00 ft.; thence N 17°42'00"E, a distance of 82.33 ft.; thence N 40°13'30"W, a distance of 383.31 ft.; thence N 35°02'30"E, a distance of 430.00 ft.; thence S 44°30'34"E, a distance of 1229.04 ft.; thence S 35°07'30"W, a distance of 530.00 ft. to the P.O.B.

**ALSO LESS AND EXCEPT:**

That certain tract, as recorded in Deed Book 1117, Pages 582-530, public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run S 68°48'37"E, 21,000 ft.; thence S 70°20'W, 380 ft.; thence S 01°30'E, 480 ft.; thence S 88°10'W, 400 ft.; thence S 38°35'W, 850 ft.; S 35°40'W, 530 ft. for a Point of Beginning; thence from said Point of Beginning run S 24°14'E, 1220 ft.; thence S 24°50'W, 500 ft.; thence N 20°21'W, 1340 ft.; thence N 80°14'W, 841.20 ft. to the Point of Beginning, and lying in Section 30, Township 32 South, Range 16 East.

ALSO LESS AND EXCEPT:

All State of Florida owned submerged lands, submerged lands being defined as any land waterward of the mean high water line as they may shift from time to time during the term of this Lease by flooding or accretion.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in O.R. 4640, Page 1653, public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run S 08°46'37"E, 21,060 ft.; thence S 68°51'46"W, 911.98 ft. for a Point of Beginning; thence S 02°11'00"E, 815.36 ft.; thence S 36°40'00"W, 600 ft. thence S 86°01'49"W, 641.20 ft.; thence N 20°30'00"E, 1,050 ft.; thence N 56°20'00"E, 540 ft.; thence N 68°51'46"E, 159.65 ft. to the Point of Beginning.

ALSO LESS AND EXCEPT:

That certain tract, as recorded in O.R. 10255, Page 149 public records of Pinellas County, Florida, being described as follows:

From the Northwest Corner of Section 6, Township 32 South, Range 16 East, Pinellas County, Florida, run S 08°46'37"E, 21,060 ft. for a Point of Beginning; thence S 70°20'00"E, 380 ft.; thence S 01°50'00"E, 480 ft.; thence S 88°10'00"W, 400 ft.; thence S 56°35'00"W, 950 ft.; thence N 02°11'00"W, 815.36 ft.; thence N 68°51'46"E, 911.98 ft.; to the Point of Beginning.

MANAGEMENT AGREEMENT FOR CERTAIN SOVEREIGNTY  
SUBMERGED LANDS IN PINELLAS COUNTY, FLORIDA

AGREEMENT NO. MA 52-132  
BOT FILE NO. 520221574

WHEREAS, the Board of Trustees of the Internal Improvement Trust Fund holds title to certain sovereignty submerged lands in Pinellas County, Florida; and

WHEREAS, the Board of Trustees of the Internal Improvement Trust Fund may authorize the management of said lands by virtue of Chapter 253.03, Florida Statutes; and

WHEREAS, PINELLAS COUNTY, FLORIDA desires to manage the subject lands for public purposes as outlined in Exhibit "A" attached hereto;

NOW, THEREFORE, THE BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, referred to herein as "Grantor", hereby grants to PINELLAS COUNTY, FLORIDA, herein referred to as "Grantee", the right to manage for public purposes the site described in Exhibit "B" attached hereto and made part hereof, for a period concurrent with Lease Agreement No. 4228 between the Board of Trustees of the Internal Improvement Trust Fund and Pinellas County, Florida, on the following terms and conditions:

1. MANAGEMENT OF THE PROPERTY: Grantee shall manage the subject properties as provided in the management plan attached as Exhibit "A" in a manner which will not conflict with the conservation, protection and enhancement of said lands and which will not interfere with the maintenance of public navigation projects or other public works projects authorized by the United States Congress. The Grantee shall not alter the property or engage in any activity except as provided for in the required plan without the prior written approval of the Grantor.
2. RIGHT TO INSPECT: The Grantor shall have the right at any time to inspect the works and operations of the Grantee in any matter pertaining to this Agreement.
3. PROPERTY RIGHTS: This Agreement does not convey any title interest to the area described in Exhibit "B" attached hereto.
4. TERMINATION OF AGREEMENT: This Agreement may be terminated by either party, only if Lease Agreement No. 4228 is concurrently terminated under the terms of the Lease. Written notice of the intent to terminate this Agreement will be provided to the other party at least 60 days prior to the date of termination. Upon termination or expiration of this Agreement, the Grantee agrees to leave all fixed improvements for the use of the Grantor and to put no claim upon said fixed improvements; or, at the option of the Grantor, the Grantee agrees to remove any or all improvements from the property at Grantee's expense.
5. GRANTOR'S RIGHT TO GRANT COMPATIBLE USES OF THE PROPERTY: The Grantor retains the right to enter the property and to engage in management activities other than those provided for herein following notification to and consultation with the Grantee and further retains the right to grant approval for compatible uses of the property to third parties during the term of this Agreement. The Grantor shall determine whether or not any proposed uses by a third party are compatible with the uses authorized herein.
6. RENEWAL PROVISIONS: Renewal of this agreement will coincide with renewal of lease No. 4228. Any renewal granted shall be subject to the terms, conditions and provisions of management standards and applicable laws, rules and regulations in effect at that time.



7. ASSIGNMENT OF MANAGEMENT AGREEMENT: This Agreement shall not be assigned or otherwise transferred without prior written consent of the Grantor or its duly authorized agent and which consent shall not be unreasonably withheld. Any assignment or other transfer without prior written consent of the Grantor shall be null and void and without legal effect.

8. INDEMNIFICATION/INVESTIGATION OF ALL CLAIMS: The Grantee shall investigate all claims of every nature at its expense. Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees and agents thereof. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 763.28, Florida Statutes, as amended from time to time, or any other law providing limitations on claims.

9. TITLE TO ALL TREASURE TROVE ARTIFACTS AND OBJECTS OF ANTIQUITY: Section 267.061(1)(b), Florida Statutes, specifies that title to all treasure trove, artifacts and such objects of antiquity having intrinsic, scientific or historical and archaeological value, which have been abandoned on state-owned lands or state-owned sovereignty submerged lands is vested in the Division of Historical Resources (DHR) of the Department of State, for the purpose of administration and protection for the State of Florida. Execution of this Agreement in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The disturbance of archaeological and historical sites on state-owned lands is prohibited unless prior authorization has been obtained from DHR. All proposals for changes in the character or use of state lands shall be coordinated with DHR in order to mitigate potential damage or disturbance of, or to preserve, archaeological and historical sites and properties.

10. NON-DISCRIMINATION: The Grantee shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the area subject to this Agreement or upon lands adjacent to and used as an adjunct of the area.

11. VENUE: Grantee waives venue as to any litigation arising from matters relating to this management agreement and any such litigation between Grantor and Grantee shall be initiated and maintained only in Leon County, Florida.

WITNESSES:

Tom Butler

Original Signature

Tom Butler

Print/Type Name of Witness

Michelle Brady

Original Signature

Michelle Brady

Print/Type Name of Witness

BOARD OF TRUSTEES OF THE INTERNAL  
IMPROVEMENT TRUST FUND OF THE STATE  
OF FLORIDA

(SEAL)

BY: Gloria C. Nelson

Gloria C. Nelson, Operations and Management Consultant  
Manager, Bureau of Public Land Administration,  
Division of State Lands, Department of Environmental  
Protection, as agent for and on behalf of the Board of Trustees of  
the Internal Improvement Trust Fund of the State of Florida

"GRANTOR"

STATE OF FLORIDA  
COUNTY OF LEON

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by Gloria C. Nelson, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

APPROVED AS TO FORM AND LEGALITY:

Mark L. Puc

DEP Attorney

Notary Public, State of Florida

Printed, Typed or Stamped Name

My Commission Expires:

Commission/Serial No.

WITNESSES:

Hien Tran

Original Signature

Hien Tran

Typed/Printed Name of Witness

D. Elaine Cox

Original Signature

D. Elaine Cox

Typed/Printed Name of Witness

STATE OF Florida

COUNTY OF PINELLAS

Pinellas County Board of County Commissioners (SEAL)

BY: Robert B. Stewart

Original Signature of Executing Authority

Robert B. Stewart

Typed/Printed Name of Executing Authority

Chairman

Title of Executing Authority

"GRANTEE"

ATTEST: Karleen E. De Blaker, Clerk

By: Linda A. Clark  
Deputy Clerk

The foregoing instrument was acknowledged before me this 30 day of November, 2000, by Robert B. Stewart as Chairman, for and on behalf of the Pinellas County Board of County Commissioners. He is personally known to me or produced \_\_\_\_\_ as identification.

My Commission Expires Huyen Kim Hahn  
MY COMMISSION # 00610732 EXPIRES  
April 15, 2001  
SIGNED HERE BY NOTARY PUBLIC, INC.

Commission/Serial No.

Notary Public, State of Florida

Huyen Kim Hahn

Printed, Typed or Stamped Name

APPROVED AS TO FORM  
OFFICE OF COUNTY ATTORNEY  
SUBJECT TO PROPER EXECUTION  
BY STATE OF FLORIDA

By Sandra Richardson  
Attorney

**LPA REVIEW AND RECOMMENDATION**  
**ON THE PROPOSED LEASE AGREEMENT AND MANAGEMENT PLAN FOR THE**  
**STATE OF FLORIDA OWNED SECTIONS OF SHELL KEY**  
**(CASE #LPA 66-8-98)**

**SUBJECT:**

This is a review and recommendation by the Pinellas County Local Planning Agency (LPA) on the proposed application to lease the State of Florida owned section of Shell Key and develop a management plan for said properties. The proposed application is being reviewed for consistency with the adopted provisions of the Pinellas County Comprehensive Plan and the Local Government Comprehensive Planning and Land Development Regulation Act (Growth Management Act), Chapter 163.3161, et seq., Florida Statutes, as amended.

**GENERAL DESCRIPTION:**

The Real Estate Management Division of Pinellas County General Services is proposing to submit an agreement to the Florida Department of Environmental Protection to lease lands, in and surrounding, Shell Key. The County also intends to purchase the remaining lands in private ownership. Additionally, Pinellas County will develop a management plan for the greater Shell Key area over the next twelve months. This area is comprised largely of submerged and preservation lands. Leasing this portion of Shell Key from the State will protect the natural resources onsite and tie it into the larger contiguous area of existing and planned Preservation lands in that portion of Pinellas County. Additionally, the site will provide the opportunity to inform the public about the significance of Shell Key as a part of Pinellas County's unique bird habitat.

The purpose of the lease agreement is to conserve and preserve the natural resources of these public lands, while still providing for some of the public recreation activities historically associated with this site. The primary goal of the Management Plan for Shell Key will be to protect a significant bird sanctuary. As a part of the Management Plan, exotic vegetation control measures as well as shoreline restoration activities will be undertaken to restore and enhance habitat value. Significantly, the Management Plan will require that the bird habitat be separated and protected from the public use area. This will probably be done with the use of educational signage, barriers to set these areas aside, designating the beach as the major public use area, and prohibiting the construction of structures on the site.

## IMPLEMENTATION OF COMPREHENSIVE PLAN POLICIES:

The proposed lease application would help implement the following goal, objectives and policies of the Pinellas County Comprehensive Plan:

### Natural, Historic and Cultural Resources Element:

Goal 3. To conserve, protect, restore and appropriately manage the natural systems and living resources of Pinellas County to ensure the highest environmental quality possible.

Objective 3.1. Pinellas County shall implement management programs for the conservation of native vegetative communities, terrestrial, marine, estuarine and aquatic habitats, and wildlife species.

Policy 3.1.1. Pinellas County shall continue to identify habitat that needs to be conserved.

Policy 3.1.2. Pinellas County shall continue to follow an active program of preservation, conservation and restoration of functioning native terrestrial, estuarine, aquatic, and marine vegetative communities.

Policy 3.1.3. Pinellas County shall identify and preserve naturally occurring vegetative communities, terrestrial, estuarine, marine and aquatic habitats, and breeding populations of wildlife species which occur naturally in Pinellas County.

Policy 3.1.14. Pinellas County land acquisition efforts shall include a commitment to linking open space areas and creating a network of greenways and green spaces, which can be managed to support the protection, enhancement and restoration of functional and corrected natural systems, while providing unique recreation opportunities, including nature-based experiences for both residents and visitors.

Objective 3.2. Pinellas County shall continue to develop comprehensive management plans reflecting and increased commitment from the public and private sector for the protection of native vegetative communities, terrestrial, marine, estuarine and aquatic habitats, and native wildlife species, including those identified as threatened, endangered or species of special concern.

Objective 3.3. Pinellas County shall protect, and conserve living marine resources within the coastal planning area by preserving where appropriate, or restoring where possible, marine and estuarine habitats, including coastal wetlands and tidal streams.

Objective 3.6.: Pinellas County shall coordinate with other local governments and agencies relative to the conservation, protection and management of native vegetative communities, terrestrial, marine estuarine and aquatic habitats, and wildlife species and habitat in Pinellas County.

Recreation and Open Space Element:

Policy 1.5.2. Pinellas County will support and promote tourism activities for its residents and visitors which encourage environmental awareness, appreciation of the County's natural, historic and cultural resources, and responsible environmental stewardship.

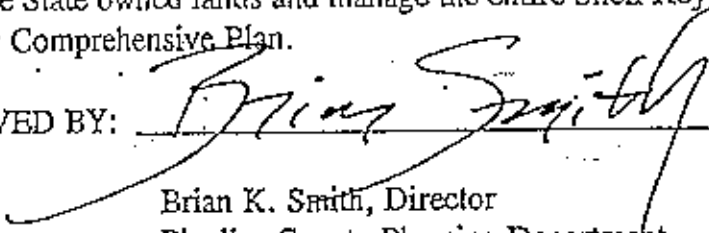
Future Land Use Element:

Policy 2.2.5. Shorelines will be protected by preservation land use designations, aquatic preserves, development setbacks, public acquisition, or other measures deemed necessary.

LOCAL PLANNING AGENCY DETERMINATION: DATE: August 24, 1998

It is the Pinellas County Local Planning Agency determination that the proposed application, and the intent to lease the State owned lands and manage the entire Shell Key, is consistent with the Pinellas County Comprehensive Plan.

LPA REPORT APPROVED BY:

  
Brian K. Smith, Director  
Pinellas County Planning Department

RESOLUTION REQUESTING THE LEASE OF  
THE GREATER SHELL KEY STATE LANDS  
FROM THE TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND  
TO PINELLAS COUNTY

WHEREAS, both Shell Key and the unnamed island immediately to the south have become a critical shorebird habitat; and

WHEREAS, since 1992 St. Petersburg Audubon has been monitoring the site and has documented 88 bird species using the island including 14 species which are listed as either Endangered, Threatened, or Species of a Special Concern by the Florida Game and Freshwater Fish Commission; and

WHEREAS, several of these species are beach nesters whose nesting habitat requires protection; and

WHEREAS, the Florida Game and Freshwater Fish Commission has ranked Shell Key as the second most important winter shorebird site in the State and also the site at most risk and in need of "conservation actions"; and

WHEREAS, Pinellas County is desirous of working with the community to provide the necessary protection of this vital bird habitat; and

WHEREAS, the island has historically been used for public recreation; and

WHEREAS, Pinellas County is desirous of managing the island so that we can ensure a blend of public recreation with environmental and wildlife protections; and

WHEREAS, the St. Petersburg Audubon Society and the Florida Department of Environmental Protection Aquatic Preserve staff have requested that Pinellas County take the lead in managing this land with other local agencies and volunteers as partners.

NOW, THEREFORE, be it resolved by the Board of County Commissioners of Pinellas County, Florida, in regular session duly assembled this 15th day of September, 1998:

1. Request that the Trustees of the Internal Improvement Trust Fund lease the upland and submerged lands lying within the greater Shell Key area which are under the jurisdiction of the State of Florida to Pinellas County for management.

2. Authorize the Real Estate Management Division of the General Services Department to make the appropriate application to the State in conjunction with the Department of Environmental Management and the Planning Department.

3. Direct that once the lease is in place that the Real Estate Management Division budget each year for the appropriate fees associated with the land lease from the State.

Commissioner Parks offered the foregoing resolution and moved its adoption, which was seconded by Commissioner Seibert; and upon roll call the vote was:

Ayes: Todd, Seibert, Parks, Stewart and Harris.

Nays: None.

Absent and Not Voting: None.

*Lease/resshell.key*

## **ADDENDUM 3**

### **The Shell Key Preserve Advisory Committee**



# The Shell Key Preserve Advisory Committee

## Pinellas County Staff

Jake Stowers, Chairman	Assistant County Administrator	Pinellas County Administrator's Office
Will Davis	Director	Pinellas County Dept. of Environmental Mgt.
Craig Huegel	Environmental Lands Administrator	Pinellas County Dept. of Environmental Mgt.
Dave Walker	Environmental Program Manager	Pinellas County Dept. of Environmental Mgt.
Ellyn Kadel	Real Estate Manager	Pinellas County Real Estate Division
Diana Kyle	Director	Pinellas County Parks Department
Jewel White Cole	Assistant County Attorney	Pinellas County Attorney's Office

## State of Florida Staff

Harry Michaels	Environmental Specialist	Florida Dept. of Environmental Protection
Randy Runnels	Aquatic Preserve Manager	Florida Dept. of Environmental Protection
Nancy Douglass	Nongame Biologist	Fish and Wildlife Conservation Commission
Bill Smith	Biological Scientist III	Fish and Wildlife Conservation Commission

## Law Enforcement

Lieutenant Dan Simovich	Pinellas County Sheriff's Department
Major Calvin Davis	Florida Marine Patrol

## Environmental Groups

Holly Greening	Tampa Bay Estuary Program
Peter Clark	Tampa Baywatch
Rich Paul	National Audubon Society
Joyce King	St. Petersburg Audubon Society
Paul Blair	St. Petersburg Audubon Society

### **Recreational and Commercial Boaters**

Alva Sholty	St. Pete Beach Charter Boat Association
Cindy McGinnis	Marine Industries Association of Greater Tampa Bay
Ken Hartley	Commercial Fisherman
Mike Anderson	Shell Key Boat Club
Dave Reynard	Recreational Boater
Jim Turner	Recreational Boater
Dick Kearley	Recreational Boater
Gwendolyn Kearley	Recreational Boater
Sean Gucken	Recreational Fisherman
Rusty Ercius	Recreational Boater
Sean Trainor	Recreational Boater
Jack Coletti	Recreational Boater

### **Residents**

Steven Cohen	Tierra Verde Community Association
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ShellIncl3.wpd

## **ADDENDUM 4**

### **Meeting Notes**

## **MINUTES**

Meeting - Shell Key Management Area Advisory Committee

August 18, 1999 - 2:00 PM

1120 Pinellas Bay Way, Ste. 201, Tierra Verde, Florida

### **Committee Members in Attendance:**

Jake Stowers, Chairman, Assistant County Administrator, Pinellas Co.  
Will Davis, Director, Pinellas Co. Dept. of Environmental Mgt. (DEM)  
Craig Huegel, Administrator, Environmental Lands Division (DEM)  
Dave Walker, Environmental Program Manager (DEM)  
Ellyn Kadel, Real Estate Manager, Real Estate Mgt. Division, Pinellas Co.  
Diana Kyle, Director, Pinellas Co. Park Department  
Joyce King, St. Petersburg Audubon Society  
Paul Blair, St. Petersburg Audubon Society  
Steven Cohen, President, Tierra Verde Community Assn.  
Lt. Dan Simovich, Special Operations Unit, Pinellas Co. Sheriff's Office  
Holly Greening, Tampa Bay Estuary Program  
Randy Runnels, Florida Dept. of Environmental Protection  
Ann Schnopf, National Audubon Society (for Rich Paul)  
Peter Clark, Director, Tampa Baywatch  
Alva Sholty, Captain, St. Pete Beach Charter Boat Assn.  
Dave Reynard (Recreational Boater)  
Jim Turner (Recreational Boater)  
Gwendolyn Kearley (Recreational Boater)  
Cindy McGinnis, Vice President, Marine Industries Assn. of Greater Tampa Bay  
Bill Smith, Florida Fish and Wildlife Conservation

### **Committee Members Absent:**

Harry Michaels, Florida Dept. of Environmental Protection  
Dick Kearley (Recreational Boater)  
Mike Anderson, The Wharf Restaurant  
Nancy Douglass, Non-Game Biologist, Florida Fish and Wildlife Conservation Commission  
Maj. Calvin Davis, Florida Marine Patrol  
Perry Smith, Gulf Islands GEPark

### **Other Attendees:**

Jeanne M. Johnson, Office Manager, Environmental Lands Division (DEM)  
Cathy Flegel, Research Program Coordinator, Environmental Lands Division (DEM)  
Andy Stevens, Environmental Lands Manager, Brooker Crock Preserve (DEM)  
Keith Thompson, Environmental Lands Manager, Weedon Island Preserve (DEM)  
Steve Ritchie (Recreational Boater)  
Kevin Cronin (Resident, Tierra Verde)  
Andy D. D'Amato  
Judith Buhrman, Florida Native Plant Society  
Brad Millican, Pinellas Co. Sheriff's Office  
Sgt. Wayne Morris, Pinellas Co. Sheriff's Office  
Tom Cuba

## **Introduction and Presentations**

Committee members and guests introduced themselves. Chairman Jake Stowers presented background on the Shell Key management area and the draft management plan. The area will be managed by the Pinellas County government and lies within its boundaries. The majority of the lands within the management area are publicly owned by the State of Florida and Pinellas County. A few parcels are privately owned. The state-owned lands are leased to Pinellas County. The State recognizes the ecological and public recreation value of the area. To comply with the lease agreement, Pinellas County must develop a management plan. Much of the surrounding area is managed by Pinellas County, including Fort DeSoto Park and the Fort DeSoto Park Aquatic Habitat Management Area. Pinellas County government wants to protect the natural resources of this unique bird habitat and seagrasses and tie it into existing areas of environmentally significant natural resources by long-term management. Randy Runnels interjected that his agency has a hard time getting state statutes to address particular problems and that county management could help by addressing these problems through ordinances and management. He added that a weak area of state authority has been uplands. Shell Key is a significant natural barrier island and Pinellas County wants to restore the seagrasses in the surrounding area to the 1950 era. Local government can provide greater resources and management than state government and will consider local needs more than state management. It is the intent of the county to develop a management plan that will clearly state management concepts so that everyone knows what it entails. The plan will include the various uses and issues of management. The Board of County Commissioners and the State of Florida must approve the management plan. Input is needed to balance state and local needs.

Ellyn Kadel spoke of ownership issues and presented a property ownership map of the management area. The county is actively pursuing ownership of the few privately owned parcels. Jake foresees that the county will own these parcels "very quickly". Tom Cuba asked if these new parcels would be added to the existing aquatic preserve. Jake responded that perhaps they would. The management plan would be for the management area, regardless of

whether or not it is an aquatic preserve.

Craig Huegel commented on the natural resources of the area. Shell Key is a significant barrier island of which there are few left in the state that are undeveloped. It is one of the last renowned places in Florida for bird life, nesting areas, and winter migratory birds. Much of the upland portion is fairly recently formed due to changing conditions. Mangroves, seagrass areas, open sandy beaches and salt marshes exist. A coastal dune community exists with primarily native plant species. The south end is higher in elevation and has been in existence for a longer time; it has been invaded by Australian pines like most similar areas in the state. The removal of the Australian pines is addressed in the management plan. The area is primarily important for the birds and sea mammals. It is the most important bird nesting area in the state of Florida and probably the nation. Beach and wading birds need seagrasses. Seagrass beds also provide nesting sites for sea turtles. Dolphins and mammals are found in the deeper waters.

Dave Walker gave a brief summary of the management plan. He had studied a copy of the Anclote plan and the list of requirements from the state and composed a draft for the Shell Key plan that still needs work. Separating people from birds and the recreation components also needs work. He presented an aerial photo of the management area on which he had designated core bird areas and recreational areas after meeting with individuals and groups. He was encouraged by the small amount of overlap of the two use-areas.

### **Discussion of the First Draft of the Management Plan**

**Alcohol** – Alcohol was briefly discussed. The State does not prohibit alcohol use on publicly owned properties but the County does.

**Anchoring** - Steven Cohen asked if signs would be posted in salt marshes and seagrass beds. He stated that non-motorized vessels as well as motorized vessels can do thirty years of

damage to seagrass by anchoring and that posting to restrict motorized vessels in areas does not address the anchoring issue. Jake responded that mooring stations might be looked into. Steven Cohen stated that mooring stations would need enforcement.

**Camping** - Gwendolyn Kearley asked how the county felt about camping near the Australian pines. The response was that Ft. DeSoto is the only area of the county where camping is allowed presently and it is an issue that needs to be worked through for Shell Key.

**Commercial and Corporate Uses** - Kevin Cronin stated that ultra-lights and corporate events currently occur in the area on weekends. Events also occur until 2-3 AM. Jake responded that those issues will need to be looked at and that vendors will need to make arrangements with the county. Businesses are not generally allowed on county land to conduct business because of the profit-loss issue on public land. Recent illegal activity has been addressed by the Sheriff's office and will be handled that way in the future. Mr. D'Amato asked if permitting was a means of saying "no" and asked how stringent permitting would be. He also asked whether a lotto system would be used. Jake responded that the level of jet ski and ultra-light rental use would be the issue. Safety issues will be looked at regarding uses and also their impact on natural resources.

**Dredging** - Steven Cohen asked if dredging was allowed in the management plan. Jake responded that the management plan does not state that there will be no dredging. If flushing action is needed, it may become an ecosystem issue that needs to be addressed. One member of the group asked if the pass that has been closed for five years could be opened. Jake said the county could not get a permit to do that but it is possible that it may happen naturally.

**Jet Skis** - Lt. Simovich commented that jet ski use could be a safety issue and a concern of the Sheriff's office.

**Lease Requirements** - Holly Greening asked if there were state or county stipulations in the lease. Ellyn Kadel responded that the state has imposed requirements in the lease. Ellyn stated that if the management plan were approved, county stipulations would be supported by the state. For example, if the state does not address the use of alcohol but the management plan does, then the management plan prevails and will be supported by the State. Ellyn stated that the lease would be revisited every five years. The lease is flexible and does not prohibit revisions to the management plan. The management plan is an element of the lease agreement. Jake pointed out that the lease includes five specific conditions that must be complied with and read aloud each condition from Page seven of the first draft.

**Management Plan** - Jim Turner said it looked good from his prospective and that it leaves room for people and boats. Mr. D'Amato said he liked the plan. Peter Clark applauded the Shell Key plan concept. Paul Blair knows the Shell Key Island well and congratulated the group and stated that there are still a few problems but "we are close."

**Noise** - The County has received complaints from nearby residents and boaters about noisy activities. Steven Cohen stated that loud boat sounds must affect the birds and a noise ordinance may be needed. The ordinance should not specify certain types of boats (such as airboats) because loud noises are not limited to a type of boat.

**Preservation Vs. Management Area** - Joyce King wondered why this area was called a "management area" and not a "preserve," citing its very fragile habitat and ease of encroachment by humans from lack of visual barriers. She stated that the "preserve" designation should be gradually implemented. Brooker Creek Preserve has lots of protection but there is no such thing on Shell Key. It does not take much of an impact to impact Shell Key in a big way. The term "preserve" means something to people and they may look at the area differently if it is recognized as a preserve. Jake stated that this issue could be looked at but that the management plan may also accomplish the same goals. Cindy McGinnis wondered if a preserve designation would restrict boaters and public use. Craig Huegel



commented that the current preserves are similar to the Shell Key Management Plan in that public use must be compatible with environmental resources.

**Public Involvement** – Peter Clark stated that Tampa Bay Watch wants to help out with bird nesting activities and wants to help protect turtle nesting sites. The group wants to help with educational programs and educate children by showing them what a barrier island looks like. Jake responded that the county wants to include public opportunities.

**Seagrass and Channel Signs** – Jake said that idle speed zone signs similar to the Ft. DeSoto area would be posted. Signage has reduced impacts in other areas. Education has also reduced impacts. The county will support increased enforcement patrol in the area. Mr. D'Amato suggested the use of a chart that could be mounted where boaters access the area. The chart would show the grass flat locations and help educate boaters. Steven Cohen stated that the idle speed zones need enforcement and he sees little of that now and signs won't help without enforcement. Jim Turner said that local boaters would abide with the no-wake zone regulations. He added that if a plan is put into place that boaters like, they will help enforce it for the county.

**Users vs. Natural Resource Protection** – Mr. D'Amato stated that the county has more boats than anywhere and only four islands that boaters can go to. He was concerned about restricted access to the area and felt there must be a middle ground for human use. He is concerned about families rather than commercial use. Restricting the use of alcohol on the island will encourage 300-400 boaters to drink during boating and could create dangerous situations. Jake responded that if the situation gets critical for the natural resources, the state might address the problem by shutting the area down to recreational use.

Tom Cuba suggested that access could be limited by permit or license to limit the number of

people in the area and provide an opportunity for education. Jake responded that daily regulation would be extremely difficult. Lt. Simovich stated that permitting is cumbersome and daily checks could not be done. He added that the county ordinances would regulate many illegal activities and the management plan would help address other activities. Tom suggested that a carrying capacity should be addressed, citing the lack of restrooms and quantity of trash that may be generated. Jake said these two issues need to be addressed. Steven Cohen then commented that most boats are equipped with porta-potties and this is not an issue. Tom Cuba noted that access permits or licenses have been used in federal parks and that they are enforceable, effective, and achievable; the process combines access, carrying capacity, and education.

Steven Cohen suggested that a low fence would keep children and pets from the core bird areas. He approves of the boundaries delineated on the aerial map presentation of the core bird areas and recreational areas. Jake stated that a possibility of a 4' high fence along the "hard-line" between the two core bird areas but not along the shorelines might be a solution. Information signs could also be posted near the fence. Short of constant patrol, the county will have to see what works best. If the county has a consensus of the community, the community will support and help regulate use. The sheriff's office will be used and possibly a community volunteer corps. Jim Turner supported fences on the north and south ends of Shell Key Island but was opposed to trash containers because they encourage trash.

According to Jake, turtle nesting areas will be treated similar to what is currently being done at Ft. DeSoto where they are monitored and staked out.

**Other Issues** – Kevin Cronin expressed his concern about children diving under boats and stated that it was a community safety issue. Lt. Simovich stated that there was no law regarding this and no action could be taken by the Sheriff's office regarding it.

Jim Turner commented that this area is different from other county management areas and the county should approach it differently and slower. He recommended a gradual approach to see what works.

Peter Clark said that the issue of live-aboards in the management area needs to be looked at.

Peter Clark cautioned that other areas that have been impacted by vehicular traffic after exotics have been removed.

Diana Kyle asked for written comments on shell fishing because it is a major issue at Fort DeSoto where heavy harvesting takes place.

### **Closing Comments**

A GIS map of the management area with the designated core bird areas and recreational areas will be provided to committee members soon.

Committee members were asked to write detailed comments about the draft plan and send them to David Walker, who provided his name, mailing address, and email address.

Comments should be received by September 15, 1999. Comments on all issues, discussed and not discussed, were encouraged, including comments on suggested methods to control and confine activities or uses.

The county will compile the comments and distribute them to the committee for review.

There will be another meeting before the final draft. The meeting location was agreeable and would be used for the next meeting.

Attendees were thanked for coming and encouraged to send a substitute in their place if they could not attend the next meeting.

## **MINUTES**

Meeting - Shell Key Management Area Advisory Committee

November 15, 1999 - 2:00 PM

1120 Pinellas Bay Way, Ste. 201, Tierra Verde, Florida

### **Committee Members in Attendance:**

Jake Stowers, Chairman, Assistant County Administrator, Pinellas County

Will Davis, Director, Pinellas Co. Dept. of Environmental Mgt. (DEM)

Craig Huegel, Administrator, Environmental Lands Division (DEM), Pinellas County

Dave Walker, Environmental Program Manager (DEM), Pinellas County

Mike Anderson, The Wharf Restaurant, Director of Shell Key Boat Club

Paul Blair, St. Petersburg Audubon Society

Steven Cohen, President, Tierra Verde Community Association

Nancy Douglass, Non-Game Biologist, Florida Fish and Wildlife Conservation Commission

Joyce King, St. Petersburg Audubon Society

Rich Paul, National Audubon Society

Dave Reynard (Recreational Boater)

Randy Runnels, Florida Dept. of Environmental Protection

Alva Sholty, Captain, St. Pete Beach Charter Boat Association

Lt. Dan Simovich, Special Operations Unit, Pinellas County Sheriff's Office

Bill Smith, Florida Fish and Wildlife Conservation

Jewel Cole, Pinellas County Attorney

Jim Meloy, Pinellas County Real Estate Management (for Ellyn Kadel)

Robert Musser, Environmental Scientist, Tampa BayWatch (for Peter Clark)

Sean Trainer, OPBA, President

### **Committee Members Absent:**

Maj. Calvin Davis, Florida Marine Patrol

Holly Greening, Tampa Bay Estuary Program

Dick Kcarley (Recreational Boater)

Gwendolyn Kearley (Recreational Boater)

Diana Kyle, Director, Pinellas County Park Department

Cindy McGinnis, Vice President, Marine Industries Assn. of Greater Tampa Bay

Harry Michaels, Florida Dept. of Environmental Protection

Perry Smith, Gulf Islands GEOPark

Jim Turner (Recreational Boater)

### **Other Attendees:**

Judith Buhrman, Florida Native Plant Society

Ron Cowell (Resident, Tierra Verde)

Kevin Cronin (Resident, Tierra Verde)

Tom Cuba, Delta Seven Environmental Consulting

Jim Fletcher, Shell Key Boat Club

Al Gentless, Owner, Shoobees Food

Marc Granet (Resident, Vina Del Mar)

Sgt. R.D. Hammock, Marine Unit, Pinellas County Sheriff's Office  
Jan M. Jacobson, Director, The Everglades Institute  
Jeanne M. Johnson, Office Manager, Environmental Lands Division (DEM), Pinellas County  
Brad Millican, Pinellas County Sheriff's Office  
Sgt. Wayne Morris, Pinellas Co. Sheriff's Office  
Carolyn Orr, Commodore, Shell Key Boat Club  
Leigh Tessler (Resident, Tierra Verde)  
Keith Thompson, Environmental Lands Manager, (DEM), Pinellas County  
James B. Wilson, Fort Desota Park, Pinellas County

## **Introduction**

Chairman Jake Stowers presented background on the Shell Key management area and the draft management plan. The Pinellas County government will manage the area.

## **Discussion of the Second Draft of the Management Plan**

Chairman Stowers asked for general comments on the second draft after talking briefly about Figure 8, Resource and Public Use Areas. Discussions on specific changes in the plan would follow the general comments.

**General Comments** - Mike Anderson, a member of the Shell Key Boat Club which has been in existence for six years and has approximately 100 members, stated that he felt the true concern of boaters is that the island's northern tip would not remain open for boater use forever. He would like to see language in the management plan that would state that it is not the county's intent to close the area now or in the future. Jake responded that it is not the county's intention to restrict boater use of the island. Craig Huegel stated that the management plan states which public uses are appropriate and they "won't go away." The management plan will be reviewed in two years and then every five years and public input will be considered each time. Chairman Stowers added that the State lease requires public outdoor uses and wants a balance between natural resource and recreational resource management.

Mark Granet is a local resident who is the secretary of a power boat club and has been visiting the island for the past ten years. He feels the management plan is placating non-users of the island. He does not think anything is "driving the birds off" and that the birds are not being harmed by recreational users of the island. Craig Huegel stated that data which has been collected for a number of years show that the birds are suffering. Nesting is impacted and the success rate has been extremely low for a number of years. The proposed core areas designated in the management plan address these issues and provide for a winter bird area.

Dave Reynard has been visiting the island for 42 years. He commented that there is too much "going on now out there." He agrees that there does need to be some protection for the birds but doesn't feel that dogs are harmful.

Jan Jacobson introduced himself as a biologist and said that fencing is a better solution than policing dogs to keep birds from leaving. He agrees that management needs to be done to protect the birds but finds the proposed methods questionable. In the long run, birds and other creatures need to adapt to human activities in order to survive.

Mark Granet would like to have the island's entire shoreline accessible for persons who want to walk from the north to the south end. He would like to see a 10'-20' width of beach available and signs posted to prevent persons from going further into the interior portions of the island. Craig Huegel responded that it is essential for long-term survival of the birds to provide access to the water from nesting areas. He added that enforcement would be harder for "don't past this point" than elimination of human access. Citizen input has indicated that the public does not use this strip area.

Tom Cuba had several comments about the jurisdictional authority of the management plan's area. 1) Mr. Cuba questioned the applicability of the management plan to certain areas of the Shell Key Preserve. He questioned whether the entire site was within the Boca Ciega Bay

Aquatic Preserve and whether most of the waters could be considered Outstanding Florida Waters. Do county ordinances apply to state-owned properties? Jake responded that the management plan does apply to these areas and provides for the application of county ordinances. 2) Mr. Cuba cited page 11: The FDEP "approves the management plan and all activities within the leased areas outside the scope of the management plan," and asked if certain activities could happen *inside* the management plan. Jake responded that FDEP might have other regulations that apply.

Sean Trainer is an eleven-year resident and has lived three years on the waterfront. He believes that there is always going to be ignorant humans and that the county cannot always be responsible for their actions. How each individual treats the island is an individual choice.

**Prohibition of Dogs** - Page seven of the second draft of the management plan states that one of the State's five specific conditions that establish the minimum standards for the plan is that Pinellas County leash laws shall be enforced on Shell Key. It is the consensus that no dogs should be allowed due to factors listed on page 32 of the plan.

Steven Cohen suggested that dogs are allowed and the Pinellas County leash law enforced for two years. The issue can be reviewed after that time during a management plan review.

Nancy Douglass asked how difficult it would be to enforce the leash law and stated that dogs need to be confined to areas from a biological standpoint. She feels strongly that fence barriers need to be erected at both ends of the island to prevent dogs from going beyond designated areas.

Sean Trainer suggested a fence be put on both ends of the island that would stretch from water to water to keep dogs and humans from bird sanctuary areas. Paul Blair responded that

he wants his grandson to be able to enjoy a natural barrier island. Carolyn Orr suggested that gates be put in the fences to allow human access.

Judith Buhrman stated that dogs get loose from leashes and she would like to see no dogs allowed. Ms. Buhrman commented that dogs have a free-range area at Fort Desota for their use.

Tom Cuba stated there may be a liability issue if a dog bites and the leash law is not enforced. Lt. Dan Simovich commented that leash laws are very difficult to enforce.

Chairman Stowers stated that the best compromise might be to fence areas on the north and south ends of the island for dogs on leashes. The area designated for public use near the mid-section of the island would not be fenced and dogs would not be permitted there. From an enforcement standpoint, Lt. Simovich agreed with that dogs should not be permitted in the mid-section. Nancy Douglass also agreed, stating that it would be confusing to the public otherwise.

**Manage Shell Key as a Barrier Island – Page 32, Action 5:** Dredging may be required at some time in the future to maintain the passes which separate Shell Key from the mainland, especially at the northern tip.

Kevin Cronin stated that DEP data shows that the northern pass used to be 1400' wide and has narrowed 100' annually. He believes ecology should take its own course but the narrowing is a concern. It is now approximately 92' wide at this time. Dredging would be a recourse but would have biological and secondary impacts...



Chairman Stowers commented that it was not the intent to open the channel but to keep the "cut open." This would be necessary to prevent accretion and the owner/s of nearby lands claiming ownership and use of Shell Key Island. Tom Cuba stated that accretion applies to sovereign lands and might be prevented by transferring title to another county agency or by deeding a 1" strip. Chairman Stowers responded that "spite strips" are not allowed.

**Provide Public Education** – Page 34, Action 1. Kevin Cronin suggested that the Audubon society present an educational program once a month to the general public on Shell Key Island. Education would help the public gain a better understanding of birds and a higher degree of appreciation than currently exists in the room. Kevin attended a program similar to that which he was suggesting and was amazed at the amount of information available.

**Interpretive Structures** – Nancy Douglass commented that barrier islands are very mobile and structures are not a good idea from the taxpayers' financial standpoint. The consensus of the group was not in favor of structures.

**Provide Public Education Outreach** - In response to Tom Cuba's question, Chairman Stowers confirmed that *all* education initiatives will be coordinated through the education section of the Division of Environmental Lands. Jan Jacobson said that toilet facilities and shelters to provide shade would need to be addressed before groups could be brought out to the island for education.

**Prohibition of Liveaboard Vessels** – The consensus was that the wording, "fourteen days in any month" should be replaced with "fourteen days within a thirty-day period."

**Pinellas County Noise Standards** - Chairman Stowers stated that decibel readings would be taken from the shorelines of residents to determine whether noises are too loud. Tom Cuba

commented that he was concerned about the noise level on the island being detrimental for the wildlife. Will Davis responded that the last sentence of Action 4 on page 38 of the management plan addresses that issue.

**Prohibition of Commercial Activities** – Chairman Stowers stated that commercial activities would be *managed*. Commercial activities that originate on the Preserve as opposed to off-site are not allowed. Al Gentless, owner of Shoobees Food, stated that he has the proper licensing to conduct business and he is currently providing food for island visitors. He asked if he would be allowed to continue under the management plan regulations. Chairman Stowers and Will Davis responded that Mr. Gentless would need to obtain a permit from the county.

**Managing Large Groups Visiting Shell Key** – Steven Cohen suggested changing the group size number of “50” individuals or more that must obtain written approval from Pinellas County to “25.” Marc Granet thought that “25” was too small. Brief comments followed from other attendees. The consensus was to use the number “50.”

**Provision for Overnight Activities** - Paul Blair commented that he was not in favor of restrooms but asked what the county health department was going to say about the subject of toilet accommodations. Chairman Stowers suggested a solution might be wilderness compost toilets. Tom Cuba stated that permits could be required for overnight campers that would require campers to have toilet provisions on their boats or other provisions. Nancy Douglass predicted that camping activities will increase and stated that permits should regulate the activity. Steven Cohen said that there was no issue now and to leave it alone. Alva Sholty commented that he has hauled out tons of camper trash in the last ten years including bedrolls and tents. It was the consensus to allow overnight activities.

**Prohibition of the possession or consumption of alcoholic beverages on Shell Key** –

Chairman Stowers stated that the management plan is consistent with county and state law,

and that the county does not allow alcohol in its parks. Lt. Simovich predicted that the area will get busier and that combining alcohol and people in concentrated areas of the island would escalate problems. Alva Sholty has observed large groups of teens with kegs of beer on Shell Key and stated that the combined activities of drinking and camping are very attractive to that age group. Jewell Cole remarked that alcohol use would not pass approval by the county's risk management and legal departments and liability is an issue. Brief comments from a number of attendees indicated that they did not want alcohol use restricted.

**Review the management plan** – Chairman Stowers stated that the two-year review of the management plan would remain in the plan.

## **Concluding Remarks**

Chairman Stowers summarized:

- The county's legal department will review alcohol use.

- An alternative to dredging will be considered. (The only issue for the county is accretion.)

- There will be no structures.

- Other issues will be reviewed in two years.

The next meeting of the Shell Key Preserve Management Plan will be Monday, December 6, 1999, at 2:00 PM at the same location (1120 Pinellas Bay Way, Ste. 201, Tierra Verde, Florida). Attendees were thanked for coming and encouraged to send a substitute in their place if they could not attend the next meeting.

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## **MINUTES**

Meeting - Shell Key Management Area Advisory Committee

December 6, 1999 - 2:00 PM

1120 Pinellas Bay Way, Ste. 201, Tierra Verde, Florida

### **Committee Members in Attendance:**

Jake Stowers, Chairman, Assistant County Administrator, Pinellas County

Will Davis, Director, Pinellas Co. Dept. of Environmental Mgt. (DEM)

Craig Huegel, Administrator, Environmental Lands Division (DEM), Pinellas County

Dave Walker, Environmental Program Manager (DEM), Pinellas County

Paul Blair, St. Petersburg Audubon Society

Steven Cohen, President, Tierra Verde Community Association

Nancy Douglass, Non-Game Biologist, Florida Fish and Wildlife Conservation Commission

Holly Greening, Tampa Bay Estuary Program

Ellyn Kadel, Real Estate Manager, Real Estate Mgt. Division, Pinellas County

Dick Kearley (Recreational Boater)

Gwendolyn Kearley (Recreational Boater)

Joyce King, St. Petersburg Audubon Society

Cindy McGinnis, Vice President, Marine Industries Assn. of Greater Tampa Bay

Harry Michaels, Florida Dept. of Environmental Protection

Dave Reynard (Recreational Boater)

Randy Runnels, Florida Dept. of Environmental Protection

Ann Schnopf, National Audubon Society (for Rich Paul)

Alva Sholty, Captain, St. Pete Beach Charter Boat Association

Sean Trainor, OPBA, President

Jewel Cole, Pinellas County Attorney

Rusty Ercius (St. Petersburg Beach resident)

Sean Gucken, Co-President, Pinellas Chapter Coastal Conservation Assn.

Ken Hartley, Tampa Bay Live Bait Shrimper

Robert Musser, Jr., Environmental Scientist, Tampa BayWatch (for Peter Clark)

### **Committee Members Absent:**

Mike Anderson, The Wharf Restaurant, Director of Shell Key Boat Club

LT. Dan Simovich, Special Operations Unit, Pinellas County Sheriff's Office

Bill Smith, Florida Fish and Wildlife Conservation

Maj. Calvin Davis, Florida Marine Patrol

Diana Kyle, Director, Pinellas County Park Department

Perry Smith, Gulf Islands GEOPark

Jim Turner (Recreational Boater)

### **Other Attendees:**

Melanie Ave, St. Petersburg Times

Tom Cuba, Delta Seven Environmental Consulting

Tony Czubernat (Recreational Boater)  
John H. Davidson (County resident)  
Wayne Eckstein (Recreational Boater)  
Angela Epperson, President, Moorings of Tierra Verde  
Al Gentless, Owner, Shoobees Food  
Sgt. R.D. Hammock, Marine Unit, Pinellas County Sheriff's Office  
Faith Hoogs (Gulfport Resident)  
William C. Hadley (Tierra Verde resident)  
Jeanne M. Johnson, Office Manager, Environmental Lands Division (DEM), Pinellas County  
Marie Johnson (Recreational Boater, Birdwatcher)  
W.F. Lee, Manager, ACT  
Louis Longo, Suncoast Boaters Association  
Madlene Longo, Suncoast Boaters Association  
Bob MacPherson (St. Petersburg resident)  
Greg McGinness, Vice President, Mariner Technologies, Inc.  
Robert Miller (Recreational Boater, Dog Lover, Wildlife Lover)  
Mark Peterson, Environmental Supervisor, Florida Department of Environmental Protection  
Jim Price, President, Pine Key Lodge IV, Tierra Verde  
Bryan Pridgeon, Biologist, U.S. Fish & Wildlife Service  
Cindy Sailor (Tierra Verde Resident)  
Don Shepherd (St. Petersburg resident)  
Karen Shepherd (St. Petersburg resident)  
Keith Thompson, Environmental Lands Manager, (DEM), Pinellas County  
Tom Ward (County resident)

## **Introduction**

Chairman Jake Stowers presented the timetable for future events regarding the Shell Key Preserve Management Plan:

January 26, 2000, 4 P.M. – 7 P.M. The final draft of the plan will be presented at a public meeting on the second floor of the Mercantile Bank Building (across the street from today's meeting location).

Third Tuesday, either February or March, 2000 – Evening. A public hearing of the management plan will be presented to the Pinellas County Commissioners in their chambers.

The plan will then be presented to the State of Florida for their review (unspecified date).

### **Discussion of the Third Draft of the Management Plan**

Chairman Stowers presented a matrix that listed a summary of issues in the management plan. He read aloud each issue and asked for comments following each issue.

#### **Boater Areas on Shell Key (North End, South End, Center Beachfront, Back side) -**

Chairman Stowers commented that these issues have not changed since the second draft.

**Bird Areas on Shell Key** – Nancy Douglass commented that the southern crossover is a slight concern of her agency. The most sensitive birds that nest in that area have left. She suggested that this issue be monitored closely during the first year to measure undue disturbance of colonial nesters. Chairman Stowers responded that the plan calls for a review after two years and monitoring would be a requirement.

Ann Schnopf questioned whether the locations of the designated bird areas are locked in place by the plan. Natural forces may necessitate flexibility of designated core bird areas to allow safe nesting. The crossovers were the areas that concerned her. Chairman Stowers responded that there would not be hard lines at crossovers.

Sean Trainer asked Chairman Stowers to review the State's five conditions that establish the minimum standards for the management plan. Chairman Stowers read aloud the five conditions from page seven of the plan. Mr. Trainer said that his largest concern is his approximated 90:10 ratio of areas designated for bird protection vs. human use. He would rather see the areas designated by a *percentage* formula to allow for changes brought about by natural forces. The northern tip of the island continues to shallow out and eventually may eliminate human use because boaters will not be able to get into the area.

Rusty Erzius questioned the reliability of bird data provided by the local Audubon society. He has accessed the National Audubon Society's Internet site and observed that the data on the site does not correspond with the local annual Christmas bird count statistics.

**Seagrass Protection** – Chairman Stowers noted that the base map (Figure 8 in the Management Plan, Resource and Public Use Areas) has been revised since the last meeting after input was received from commercial fishermen. New areas that can be safely navigated are designated for idle speed. Idle speed signs will be posted in these areas and other areas will be closed to internal combustion engines. Ken Hartley introduced himself as a commercial fisherman and stated that there are several areas of restricted access at Weedon Island, Fort Desoto and other areas and that each area has unique signs but none state "idle speed" but rather "no wake." Chairman Stowers commented that seagrasses are damaged when boaters don't know what they are doing and that there are prop scars all over the area. Sean Gucken commented that recreational boaters are using the channel near the houses and suggested that the channels be marked for boat navigation. Additionally, he recommended that grass zones and water detection levels be denoted by signage. Tom Cuba commented that caution should be used if signs are posted to designate channels. The public will assume that the channels are deep unless the signs state that the channels are shallow. It was the consensus that "no wake" rather than "idle speed" signs should be posted. Randy Runnels suggested additional wording of "local knowledge recommended."

Ken Hartley then asked if "no wake" zones could replace the "no combustion engines" zones near the island. Joyce King reminded the committee that the primary purpose of the lease is to protect birds and that eliminating access to certain areas prevents disturbance of bird activities such as feeding. Steven Cohen asked if anchoring was allowed and Chairman Stowers confirmed that it was allowed. Signs similar to "Caution -- shallow grass zones" will be posted and that the State also has certain sign language that may be used. Dave Reynard asked if mooring buoys would be used as previously mentioned and Chairman Stowers replied that they might be considered in the future.

**Education** – This issue is unchanged from the second draft. There will be signage on the island for educational purposes. The island will be used for continued education purposes including visits and ecotours.

**Exotic Species Removal** – This issue is unchanged from the second draft.

**Monitoring and Research** – Sean Trainor asked if there was a provision to monitor natural disasters so that recreational users are not penalized for natural detrimental effects on the birds. Chairman Stowers confirmed that natural effects are considered in the monitoring process.

**Dogs** – This issue has changed from the second draft. Dogs are allowed on leashes on the north and south tips of the island. Fences will denote upland boundaries. The leash requirement is in the management plan as a condition of the State. Nancy Douglass stated that no dogs are allowed by the State in areas designated as Critical Wildlife Areas. Steven Cohen had no problem with the leash law but asked if leashed dogs could have access to all of the public use areas because dogs are no more disruptive to birds than people. Chairman Stowers replied that certain areas were off-limits to dogs to address enforcement problems that were discussed at the last committee meeting. Nancy Douglass added that four-legged carnivores are perceived more threatening and disruptive by birds than humans.

**Camping** – This issue is unchanged from the second draft. The Chairman confirmed that regulations were aimed at "overnight" camping activities.

**Commercial Uses** – This issue is unchanged from the second draft. Examples of commercial activities that would be subject to restriction were discussed. Chairman Stowers suggested that the wording might need to be changed from "prohibit commercial activities within the preserve" to "prohibit commercial activities on land in the Preserve." The Chairman will look at other state-leased lands for direction on this wording.



**Organized Parties and Events** – This issue is unchanged from the second draft. Alva Sholty asked if this issue specified or addressed the areas of high-use areas of the island. Chairman Stowers commented that it applied to *any* organized use and was an opportunity to get information out to groups when they applied for written approval to visit the island.

**Law Enforcement** – This issue is unchanged from the second draft. Sean Trainer asked if law enforcement would address environmental issues such as protection of seagrass. Chairman Stowers commented that there is no management plan in place now and that the plan will address environmental issues.

**Dredging North Pass** – This issue was unresolved during the second draft meeting. Harry Michaels of the Florida Dept. of Environmental Protection explained the effects of accretion as it pertains to Shell Key Island and Colony Key: if Shell Key Island accretes to Colony Key, Colony Key is not entitled to ownership of Shell Key Island. Chairman Stowers confirmed that the ownership issue is not a problem. Will Davis of Pinellas County's Department of Environmental Management stated that independence might be needed to prevent environmental impacts created by wildlife crossings and predator crossings. Dave Reynard expressed concern the Panama Key would close and Chairman Stowers responded that the predator problem was less in that area. Steven Cohen asked why taxpayers should pay for dredging that would help a nearby operator of a commercial marina. Chairman Stowers responded that the plan does not specify *who* would dredge and that state and federal permits would need to be obtained. Cindy McGinnis, vice president of the Marine Industries Association of Greater Tampa Bay, stated that a required permit condition for the nearby marina was to maintain dredging at the marina's expense.

**Alcohol** – This issue was unresolved during the second draft meeting. Chairman Stowers emphasized that the proposed management plan prohibited alcohol use on the island; boaters

could drink alcohol on their boats. Alcohol use is prohibited in all Pinellas County parks and state-managed parks with only a few concessions. Liability is a big factor. Dave Reynard asked if this applied to the mean high water mark. Many of the people attending the meeting were not agreeable to alcohol prohibition and Chairman Stowers stated that this would be conveyed to the Board of County Commissioners.

**Future Management Actions** - This issue is unchanged from the second draft. Chairman Stowers commented that the State Lands Division would review the plan in five years to make sure that the county is managing the area effectively and this process involves users. He stated that an overall monitoring process of the plan should be included. It was suggested that a web page could be a communication tool between the county and users.

Dave Reynard distributed notices of an Internet site address that he has established for exchanging comments about the Shell Key Preserve Management Plan. He suggested that the county email the proposed management plan as an attached file to the site for distribution to viewers.

### **Closing Comments**

The public was encouraged by the chairman to "come talk to us." There may be a brief committee meeting at 4:00 PM on January 26 for a final review of the management plan. Attendees were thanked for coming and encouraged to send a substitute in their place if they could not attend the next meeting.

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**SHELL KEY:**  
**SUMMARY OF ISSUES IN THE MANAGEMENT PLAN**  
 (2/15/00)

Issue	Existing	First Draft (8/18/99)	Second Draft (11/15/99)	Third Draft (12/6/99)	Draft for Public Comment (1/14/00)	Draft for BCC Review (2/15/00)	Draft for DEP Review (3/21/00)
Boater Areas on Shell Key: North End	Heavily Used	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged (Stronger language added guaranteeing continued recreation)	Unchanged
Boater Areas on Shell Key: South End	Moderately Used	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
Boater Areas on Shell Key: Center Beachfront	Moderate uses towards north and south ends; very little use in middle	Portion of minimally used beach closed to public	Provision for limited access into closed section of beach	Unchanged	Unchanged	Extended public use area northward to provide more public beach	Unchanged
Boater Areas on Shell Key: Back Side	Minor usage near north end plus two crossovers	Unchanged	Southern crossover slightly changed	Unchanged	Unchanged	Unchanged	Unchanged

Issue	Existing	First Draft (8/18/99)	Second Draft (11/15/99)	Third Draft (12/6/99)	Draft for Public Comment (1/14/00)	Draft for BCC Review (2/15/00)	Draft for DEP Review (3/21/00)
<b>Bird Areas on Shell Key</b>	Seasonally marked by Audubon Society	To be permanently marked, expanded slightly at south end and into mudflat west of Shell Key	Slight change for southern crossover	Unchanged	Unchanged	Decreased at southern end to provide more public beach	Unchanged
<b>Seagrass Protection and Aquatic Zones</b>	None	Extend Ft. DeSoto seagrass protection program into Shell Key Preserve	Unchanged	Base map revised to address concerns from fishing community.	Proposed "Idle Zones" changed to "Seagrass Caution Zones"/Minor changes to existing Idle Speed Zones	Additional minor changes to "Seagrass Caution" and "No Combustion Engine" zones	"Idle Speed" zones changed to "Slow/ Minimum Wake" zones
<b>Education</b>	Some volunteer efforts	Signage, Interpretive Programs, Coordination of volunteer efforts	Unchanged (provision for interpretive structures)	Unchanged (except interpretive structures deleted)	Unchanged	Unchanged	Unchanged

<b>Issue</b>	<b>Existing</b>	<b>First Draft (8/18/99)</b>	<b>Second Draft (11/15/99)</b>	<b>Third Draft (12/6/99)</b>	<b>Draft for Public Comment (1/14/00)</b>	<b>Draft for BCC Review (2/15/00)</b>	<b>Draft for DEP Review (3/21/00)</b>
<b>Exotic Species Removal</b>	Volunteer efforts in limited areas	Complete removal and replanting where appropriate	Unchanged	Unchanged	Unchanged	Language added for phasing out of Australian pines and for replanting with shade species	Unchanged (BCC requested a replanting plan prior to removal)
<b>Monitoring and Research</b>	Bird populations monitored by St. Petersburg Audubon Society and Florida Fish and Wildlife Conservation Commission	Monitoring and Research to be coordinated through Environmental Lands Division	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
<b>Nest Predation</b>	No protection	To be monitored and addressed if it becomes a problem	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged

[illegible]

Issue	Existing	First Draft (8/18/99)	Second Draft (11/15/99)	Third Draft (12/6/99)	Draft for Public Comment (1/14/00)	Draft for BCC Review (2/15/00)	Draft for DEP Review (3/21/00)
Organized Parties and Events	No restriction	No restriction	Permission required for groups over 50	Unchanged	Unchanged	Unchanged	Unchanged
Law Enforcement	Marine Patrol and Pinellas County Sheriff	Increase Sheriff's presence	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
Live-aboards	No restriction	Not addressed	Prohibited in the Preserve	Unchanged	Unchanged	Unchanged	Unchanged
Noise	No restriction	Not addressed	Apply Pinellas County noise code	Unchanged	Unchanged	Unchanged	Unchanged
Ultralight Aircraft	No restriction (currently a few operate at Shell Key)	Not addressed	Prohibited from landing or taking off in the preserve	Unchanged	Unchanged	Unchanged	Deleted prohibition on landing and taking off
Dredging North Pass	Not addressed except through normal permitting channels	Not addressed	Mentioned as something that may be considered should the pass threaten to close	Unchanged	Will study the issue	Unchanged	Unchanged

Issue	Existing	First Draft (8/18/99)	Second Draft (11/15/99)	Third Draft (12/6/99)	Draft for Public Comment (1/14/00)	Draft for BCC Review (2/15/00)	Draft for DEP Review (3/21/00)
Alcohol	No restriction	Not addressed	Prohibited on Shell Key	Unchanged	Unchanged	Unchanged	Unchanged
Future Manage- ment Actions	No restriction	Plan reviewed every 5 years	Plan reviewed after 2 years and then every 5 years thereafter with a provision that advisory committee must be reconvened	Unchanged	Unchanged	Unchanged	Unchanged (BCC requested that we update them sooner than two years)

NOTE: The First Draft was prepared by adapting the State's management plan for Anclote Key and was intended to serve as a general starting point for the Committee. It also included a map showing the recreation areas and the core bird areas which was produced with the assistance of both birders and boaters. A number of specific issues were raised at the first meeting (August 18) and in subsequent comments, and these were included in the second draft along with some organizational changes. The third draft reflects the discussions and compromises reached at the second meeting (November 15) and the January 14th draft was produced following the third committee meeting on December 6, 1999. The February 15th draft was produced based on comments received at the Public Information Meeting (January 26, 2000) and the only changes to the 3/21 draft were those made by the Board of County Commissioners at the March 21 Public Hearing.



## **ADDENDUM 5**

### **References Cited**

## REFERENCES CITED

- Below, T. 1997. Long-term monitoring of coastal waterbirds - Estero Bay to Everglades City. Presented at Florida Ornithological Society Meeting, October 3-5, St. Pete Beach, FL.
- Blair, P. 1999. Bird species of Shell Key. List of birds observed at Shell Key as of September, 1999. 1p.
- Douglass, N. 1997. Regional Nongame Biologist, Florida Fish and Wildlife Conservation Commission, Lakeland. Memorandum to Brian Millsap, Bureau Chief, dated July 10, 1997. Subject: "The Importance of Shell Key as a Breeding Shorebird Site." 3 pp.
- Johnson, A.F. and M.G. Barbour. 1990. Dunes and maritime forest. Pp 429-480 in *Ecosystems of Florida*. R.L. Myers and J.J. Ewel, eds. University of Central Florida Press, Orlando. 765 pp.
- King, J. 1997. Conservation Chair, St. Petersburg Audubon Society. Shell Key project update prepared for Nancy Douglass, Florida Game and Fresh Water Fish Commission, February 1997. 3 pp.
- Meylan, A., A. Redlow, A. Mosier, K. Moody, and A. Foley. 1999. Occurrence and distribution of sea turtles in Tampa Bay, Florida. Pp. 13-1 through 13-15 in *Baywide Environmental Monitoring Report, 1993-1998, Tampa Bay, Florida*. J. R. Pribble, A. J. Janicki, and H. Greening, eds. Technical Publication #07-99 of the Tampa Bay Estuary Program.
- Owens, J.K. 1996. The 1996 international piping plover winter census in Florida. U. S. Fish and Wildlife Service, Jacksonville. 8 pp.
- Paul, R. and J. King. Manager, Florida Coastal Islands Sanctuaries, National Audubon Society, Tampa and Conservation Chair, St. Petersburg Audubon Society, St. Petersburg. Letter of July 9, 1997 to Shelly Allen, Manager, Pinellas Aquatic Preserve, Florida Department of Environmental Protection, Tampa. 2 pp.
- Sprandel, G., J. Gore, and D. Cobb. 1995. Winter shorebird survey - final report -1994. Florida Game and Fresh Water Fish Commission, Bureau of Nongame Wildlife, Division of Wildlife, Tallahassee. 205 pp.

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## **ADDENDUM 6**

### **Soil Types**

## Soil Descriptions

Source: *Soil Survey of Pinellas County Florida*, Issued September 1972 by the United States Department of Agriculture Soil Conservation Service in cooperation with the University of Florida Agricultural Experiment Stations.

### Tidal Swamp

Tidal swamp (Ts) is on small islands and in low, broad coastal areas that are covered with sea water. It occurs mostly in the southeastern part of the county. The water is several inches deep at low tide and 1 or 2 feet deep at high tide. Tidal swamp differs from Tidal Marsh mainly in vegetation. Tidal swamp has a thick growth of mangrove trees and a few small patches of salt-tolerant plants. Tidal swamp is subject to wave action, whereas Tidal marsh usually is not.

This land type consists mainly of sand, peaty sand, a few organic soils, seashells, and shell fragments. The dense forest of mangrove trees and high water make detailed investigation of the soils impractical. In places the surface layer is fibrous peat, 6 to 18 inches thick, over gray to pale-brown sand mixed with shell fragments. In places the surface layer is sandy clay and the subsurface layers are loam or marl. Other areas are stratified sand and organic material. Most areas contain varying amounts of seashells and shell fragments at irregular depths.

Tidal swamp is not extensive in the county. It is mainly a source of food, cover, and

breeding grounds for numerous shore birds and animals. Many mosquito-control ditches have been dug in most areas to remove water trapped by falling tides. The shallow water in these ditches provides food and breeding areas for many species of fish. Some areas in the vicinity of St. Petersburg, Clearwater, and Honeymoon Island have been filled with dredged material to provide waterfront homesites. (No capability classification; woodland group 9).

### **Coastal Beaches**

Coastal beaches (Co) consists of narrow strips of tidewashed sand bordering islands and parts of the mainland. Most areas are covered during storms and daily at high tide. These beaches range from a few feet to as much as 500 feet in width. Long stretches are practically without vegetation, but sparse salt-tolerant grasses and other plants grow in places. Depth to the water table varies with the tide.

The beach sand has been deposited, mixed, and reworked by waves. It is firm or compact when moist and loose when dry. This sand is light gray to white and consists mainly of fine quartz particles in which there are varying quantities of medium to coarse shell fragments. The sand contains a few, fine, rounded, weakly cemented very dark gray to very dark brown particles.

Coastal beaches is used primarily for recreation. It provides habitat for shore birds. (No capability classification; woodland group 9)

## **ADDENDUM 7**

### **FNAI Natural Community Descriptions**

## NATURAL COMMUNITY DESCRIPTIONS

**(1) BEACH DUNE** - (Synonyms: sand dunes, pioneer zone, upper beach, sea oats zone, coastal strand). Beach Dune is characterized as a wind-deposited, foredune and wave-deposited upper beach that are sparsely to densely vegetated with pioneer species, especially sea oats. Other typical pioneer species include beach cordgrass, sand spur, dune or bitter panic grass, railroad vine, beach morning glory, seashore paspalum, beach elder, dune sunflower, sea purslane, and sea rocket. Typical animals include ghost crab, dune, especially along its ecotone with the unvegetated beach, is also the primary nesting habitat for numerous shorebirds and marine turtles, including many rare and endangered species.

Beach Dune communities are found along shorelines subject to high energy waves which deposit sand-sized grains to form the open beach. Onshore winds move the sand grains inland until slowed by an obstacle, usually plant stems, causing the grains to drop. As the plants grow upward and burial continues, a foredune is built. Dune height is largely determined by the strength and the directional constancy of winds and by the growth habits of dune-forming plants. As a cape or barrier island grows seaward, new beaches are deposited seaward of the old one and a characteristic ridge and swale topography develops.

Beach Dunes are very dynamic communities and mobile environments. The wind continually moves the sand inland from the beach until trapped by vegetation. Beach Dunes are subject to drastic topographic alterations during winter storms and hurricanes. Taking the brunt of storm surge, intact Beach Dunes are essential for protection of inland biological communities.

The soils of Beach Dunes are composed of sands that are similar to those washed onto the adjacent beach, except that the wind selectively lifts out the smaller sand particles, blows them inshore, and deposits them around plant stems. These deep siliceous or calcareous sands drain rapidly, creating decidedly xeric conditions.

Beach Dunes occur in an extremely harsh environment. The dune vegetation must be able to tolerate loose, dry, unstable, nutrient poor soils, as well as exposure to wind, salt spray, sand abrasion, intense sunlight, and storms. Thus, dune species have evolved several morphological adaptations to survive in this harsh environment. Many of them root easily from fragments washed ashore in storm debris, or they produce large floating seeds that can be transported by ocean currents. Some have thickened cuticles and succulent foliage to better retain water and to reduce the effects of salt spray and sand abrasion. Some spread by subterranean or surface runners that creep across the barren sands. Many readily reroot from higher up their stems when buried by blowing sand and consequently develop a matted or wiry root system. Some have become so dependent on the dune habitat that they lose vigor without shifting sands constantly stimulating them to send out new shoots and reroot. These characteristics are the primary reasons for their unique ability to stabilize aeolian sand into nearly static beach dunes.

In spite of their ability to withstand the harsh maritime environment, plants of the Beach Dunes are extremely vulnerable to human impacts. A foot path or off-road vehicle trail over the beach dunes can damage the vegetation, giving wind and water the leverage needed to begin

erosional processes. A gap, or blowout, forms and continually widens until it is slowly revegetated and stabilized. The sand from the gap moves inland, and rapidly buries vegetation, destabilizing the beach dunes and often disturbing adjacent communities. When a storm ensues, the unvegetated gap allows storm surges easy access to these communities for further disruption. Because of their vulnerability, Beach Dunes require protection from trampling (i.e., boardwalks for beach access) and off-road vehicles. Coastal developments which affect the sand sources that are necessary for Beach Dune replenishment should be strongly discouraged.

**(5) COASTAL STRAND** - (synonyms: shrub zone, maritime thicket, coastal scrub).

Coastal Strand is characterized as stabilizer, wind-deposited coastal dunes that are vegetated with a dense thicket of salt-tolerant shrubs, especially saw palmetto. Other typical plants include sand live oak, cabbage palm, myrtle oak, yaupon, sea grape, cat's claw, nakedwood, lantana, green brier, buckthorn, cocoplum, nickerbean, coin vine, beach jacquemontia, pinweed, bay cedar, necklace pod, sea lavender, Spanish bayonet, woody goldenrod and Florida rosemary. Typical animals include gopher tortoise, six-lined racerunner, southern hognose snake, coachwhip snake, diamondback rattlesnake, and beach mouse.

Coastal Strand occurs on deep wind-deposited sands which have been wind-sorted and wavewashed. There is usually some shell admixed with quartz grains on the beach, but this is rapidly leached out in the course of only a few hundred years. Coastal Strand dunes are generally quite stable but are susceptible to severe damage if the vegetation is disturbed. Shrubs in the coastal Strand are frequently dwarfed and pruned as a result of the salt spray-laden winds that kill twigs on the seaward side, producing a smooth, dense upward-slanting canopy resembling a sheared hedge.

Coastal Strand is actually an ecotonal community that generally lies between Beach Dune and Maritime hammock. It may also grade into Scrub, and it often shares many of the same species that occur in Coastal Berm. Fire may reduce succession towards Maritime Hammock. However, maritime influences alone will often suffice to inhibit succession to forest.

Coastal Strand is probably the most rapidly disappearing community in Florida. It is most extensive along the Atlantic Coast where, being elevated and next to the coast, it is prime resort or residential property. Coastal Strand originally occurred as a nearly continuous band along the Atlantic shorelines. Now it occurs largely as broken and isolated small stretches. In south Florida, it has also been disturbed by invasions of exotic species, principally Brazilian pepper and Australian pine. Along with other coastal communities, Coastal Strand protects inland communities from the severe effects of storms.

**(75) MARINE TIDAL MARSH** - (synonyms: saltmarsh, brackish marsh, coastal wetlands, coastal marshes, tidal wetlands). Marine and Estuarine Tidal Marshes are floral Based Natural Communities generally characterized as expanses of grasses, rushes and sedges along coastlines of low wave-energy and river mouths. They are most abundant and most extensive in Florida north of the normal freeze line, being largely displaced by an interspersed among Tidal Swamps below this line. Black needlerush and smooth cordgrass are indicator species which usually form dense, uniform stands. The stands may be arranged in well-defined zones according



to tide levels or may grade subtly over a broad area, with elevation as the primary determining factor. In the upper reaches of river mouths, where Estuarine tidal Marsh begins to blend with Freshwater Tidal Swamp and Marsh, sawgrass may occur in dense stands. Saw grass is the least salt tolerant of these Tidal Marsh species. Other typical plants include saltgrass, saltmeadow cordgrass (marsh hay), gulf cordgrass, soft rush and other rushes, salt myrtle, marsh elder, saltwort, sea oxeye, cattail, big cordgrass, bulrushes, seashore dropseed, seashore paspalum, shoregrass, glassworts, seablight, seaside Heliotrope, saltmarsh boltonia, and marsh fleabane. Typical animals include marsh snail, periwinkle, mud snail spiders, fiddler crabs, marsh crab, green crab, isopods, amphipods, diamondback terrapin, saltmarsh snake, wading birds, waterfowl, osprey, rails, marsh wrens, seaside sparrows, muskrat and raccoon.

Fishes frequently found in this community include blacktip shark, lemon shark, bonnet-head shark, hammerhead shark, southern stingray, yellow spotted ray, tarpon, ladyfish, bonefish, menhaden, sardines, anchovy, catfish, needlefish, killifish, bluefish, blue runner, lookdown, permit, snapper, grunts, sheepshead, porgies, pinfish, seatrout, red drum, mullet, barracuda, blenny, goby, trigger fish, filefish, and puffers.

Tidal Marsh soils are generally very poorly drained muck or sandy clay loams with substantial organic components and often a high sulfur content. The elevation of Tidal Marshes range from just below sea level to slightly above sea level with vegetation occupying the intertidal and supratidal zones. The frequently high density of plant stems and roots effectively traps sediments derived from upland runoff or from littoral and storm currents. The decaying, dead marsh plants and the transported detritus which the living plants trap, accumulate to form peat deposits. Together, these accretion processes may build land.

Tidal Marsh plants live under conditions which would stress most plants. High salt content in the soil, poor soil aeration, frequent submersion and exposure intense sunlight, and occasional fires make the tidal Marsh community inhospitable to most plants and require a wide tolerance limit for its inhabitants. The landward extent of Tidal Marsh along the shore line is directly related to the degree of bottom slope; the more gradual the slope the broader the community band. Typical zonation of this community includes smooth cordgrass in the deeper edges, grading to salt tolerant plants such as black needlerush that withstand less inundation.

Tidal fluctuation is the most important ecological factor in Tidal Marsh communities, cycling nutrients and allowing marine and estuarine fauna access to the marsh. This exchange helps to make Tidal Marsh one of the most biologically productive Natural Communities in the world. In fact, primary productivity in Tidal Marshes surpasses that of most intensive agricultural practices. The former operates at no cost because of free energy subsidies from tides, while the latter requires costly energy subsidies in the form of fuels, chemicals, and labor. A myriad of invertebrates and fish, including most of the commercially and recreationally important species such as shrimp, blue crab, oysters, sharks, grouper, snapper and mullet, also use Tidal Marshes throughout part or all of their life cycles.

Tidal Marshes are also extremely important because of their storm buffering capacity and three pollutant filtering actions. The dense roots and stems hold the unstabilized soils together,

reducing the impact of storm wave surge. The plants, animals, and soils filter, absorb, and neutralize many pollutants before they can reach adjacent marine and estuarine communities. These factors make Tidal Marshes extremely valuable as a Natural Community.

Adverse impacts of urban development of Tidal Marshes include degradation of water quality, filling of marshes, increased erosion, and other alterations such as bulkheading and beach renourishment. The most attractive coastal areas for development activities frequently are the most ecologically fragile and are extremely vulnerable to development of any kind. Off shore pollution in the form of oil spills and various forms of letter jettisoned from shipping traffic also impact Tidal Marsh terminal stage of succession in coastal areas.

**(76) MARINE TIDAL SWAMP** - (synonyms: mangrove forest, mangrove swamp, mangrove islands). Marine and estuarine Tidal Swamps are Floral Based Natural Communities characterized as dense, low forests occurring along relatively flat, intertidal and supratidal shorelines of low wave energy along southern Florida. The dominant plants of Tidal Swamp Natural Communities are red mangrove, black mangrove, white mangrove and buttonwood. These four species occasionally occur in zones which are defined by varying water levels, with red mangrove occupying the lowest zone, black mangrove the intermediate zone, and white mangrove and buttonbush the highest zone. Other vascular plants associated with Tidal Swamps include salt grass, black needlerush, spike rush, glasswort, Gulf Cordgrass, sea purslane, saltwort and sea oxeye. Typical animals of the Tidal Swamp include mangrove water snake, brown pelican, white ibis, osprey, bald eagle, and a variety of shorebirds, herons, egrets, and raccoon. Also included are sponges, oysters, marine worms, barnacles, mangrove tree crabs, fiddler crabs, mosquitoes; and numerous other invertebrates. Fishes are likewise diverse in this community. Those most frequently occurring include black-tipped shark, lemon shark, nurse shark, bonnet-head shark, rays, tarpon, ladyfish, bonefish, menhaden, sardines, lookdown, permit, snapper, sheepshead, porgies, pinfish, and mullet.

Several variations of Tidal Swamps are generally recognized. These include (1) overwash swamps found on islands which are frequently inundated by the tides; (2) narrow fringe swamps located along waterways; (3) riverine swamps found in floodplains; (4) basin swamps growing in depressions slightly inland from the water; (5) hammock swamps, similar to basin swamps but growing at a slightly higher elevation; and (6) scrub swamps growing over hard substrates such as limestone marl.

Tidal Swamps occur in flat coastal areas. The soils are generally saturated with brackish water at all times, and at high tides these same soils are usually inundated with standing water. Mangroves grow on a wide variety of soils ranging from sands to muds. In older Tidal Swamps the sands and muds are usually covered by a layer of peat which has built up from detritus (decaying plant material).

The prop roots of red mangroves, the extensive pneumatophores (aerial roots) of black mangroves and the dense root mats of the white mangrove serve to entrap sediments and recycle nutrients from upland areas and from tidal import. This process serves in "island formation" and is a part of the successional process involved in land formation in south Florida. These root

structures also provide substrate for the attachment of and shelter for numerous marine and estuarine organisms.

Temperature, salinity, tidal fluctuation, substrate and wave energy are five physical factors influencing the size and extent of Tidal Swamps. Mangroves require an annual average water temperature above 19°C (66°F) to survive. They do not tolerate temperatures below freezing or temperatures which fluctuate widely over the course of a year. Salt water is a key element in reducing competition from other plants and allowing mangroves to flourish. In addition, mangroves have adapted to the salt water environment by either excluding or excreting salt from plant tissues. Mangroves can survive in freshwater but are usually not found in large stands under such conditions in nature because they succumb to competition.

Tidal Swamps are closely associated with an often grade into Seagrass beds, Unconsolidated Substrates, Tidal Marshes, Shell Mounds, Coastal Berms, Maritime Hammocks, and other coastal communities. Seagrass Beds and Unconsolidated Substrates are usually found in the subtidal regions surrounding Tidal Swamps. Tidal Marshes are often found along the inland boundary of the Tidal Swamps. Tropical hardwood species occupy Coastal Berm and Shell Mound communities which are often surrounded by mangroves. In Florida, Tidal Swamps occur along both coasts, buffered by barrier island formations. Tidal Swamps are most extensive from Cedar Key southward along the Gulf Coast and from Ponce de Leon Inlet southward along the east coast. The most luxuriant growth occurs in the Ten-Thousand Island areas of southwest Florida.

The Marine and Estuarine Tidal Swamp communities are significant because they function as nursery grounds for most of the state's commercially and recreationally important fish and shellfish. These Natural Communities are also the breeding grounds for substantial populations of wading birds, shorebirds, and other animals. The continuous shedding of mangrove leaves and other plant components produce as much as 80% of the total organic material available in the aquatic food web. Additionally, Tidal swamps help protect other inland communities by absorbing the brunt of tropical storms and hurricanes.

Tidal Swamps have been and continue to be areas of environmental concern because many acres were destroyed through diking and flooding, ditching for mosquito control, and dredging and filling activities. Fortunately, specific legal protection for mangrove swamps was adopted by the state in 1985. Today, mangroves continue to face such problems as destruction from oil spills and changes in the quantity, quality and timing of the fresh water input as the adjacent uplands are developed or otherwise altered. Reducing estuarine salinity and flushing chemical pollutants from adjacent uplands have resulted in the destruction of some Tidal Swamp areas and the invasion of non-mangrove species.

The combination of these factors has resulted in a decrease in the number of acres of Tidal Swamps and a reduction in available nursery grounds and valuable habitat for native wildlife. Mangrove swamps can be replanted by man; however, long term monitoring has not been conducted to determine if restored sites function as the original community did. The best management practice is to prevent further destruction of existing Tidal Swamps and maintain a natural flow of fresh water into these areas.

**(77) MARINE UNCONSOLIDATED SUBSTRATE** - (synonyms: beach, shore, sand bottom, shell bottom, sand bar, mud flat, tidal flat, soft bottom, coralgall substrate, marl, gravel, pebble, calcareous clay). Marine and Estuarine Unconsolidated Substrates are Mineral Based Natural Communities generally characterized as expansive, relatively open areas of subtidal, intertidal, and supratidal zones which lack dense populations of sensible plant and animal species. Unconsolidated Substrates are unconsolidated material and include coralgall, marl, mud, mud/sand, sand or shell. This community may support a large population of infaunal organisms as well as a variety of transient planktonic and pelagic organisms (e.g., tube worms, sand dollars, mollusks, isopods, amphipods, burrowing shrimp, and an assortment of crabs).

In general Marine and Estuarine Unconsolidated Substrate Communities are the most widespread communities in the world. However, Unconsolidated Substrates vary greatly throughout Florida, based on surrounding parent material. Unconsolidated sediments can originate from organic sources, such as decaying plant tissues (e.g., mud) or from calcium carbonate depositions of plants or animals (e.g., coralgall, marl and shell substrates). Marl and coralgall substrates are primarily restricted to the southern portion of the state. The remaining four kinds of Unconsolidated Substrate, mud, mud/sand, sand, and shell, are found throughout the coastal areas of Florida. While these areas may seem relatively barren, the densities of infaunal organisms in subtidal zones can reach the tens of thousands per meter square, making these areas important feeding grounds for many bottom feeding fish, such as redfish, flounder, spot and sheepshead. The intertidal and supratidal zones are extremely important feeding grounds for many shorebirds and invertebrates.

Unconsolidated Substrate Communities which are composed chiefly of sand (e.g., sand beaches) are the most important recreational areas in Florida, attracting millions of residents and tourists annually. This community is resilient and may recover from recreational disturbances. However, this community is vulnerable to compaction associated with vehicular traffic on beaches and disturbances from dredging activities and low dissolved oxygen levels, all of which can cause infaunal organisms to be destroyed or to migrate out of the area. Generally these areas are easily recolonized either by the same organisms or a series of organisms which eventually results in the community returning to its original state once the disturbance has ceased. In extreme examples, such as significant alterations of elevation, there is potential for serious long-term impacts from this type of disturbance.

**(81/82) RUDERAL AND DEVELOPED** - Ruderal areas are characterized by having the natural substrate or the natural community overwhelmingly altered as a result of human activity. Native vegetation is sparse and is often replaced by weedy or exotic species. These areas require a long-term restoration effort.

Developed areas consist of natural biological communities that have been replaced or nearly replaced by structures or permanently cleared areas such as roads, visitor facilities, campgrounds, recreation areas, parking lots or concessions.

# FLORIDA NATURAL AREAS INVENTORY

1018 Thomasville Road, Suite 200-C • Tallahassee, Florida 32303 • (850) 224-0207 • FAX (850) 681-9364 • [www.fnai.org](http://www.fnai.org)

February 23, 1999

Ms. Gloria C. Nelson, OMCM  
Department of Environmental Protection  
Division of State Lands  
3900 Commonwealth Boulevard, m.s. 130  
Tallahassee, Florida 32399

**RECEIVED**

FEB 26 1999

DSL  
Bureau of  
Public Land Administration

Dear Ms. Nelson:

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). Your data request, received on February 18, 1999, specified an area located in Township 32S, Range 16E, Section 30 on the Pass-A-Grille Beach 7.5 minute USGS Quadrangle in Pinellas County.

A search of our maps and database indicates that currently we have five Element Occurrence Records mapped within one mile of the study area (see enclosed map and table). Please note that the map legend indicates the precision of the element occurrence location, defined as second (within about 300 feet), minute (within about one mile), or general (within about 5 miles). Also note the locations of breeding colony sites identified by the Florida Game and Fresh Water Fish Commission Breeding Bird Atlas Project.

This site is located within the Pinellas County Aquatic Preserve, which is managed by the Florida Department of Environmental Protection, Division of Marine Resources. The site is also located within one mile of the Pinellas National Wildlife Refuge, managed by the U.S. Fish & Wildlife Service.

Please note that Potential Natural Areas are located near the site. These are private lands which are not managed for conservation, but which may have features of environmental significance, as determined by FNAI scientists. Potential Natural Areas should be considered important information for planning purposes. Please see the enclosed explanation sheet for more information.

FNAI strongly suggests that a site specific survey be conducted to determine the current presence or absence of rare, threatened, or endangered species. Surveys should be conducted by individuals familiar with Florida's flora and fauna. For your convenience, a summary of the elements recorded for Pinellas County is enclosed.

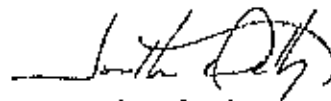
Gloria C. Nelson  
February 23, 1999  
Page 2

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and FNAI must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Sincerely,



Jonathan Oetting  
Conservation Information Coordinator

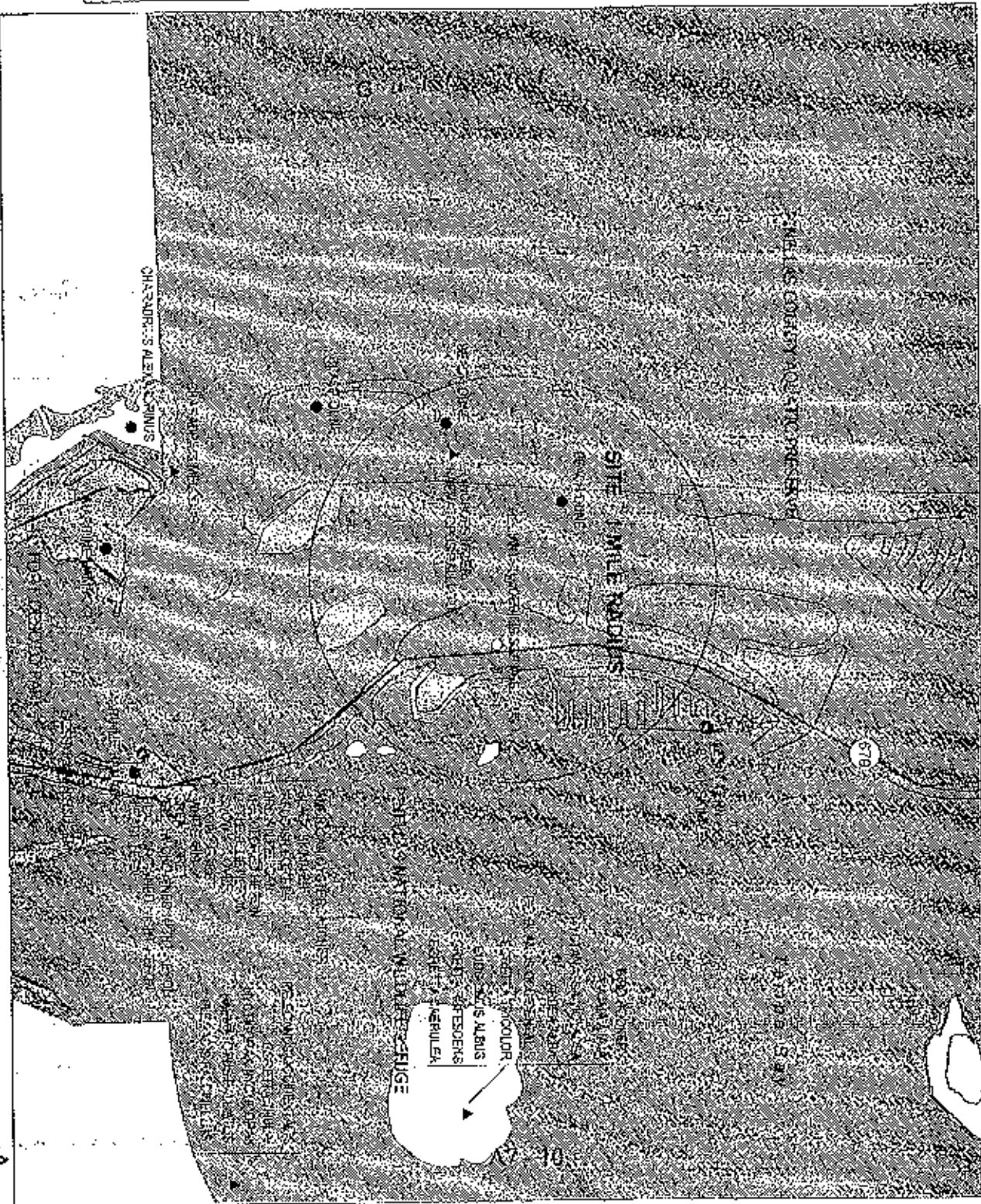
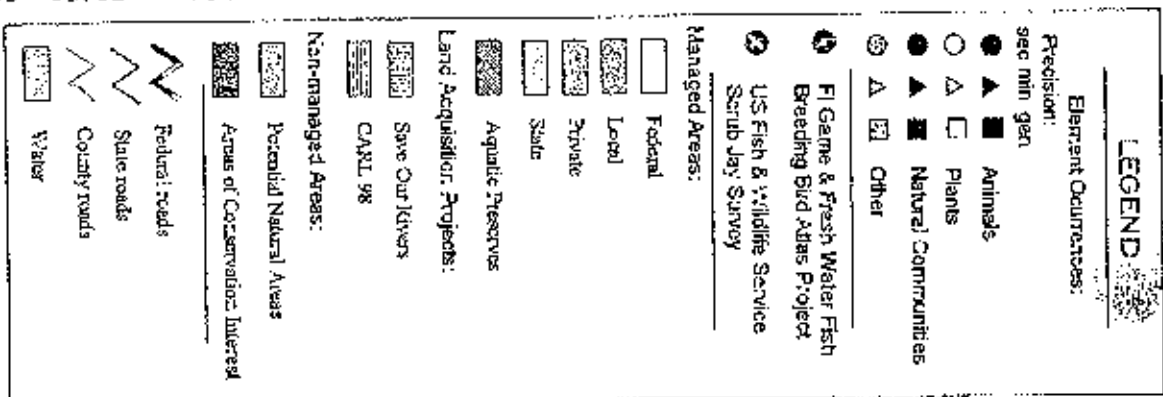
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# Florida Natural Areas Inventory

Tallahassee, FL 32303  
(850) 224-5207

Township 32S, Range 16E, Section 30, located on the Pass-A-Grille Beach 7.5 min. USGS Quadrangle in Pinellas County



Prepared by J. Oetting  
23 February 1999  
Data Source: FNAI 12/98

## FNAI ELEMENT OCCURRENCE RECORDS ON OR NEAR SITE

EOCODE	SCIENTIFIC NAME	COMMON NAME	GLOBAL RANK	STATE RANK	FEDERAL STATUS	STATE STATUS
<b>ANIMALS</b>						
ABANCD101070787FL	HAEMATOPUS PALLIATUS	AMERICAN OYSTERCATCHER	G5	S3	N	LS
ABNNM1401070697FL	RYNCHOPS NIGER	BLACK SKIMMER	G5	S3	N	LS
<b>PLANTS</b>						
POAST4N0E50137FL	HELIANTHUS DEBILIS SSP VESTITUS	HAIRY BEACH SUNFLOWER	G5T2	S2	N	N
<b>COMMUNITIES</b>						
CTS000000371577FL	BEACH DUNE		G4?2	S2	N	N
CTS0000003071587FL	BEACH DUNE		G4?7	S2	N	N

2/23/99

1



**FLORIDA NATURAL AREAS INVENTORY**

April, 1998

1018 Thomasville Road, Suite 200-C, Tallahassee, FL 32303 (850) 224-8207 Page 1

### Pinellas County Summary

#### Rare Species and Natural Communities

Scientific Name	Common Name	Global Rank*	State Rank*	Federal Status*	State Status*	Occurrence Status†
<b>FISH</b>						
<i>Acipenser oxyrinchus desotol</i>	Gulf sturgeon	G3T2	S2	LT	LS	C
<i>Agonostomus monticola</i>	mountain mullet	G5	S3	N	N	P
<i>Microphis brachyurus</i>	opossum pipefish	G5	S2	N	N	P
<b>AMPHIBIANS</b>						
<i>Rana capito</i>	gopher frog	G4	S3	N	LS	P
<b>REPTILES</b>						
<i>Alligator mississippiensis</i>	American alligator	G5	S4	T(S/A)	LS	P
<i>Caretta caretta</i>	loggerhead	G3	S3	LT	LT	N
<i>Chelonia mydas</i>	green turtle	G3	S2	LE	LE	N
<i>Crotalus adamanteus</i>	eastern diamondback rattlesnake	G5	S3	N	N	C
<i>Dermochelys coriacea</i>	leatherback	G3	S2	LE	LE	N
<i>Drymarchon corais couperi</i>	eastern indigo snake	G4T3	S3	LT	LT	C
<i>Gopherus polyphemus</i>	gopher tortoise	G3	S3	N	LS	C
<i>Lepidochelys kempi</i>	Kemp's ridley	G1	S1	LE	LE	C
<i>Stilosoma extenuatum</i>	short-tailed snake	G3	S3	N	LT	C
<b>BIRDS</b>						
<i>Accipiter cooperii</i>	Cooper's hawk	G4	S3†	N	N	P
<i>Amphispiza aestivalis</i>	Bachman's sparrow	G3	S3	N	N	P
<i>Ajaja ajaja</i>	roseate spoonbill	G5	S2S3	N	LS	C
<i>Aramus guarana</i>	limpkin	G5	S3	N	LS	P
<i>Ardea alba</i>	great egret	G5	S4	N	N	C
<i>Ardea herodias occidentalis</i>	great white heron	G5T2	S2	N	N	P
<i>Buteo brachyurus</i>	short-tailed hawk	G4†	S3	N	N	P
<i>Charadrius alexandrinus</i>	snowy plover	G4	S2	N	LT	C
<i>Charadrius melodus</i>	piping plover	G3	S2	LT	LT	C
<i>Coccyzus minor</i>	mangrove cuckoo	G5	S3	N	N	P
<i>Dendroica discolor paludicola</i>	Florida prairie warbler	G5T3	S3	N	N	P
<i>Egretta caerulea</i>	little blue heron	G5	S4	N	LS	C
<i>Egretta rufescens</i>	reddish egret	G4	S2	N	LS	C
<i>Egretta thula</i>	snowy egret	G5	S4	N	LS	P
<i>Egretta tricolor</i>	tricolored heron	G5	S4	N	LS	C
<i>Eudocimus albus</i>	white ibis	G5	S4	N	LS	C
<i>Falco columbarius</i>	merlin	G5	SU	N	N	P
<i>Falco peregrinus</i>	peregrine falcon	G4	S2	LE	LE	P
<i>Falco sparverius paulus</i>	southeastern American kestrel	G5T3T4	S3†	N	LT	P
<i>Fregata magnificens</i>	magnificent frigatebird	G5	S1	N	N	P
<i>Haematopus palliatus</i>	American oystercatcher	G5	S3	N	LS	C
<i>Haliaeetus leucocephalus</i>	bald eagle	G4	S3	LT	LT	C
<i>Icthyophaga exilis</i>	least bittern	G5	S4	N	N	P
<i>Laterallus jamaicensis</i>	black rail	G4	S3†	N	N	P
<i>Mycteria americana</i>	wood stork	G4	S2	LE	LE	C
<i>Nyctanassa violacea</i>	yellow-crowned night-heron	G5	S3†	N	N	C
<i>Nycticorax nycticorax</i>	black-crowned night-heron	G5	S3†	N	N	P
<i>Pandion haliaetus</i>	osprey	G5	S3S4	N	LS**	C
<i>Pelecanus occidentalis</i>	brown pelican	G4	S3	N	LS	C

# FLORIDA NATURAL AREAS INVENTORY

April, 1998

1018 Thomasville Road, Suite 200-C, Tallahassee, FL 32303 (850) 224-8207 Page 2

## Pinellas County Summary Rare Species and Natural Communities

Scientific Name	Common Name	Global Rank*	State Rank*	Federal Status*	State Status*	Occurrence Status†
<i>Picoides villosus</i>	hairy woodpecker	G5	S3?	N	N	P
<i>Plegadis falcinellus</i>	glossy ibis	G5	S2	N	N	P
<i>Rallus longirostris scottii</i>	Florida clapper rail	G5T3?	S3?	N	N	P
<i>Rynchops niger</i>	black skimmer	G5	S3	N	LS	C
<i>Speotyto cunicularia floridana</i>	Florida burrowing owl	G4T3	S3	N	LS	P
<i>Sterna antillarum</i>	least tern	G4	S3	N	LT	C
<i>Sterna caspia</i>	Caspian tern	G5	S2?	N	N	P
<i>Sterna maxima</i>	royal tern	G5	S3	N	N	C
<i>Sterna sandvicensis</i>	sandwich tern	G5	S2	N	N	C
<i>Vireo altiloquus</i>	black-whiskered vireo	G5	S3	N	N	P
<b>MAMMALS</b>						
<i>Corynorhinus rafinesquii</i>	Rafinesque's big-eared bat	G3	S3?	N	N	P
<i>Mustela frenata peninsular</i>	Florida long-tailed weasel	G5T3	S3?	N	N	P
<i>Neofiber alleni</i>	round-tailed muskrat	G3	S3	N	N	C
<i>Peromyscus floridanus</i>	Florida mouse	G3	S3	N	LS	C
<i>Sciurus niger shermani</i>	Sherman's fox squirrel	G5T2	S2	N	LS	C
<i>Trichechus manatus</i>	manatee	G2?	S2?	LE	LE	C
<b>VASCULAR PLANTS</b>						
<i>Acrostichum aureum</i>	golden leather fern	G5	S3	N	LE	C
<i>Actinostachys pennula</i>	ray fern	G4G5	S1	N	LE	C
<i>Adiantum tenerum</i>	brittle maidenhair fern	G5	S3	N	LE	C
<i>Asclepias curassavica</i>	Curtiss' milkweed	G3	S3	N	LE	C
<i>Bigelovia nuttallii</i>	Nuttall's rayless goldenrod	G3	S1	N	LE	C
<i>Chamaesyce cumulicola</i>	sand-dune spurge	G2	S2	N	LE	C
<i>Chrysopsis floridana</i>	Florida golden aster	G1	S1	LE	LE	R
<i>Eragrostis tracyi</i>	Sanibel lovegrass	G2	S2	N	LE	C
<i>Glandularia tampensis</i>	Tampa vervain	G1	S1	N	LE	C
<i>Gossypium hirsutum</i>	wild cotton	G4G5	S3?	N	LE	C
<i>Helianthus debilis ssp vestitus</i>	hairy beach sunflower	G5T2	S2	N	N	C
<i>Lantana depressa var sanibelensis</i>	Gulf Coast Florida lantana	G2T1	S1	N	LE	C
<i>Lechea cernua</i>	nodding pinweed	G3	S3	N	LT	C
<i>Lechea divaricata</i>	pine pinweed	G2	S2	N	LE	C
<i>Pteroglossaspis ecristata</i>	wild coco	G2G3	S2	N	LT	C
<i>Stillingia sylvatica ssp tenuis</i>	queen's delight	G4G5T2	S2	N	N	C
<i>Zephyranthes simpsonii</i>	rain lily	G2G3	S2S3	N	LT	C
<b>NATURAL COMMUNITIES</b>						
Beach Dune		G4?	S2	N	N	C
Coastal Grassland		G3	S2	N	N	C
Estuarine Composite Substrate		G3	S3	N	N	C
Estuarine Grass Bed		G2	S2	N	N	C
Estuarine Tidal Marsh		G4	S4	N	N	C
Estuarine Tidal Swamp		G3	S3	N	N	C
Estuarine Unconsolidated Substrate		G5	S5	N	N	C
Marine Composite Substrate		G3	S3	N	N	C
Marine Consolidated Substrate		G3	S3	N	N	C
Marine Grass Bed		G2	S2	N	N	C
Marine Mollusk Reef		G3	S3	N	N	C

**FLORIDA NATURAL AREAS INVENTORY**

April, 1998

1018 Thomasville Road, Suite 200-C, Tallahassee, FL 32303 (850) 224-8207 Page 3

### Pinellas County Summary

#### Rare Species and Natural Communities

Scientific Name	Common Name	Global Rank*	State Rank*	Federal Status*	State Status*	Occurrence Status†
Marine Tidal Marsh		G4	S4	N	N	C
Marine Tidal Swamp		G3	S3	N	N	C
Maritime Hammock		G4	S2	N	N	C
Meale Flatwoods		G7	S4	N	N	C
Scrub		G2	S2	N	N	C
<b>OTHER</b>						
Bird rookery				N	N	C

\* See attached *FNAI Rank Explanations* sheet for definitions of Global and State Ranks, and State and Federal Status

\*\* See attached *FNAI Rank Explanations* sheet, *Special Animal Listings - State and Federal Status* section

#### † COUNTY OCCURRENCE STATUS

##### Vertebrates and Invertebrates:

C = (Confirmed) Occurrence status derived from a documented record in the FNAI data base.

P = (Potential) Occurrence status derived from a reported occurrence for the county, or the occurrence lies within the published range of the taxon.

N = (Nesting) For sea turtles only; occurrence status derived from documented nesting occurrences.

##### Plants, Natural Communities, and Other:

C = (Confirmed) Occurrence status derived from a documented record in the FNAI data base or from a herbarium specimen.

R = (Reported) Occurrence status derived from published reports.

## Florida Natural Areas Inventory: Areas of Conservation Interest (ACI) and Potential Natural Areas (PNA) Data Layers

Effective as of January 1, 1998, the former Areas of Conservation Interest data layer categories A, B and C have been reclassified into two separate layers known as Areas of Conservation Interest (ACI) and Potential Natural Areas (PNA). The former ACI categories B and C have been renamed and assigned new ranks as explained below. The only changes made have been in data layer names and rank assignments. The actual information contained in the data layers remains the same.

### I. Areas of Conservation Interest (ACI)

(Former ACI Category A, no internal ranking assigned)

The Areas of Conservation Interest data layer indicates, throughout the State of Florida, natural resource areas that remain in private ownership and are not managed or listed for conservation purposes. These areas have been identified on the basis of extensive ground truthing or the presence of highly ranked (FNAI G1/S1) element occurrences. The database information was supplemented by FNAI's scientific staff interpretation of landscape vegetation surrounding the species or natural community occurrences from Florida Department of Transportation (FLDOT) aerial photographs. FNAI occurrence information is compiled from a variety of sources including field surveys by FNAI staff, published literature, herbaria and museum collections, and personal communication or unpublished notes.

### II. Potential Natural Areas (PNA)

(Former ACI Category B and C, ranking of 1-5 assigned with 1 indicating the highest quality natural communities)

The Potential Natural Areas data layer indicates, throughout the State of Florida, lands that are in private ownership and are not managed or listed for conservation purposes that are possibly examples of good quality natural communities. These areas were determined from FNAI's scientific staff interpretation of landscape vegetation on 1988-93 FLDOT aerial photographs and from input received during Regional Ecological Workshops held for each regional planning council. These workshops were attended by experts familiar with natural areas in the region. Element occurrence records in the FNAI database may or may not be present for these sites. In order to be classified as a Potential Natural Area (with the exception of internal rank PNA-5) the area identified through aerial photographs must meet the following criteria:

1. Must be a minimum of 500 acres. *Exceptions:* sandhill, min. 320 acres; scrub, min. 80 acres; pine rockland, min. 20 acres; dry prairie, min. 320 acres; or any example of coastal rock barren, upland glade, coastal dune lake, spring-run stream or terrestrial cave.
2. Must contain at least one of the following:
  - a. One or more high quality examples of FNAI state ranked S3 or above natural communities.
  - b. An outstanding example of any FNAI tracked natural community.

Potential Natural Areas have been assigned internal ranks of PNA-1 through 4 mostly based on size and perceived quality of type of natural community present. The areas included in rank PNA-5 (former ACI Category C) are exceptions to the above criteria. These areas were identified through the same process of aerial photographic interpretation and regional workshops as the PNA-1 through 4 ranked sites, but do not meet the standard criteria. These PNA-5 areas are considered lower priority for conservation than areas ranked PNA-1 through 4, but nonetheless are believed to be ecologically viable tracts of land representative of Florida's natural ecosystems.

*Florida Natural Areas Inventory**May 1997***RANK EXPLANATIONS****for FNAI Global Rank, FNAI State Rank, Federal Status, and State Status**

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an element as any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. An element occurrence (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

Using a ranking system developed by The Nature Conservancy and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks to each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element occurrences, estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Game and Freshwater Fish Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

**FNAI GLOBAL RANK DEFINITIONS**

- G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
- G4** = apparently secure globally (may be rare in parts of range)
- G5** = demonstrably secure globally
- GH** = of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
- GX** = believed to be extinct throughout range
- GXC** = extirpated from the wild but still known from captivity or cultivation
- G#?** = tentative rank (e.g., G2?)
- G/G#** = range of rank; insufficient data to assign specific global rank (e.g., G2G3)
- G/T#** = rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
- G/Q** = rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
- G/T/Q** = same as above, but validity as subspecies or variety is questioned.
- GU** = due to lack of information, no rank or range can be assigned (e.g., GUT2).
- G?** = not yet ranked (temporary)

**FNAI STATE RANK DEFINITIONS**

- S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- S2** = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- S3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
- S4** = apparently secure in Florida (may be rare in parts of range)
- S5** = demonstrably secure in Florida

A7 - 16

**FNAI STATE RANK DEFINITIONS (cont.)**

- SH** = of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)

- SX = believed to be extinct throughout range
- SA = accidental in Florida, i.e., not part of the established biota
- SE = an exotic species established in Florida may be native elsewhere in North America
- SN = regularly occurring, but widely and unreliably distributed; sites for conservation hard to determine
- SU = due to lack of information, no rank or range can be assigned (e.g., SUT2).
- S? = not yet ranked (temporary)

### LEGAL STATUS

- N = Not currently listed, nor currently being considered for listing, by state or federal agencies.

#### FEDERAL (Listed by the U. S. Fish and Wildlife Service - USFWS)

- LE = Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species which is in danger of extinction throughout all or a significant portion of its range.
- PE = Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LT = Listed as Threatened Species. Defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- PT = Proposed for listing as Threatened Species.
- C = Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
- E(S/A) = Endangered due to similarity of appearance.
- T(S/A) = Threatened due to similarity of appearance.

#### STATE

##### Animals (Listed by the Florida Game and Fresh Water Fish Commission - FGFWFC)

- LE = Listed as Endangered Species by the FGFWFC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT = Listed as Threatened Species by the FGFWFC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LS = Listed as Species of Special Concern by the FGFWFC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

##### Plants (Listed by the Florida Department of Agriculture and Consumer Services - FDACS)

- LE = Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
- LT = Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.

## **ADDENDUM 8**

### **Shell Key Species Lists**

# Bird Species Observed at Shell Key

122 Species

September 1999

Common Name	Scientific Name	State Designation
Common Loon	<i>Gravia immer</i>	
Sooty Shearwater	<i>Puffinus griseus</i>	
Northern Gannet	<i>Morus bassanus</i>	
Brown Pelican	<i>Pelecanus occidentalis</i>	SSC
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	
Anhinga	<i>Anhinga anhinga</i>	
Magnificent Frigatebird	<i>Fregata magnificens</i>	
Great Blue Heron	<i>Ardea herodias</i>	
Great Egret	<i>Casmerodius albus</i>	
Snowy Egret	<i>Egretta thula</i>	SSC
Little Blue Heron	<i>Florida caerulea</i>	SSC
Tricolored Heron	<i>Egretta tricolor</i>	SSC
Reddish Egret	<i>Dichromanassa rufescens</i>	SSC
Cattle Egret	<i>Bubulcus ibis</i>	
Green Heron	<i>Butorides striatus</i>	
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	
Yellow-crowned Night Heron	<i>Nyctanassa violacea</i>	
White Ibis	<i>Eudocimus albus</i>	SSC
Rosate Spoonbill	<i>Ajaia ajaja</i>	SSC
Wood Stork	<i>Mycteria americana</i>	E
Mottled Duck **	<i>Anas fulvigula</i>	
Blue-winged Teal	<i>Anas discors</i>	
Northern Shoveler	<i>Anas clypeuta</i>	
Gadwall	<i>Anas strepera</i>	
Redhead	<i>Aythya americana</i>	
Red-breasted Merganser	<i>Mergus serrator</i>	



Turkey Vulture	<i>Cathartes aura</i>	
Osprey	<i>Pandion haliaetus</i>	
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T
Northern Harrier	<i>Circus cyaneus</i>	
Sharp-shinned Hawk	<i>Accipiter striatus</i>	
Cooper's Hawk	<i>Accipiter cooperii</i>	
American Kestrel	<i>Falco sparverius</i>	
Merlin	<i>Falco columbarius</i>	
Peregrine Falcon	<i>Falco peregrinus</i>	E
Clapper Rail **	<i>Rallus longirostris</i>	
Black-bellied Plover	<i>Pluvialis squatarola</i>	
American Golden-Plover	<i>Pluvialis dominicus</i>	
Snowy Plover **	<i>Charadrius alexandrinus</i>	T
Wilson's Plover **	<i>Charadrius wilsonia</i>	
Semipalmated Plover	<i>Charadrius semipalmatus</i>	
Piping Plover	<i>Charadrius melodus</i>	T
Killdeer	<i>Charadrius viciferus</i>	
American Oystercatcher **	<i>Haematopus palliatus</i>	SSC
Black-necked Stilt	<i>Himantopus mexicanus</i>	
American Avocet	<i>Recurvirostra americana</i>	
Greater Yellowlegs	<i>Tringa melanoleuca</i>	
Lesser Yellowlegs	<i>Tringa flavipes</i>	
Willet **	<i>Catoptrophorus semipalmatus</i>	
Spotted Sandpiper	<i>Actitis macularia</i>	
Whimbrel	<i>Numenius phaeopus</i>	
Long-billed Curlew	<i>Numenius americanus</i>	
Marbled Godwit	<i>Limosa fedoa</i>	
Ruddy Turnstone	<i>Arenaria interpres</i>	
Red Knot	<i>Calidris canutus</i>	
Sanderling	<i>Calidris alba</i>	
Semipalmated Sandpiper	<i>Calidris pusilla</i>	

Western Sandpiper	<i>Calidris mauri</i>	
Least Sandpiper	<i>Calidris minutilla</i>	
Pectoral Sandpiper	<i>Calidris melanotos</i>	
Dunlin	<i>Calidris alpina</i>	
Sift Sandpiper	<i>Micropalama himantopus</i>	
Short-billed Dowitcher	<i>Limnodromus scolopaceus</i>	
Common Snipe	<i>Capella gallinago</i>	
Wilson's Phalarope	<i>Steganopus tricolor</i>	
Laughing Gull **	<i>Larus atricilla</i>	
Bonaparte's Gull	<i>Larus philadelphia</i>	
Ring-billed Gull	<i>Larus delawarensis</i>	
Herring Gull	<i>Larus argentatus</i>	
Lesser Black-backed Gull	<i>Larus fuscus</i>	
Great Black-backed Gull	<i>Larus marinus</i>	
Caspian Tern	<i>Sterna caspia</i>	
Royal Tern	<i>Sterna maxima</i>	
Sandwich Tern	<i>Sterna sandvicensis</i>	
Common Tern	<i>Sterna hirundo</i>	
Forster's Tern	<i>Sterna forsteri</i>	
Least Tern **	<i>Sterna antillarum</i>	T
Black Tern	<i>Chlidonias niger</i>	
Black Skimmer **	<i>Rynchops niger</i>	SSC
Rock Dove	<i>Columba livia</i>	
Mourning Dove	<i>Zenaida macroura</i>	
Eurasian Collared-Dove	<i>Streptopelia decaocto</i>	
Common Ground-Dove **	<i>Columbina passerina</i>	
Short-eared Owl	<i>Asio flammeus</i>	
Chuck-will's-widow	<i>Caprimulgus carolinensis</i>	
Belted Kingfisher	<i>Megasceryle alcyon</i>	
Eastern Wood-Pewee	<i>Contopus virens</i>	
Gray Kingbird	<i>Tyrannus dominicensis</i>	

Purple Martin	<i>Progne subis</i>	
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	
Bank Swallow	<i>Riparia riparia</i>	
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	
Barn Swallow	<i>Hirundo rustica</i>	
Fish Crow **	<i>Corvus ossifragus</i>	
House Wren	<i>Troglodytes aedon</i>	
Sedge Wren	<i>Cistothorus platensis</i>	
Marsh Wren	<i>Cistothorus palustris</i>	
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	
Swainson's Thrush	<i>Catharus ustulatus</i>	
Cedar Waxwing	<i>Bombycilla cedrorum</i>	
Loggerhead Shrike	<i>Lanius ludovicianus</i>	
White-eyed Vireo	<i>Vireo griseus</i>	
Tennessee Warbler	<i>Vermivora peregrina</i>	
Magnolia Warbler	<i>Dendroica magnolia</i>	
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	
Blackburnian Warbler	<i>Dendroica fusca</i>	
Prairie Warbler	<i>Dendroica discolor</i>	
Palm Warbler	<i>Dendroica palmarum</i>	
American Redstart	<i>Setophaga ruticilla</i>	
Louisiana Waterthrush	<i>Seiurus motacilla</i>	
Common Yellowthroat	<i>Geothlypis trichas</i>	
Hooded Warbler	<i>Wilsonia citrina</i>	
Summer Tanager	<i>Piranga rubra</i>	
Northern Cardinal	<i>Cardinalis cardinalis</i>	
Chipping Sparrow	<i>Spizella passerina</i>	
Savannah Sparrow	<i>Passerculus sandwichensis</i>	
Nelson's Sharp-tailed Sparrow	<i>Ammodramus nelsoni</i>	
Bobolink	<i>Dolichonyx oryzivorus</i>	

Red-winged Blackbird **	<i>Agelaius phoeniceus</i>	
Eastern Meadowlark	<i>Sturnella magna</i>	
Boat-tailed Grackle	<i>Quiscalus major</i>	
House Sparrow	<i>Passer domesticus</i>	

\*\* - indicates Nesting Species

State Designation Code

SSC - Species of Special Concern

T - Threatened

E - Endangered

Source: Paul Blair, St. Petersburg Audubon Society, May, 1999.

shellBir.wpd

## Plants Observed on Shell Key

Common Name	Scientific Name	Exotic
Saltmarsh aster	<i>Aster tenuifolius</i>	
Black mangrove	<i>Avicennia germinans</i>	
Saltwort	<i>Batis maritima</i>	
Sea-rocket	<i>Cakile edentula</i>	
Gray nickerbean	<i>Caesalpinia crista</i>	
Australian pine	<i>Casuarina</i> sp.	X
Sand bur	<i>Cenchrus incertus</i>	
Sea-grape	<i>Coccoloba uvifera</i>	
Seashore saltgrass	<i>Distichlis spicata</i>	
5-stem grass	<i>Eustachys petraea</i>	
none	<i>Eustoma exaltatum</i>	
Globe amaranth	<i>Gomphrena dispersa</i>	
Railroad vine	<i>Ipomoea pes-caprae</i>	
Marsh elder	<i>Iva frutescens</i>	
White mangrove	<i>Laguncularia racemosa</i>	
Lantana	<i>Lantana involucrata</i>	
Sea lavender	<i>Limonium carolinianum</i>	
Prickly pear cactus	<i>Opuntia austrina</i>	
Creeping grass	<i>Paspalum distichum</i>	
Salt jointgrass	<i>Paspalum vaginatum</i>	
Ground cherry	<i>Physalis viscosa</i>	
Marsh samphire	<i>Phloxerus vermicularis</i>	
Logan	<i>Polypremum procumbens</i>	
Red mangrove	<i>Rhizophora mangle</i>	
Glasswort	<i>Salicornia virginica</i>	
Waterpimpernel	<i>Samolus ebracteatus</i>	
Sea purslane	<i>Sesuvium portulacastrum</i>	
Seaside goldenrod	<i>Solidago sempervirens</i>	

Smooth cordgrass	<i>Spartina alterniflora</i>	
Saltmeadow cordgrass	<i>Spartina patens</i>	
Virginia dropseed	<i>Sporobolus virginicus</i>	
Sea blite	<i>Suaeda linearis</i>	
Sea blite	<i>Suaeda maritima</i>	
Sea oats	<i>Uniola sessiliflora</i>	

Source: Dr. Sheila D. Hanes, Eckerd College, January, 1996.

## **ADDENDUM 9**

### **Final Approvals**

No. 58  
BCC 03-21-00  
6:30 P.M. JONES/Penhale

#58 SHELL KEY PRESERVE MANAGEMENT PLAN - APPROVED AS AMENDED, WITH AUTHORIZATION FOR TRANSMITTAL TO STATE OF FLORIDA FOR APPROVAL

Pursuant to legal notice published in the February 18, 2000 issue of Tampa Bay Review and the March 12 and March 19, 2000 issues of the St. Petersburg Times as evidenced by publisher's affidavit filed with the Clerk, public hearing was held on the Shell Key Preserve Management Plan. Chief Deputy Clerk C. R. Short reported that 57 letters and 264 petitions with 717 signatures in favor of and 46 letters in opposition to the Management Plan have been received; and that the matter is properly before the Board to be heard.

County Administrator Fred E. Marquis recommended approval of the Shell Key Preserve Management Plan and authorization for transmittal of the Plan to the State of Florida for further approval.

Assistant County Administrator Jacob F. Stowers, III, referred to an aerial map and pointed out the subject area and presented an overview of the proposed Management Plan, a copy of which has been filed and made a part of the minutes.

In response to the Chairman's call for proponents of the Plan wishing to be heard, the following individuals expressed their comments and concerns:

Ken Harley, Pinellas Park (representing live bait shrimp fishermen)  
Dr. Tom Cuba (representing Tierra Verde Community Association)  
Greg Holder, Regional Director, Fish and Wildlife Conservation Commission  
William Harner (representing some commercial fishermen)  
Gary Bergersher  
Elizabeth Burke  
Joyce King, Conservation Chairman, St. Petersburg Audubon Society  
Randy Reynolds, Manager of Aquatic Preserves for Tampa Bay, Department of Environmental Protection  
Dr. Harold Albers, 5099 26th Avenue North, St. Petersburg  
Christina Lear, student, Palm Harbor University High School  
Al Schulte, 1960K Lakewood Club Drive South, St. Petersburg  
Timyn Rice, 3497 Coquina Key Drive Southeast, St. Petersburg  
Rich Paul, 1020 South 82nd Street, Tampa  
Harry Michaels, Environmental Specialist, Department of Environmental Protection  
Deborah Archer, 11401 101st Street North, Seminole (presenting letter from Seaplane Pilots Association)  
Jack Coletti, 4258 Cardinal Way South (representing 133 signers of petition)  
Toby Brown (representing 200 members of Tampa Bay Sea Kayakers)  
Dave Bernard, 504 John's Pass Avenue, Madeira Beach



In response to the Chairman's call for opponents of the Plan wishing to be heard, the following individuals expressed their concerns:

John Guth, 700 37th Avenue North, St. Petersburg  
Lou Longa, 200 81st Avenue North, St. Petersburg  
Wayne Stewart, 5055 21st Avenue North, St. Petersburg  
Scott Schoyder, 9301 3rd Street Northeast, St. Petersburg  
Ed Marsh, 11930 Colena Drive, Seminole  
Walter Hirsches, 111 12th Avenue, St. Pete Beach  
Tony Baker, 805 Rural Drive, Largo

Alluding to the concerns of the speakers, Mr. Stowers indicated that barrier islands by their nature are susceptible to movement; that the proposed Plan will address any necessary dredging; that removal of Australian pines and exotic species is part of an overall management perspective; that the issue of seaplanes can be best addressed by designating areas which are not appropriate for landings; that it is anticipated that commercial fishing areas will increase; that education will be a component of the Plan; that the purpose of fencing is to delineate recreation and preserve areas; and that part of the beach will be closed off for protection of chicks in bird nesting areas.

Following discussion, Commissioner Todd moved, seconded by Commissioner Parks, that the Management Plan be approved.

Responding to queries by Commissioner Parks, Mr. Stowers indicated that the issue of addressing the seaplanes can be eliminated from the Plan; whereupon, Commissioner Todd amended her motion to adopt the Management Plan with the exception of the section relating to seaplanes; and the seconder concurred. Upon call for the vote, the motion carried unanimously.



Jeb Bush  
Governor

# Department of Environmental Protection

David B. Struhs  
Secretary

October 18, 2000

Mr. David L. Walker, Jr.  
Environmental Program Manager  
Pinellas County  
512 S. Ft Harrison Avenue  
Clearwater, FL 33756

Dear Mr. Walker:

Re: Shell Key Preserve      Lease Number 4228

On October 17, 2000, the Acquisition and Restoration Council recommended approval of the management plan for Shell Key Preserve. The plan was approved by the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund. Pursuant to Section 253.034 and 259.032, Florida Statutes, and Chapter 18-2, Florida Administrative Code the plan's five year update will be due on October 17, 2005.

Approval of this land management plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Please forward copies of all permits to this office upon issuance.

Sincerely,

*Delmas T. Barber*

Delmas T. Barber, OMC Manager  
Office of Environmental Services  
Division of State Lands

## **SHELL KEY MANAGEMENT PLAN**

### **Resource Management Objectives**

#### **Addendum to the Management Plan**

The management plan outlines several key management objectives for Shell Key Preserve; namely the long-term preservation of wildlife, habitat, and recreational resources. Pinellas County intends that all of these interests and resources are legitimate and that any management plan should ensure their preservation at Shell Key. Therefore, the management plan seeks to protect all resources even though conflicts could arise.

To ensure the protection of wildlife, habitat and recreational resources and to minimize conflicts between them, Pinellas County is committed to long-term monitoring of these resources and to the use of the data generated from these studies to influence any future modifications to the submitted management plan. It is Pinellas County's intent that any future management plan revisions will be data-driven and based on the ability of the plan to meet management objectives. Shell Key Preserve will be managed by the Department of Environmental Management's Environmental Lands Division. This Division is comprised of land management, research, and environmental education sections. It is Pinellas County's intent to use the research section to conduct and manage a variety of research studies at Shell Key Preserve and to use this data to assist with land management and educational directives. This model has already been successfully used at both Brooker Creek and Weedon Island Preserves.

A number of key monitoring programs have already been initiated at Shell Key. A research program to gather data on nesting success of all nesting bird species was begun in the 2000 nesting season. This will be continued each year. All nests will be located and monitored to determine nesting success and the number of young fledged. Causes of nest failure will be determined as best as possible. All sea turtle nests will be located annually and monitored to determine hatching success. A water quality study has been initiated to monitor any changes in water quality in the shallow waters to the east of the Shell Key island. Regular bird surveys, at least monthly, will be continued to monitor annual bird use and to determine an index to species abundance. Regular track surveys were initiated and will be maintained to determine mammalian species distribution and population indices. Finally, regular surveys of human use have been initiated and will be continued, coupled with a survey program to determine use patterns and attitudes.

As stated above, research data will be gathered to assist Pinellas County in determining whether we are meeting management objectives and to assist us in making modifications in the future to the management plan, should such changes seem necessary. Several management objectives are inherent:

**Wildlife:** Shell Key Preserve is established to preserve its important wildlife resources. One primary resource is the preservation of critical nesting habitat for listed bird species, primarily nesting shorebirds. Management efforts should seek to maintain nest success comparable to that found nationally for these species. Shorebirds in nature have highly variable nesting success from year to year and are susceptible to a wide variety of predators and natural forces. Literature values of about 0.5 young/nest fledged per year is regarded as successful, but such success needs to be averaged over many years to consider

both good and bad nesting seasons. Such a value will be considered as successful as the management plan is reviewed at the 5-year review date.

Regular surveys will be used to determine the success of the management plan for other wildlife. Indices of wintering birds, nesting turtles, and mammals will be used to determine if the current management plan is effective. Statistical analysis of population trend data that show negative responses during the 5-year period would indicate that the current management plan is not meeting objectives.

**Habitat:** Shell Key Preserve includes many areas of important habitat. Of primary importance are sea grass beds in the shallow waters east of Shell Key. Pinellas County has been conducting annual sea grass monitoring in this region for many years. Such monitoring will be continued to determine impacts to the grass areas. Any significant changes in the area of flats covered by sea grass will indicate that current management efforts are not meeting objectives and will cause a review of current management efforts to seek ways to maintain current sea grass populations. In addition, habitat mapping of the Preserve has been conducted and will be continued on an annual basis to monitor for changes in vegetation on the islands. Although Shell Key is a very dynamic system and vegetation changes are inherent, negative trends such as the invasion of non-native plants will be used to affect more control measures.

**Recreation:** The human use of sections of Shell Key are an important element to the management plan and are to be preserved to the extent possible. Currently, the plan attempts to balance both recreation and wildlife preservation and it is Pinellas County's intent to preserve recreation while protecting the valuable natural resource values through time. To accomplish this, human use patterns within the Preserve will be continued to be monitored. Surveys of uses, patterns of use, and recreational satisfaction will be conducted regularly. Such surveys will be used both to monitor compliance with resource preservation objectives and satisfaction levels. It is the intent of the management plan to maintain a high compliance with all natural resource objectives and to maintain a high level of satisfaction with visitors to the Preserve. Should compliance issues are not being met, an increase of education programs will ensue coupled by increased attention to security. Should visitor satisfaction decrease, an effort will be made to reverse that trend within the extent possible to maintain natural resource preservation objectives.