

**CITY OF MARATHON, FLORIDA  
RESOLUTION 2007-167**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, APPROVING THE SUBMISSION OF A DRAFT MANAGEMENT PLAN FOR REVIEW AND APPROVAL THROUGH THE DIVISION OF STATE LANDS, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; AND PROVIDING AN EFFECTIVE DATE**

**WHEREAS**, the City Council of the City of Marathon, Florida (the “City”) entered into a lease with the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (the “State”) that was executed on April 17, 2007 to manage lands purchased by the State through the Florida Forever Program (the “Lease”); and

**WHEREAS**, the State requires that the City prepare and submit a Management Plan for the leased premises in accordance with Section 253.034, Florida Statutes and subsection 18-2.021(4), Administrative Code; and

**WHEREAS**, the Management Plan shall be submitted in draft form for review and comments within ten (10) months of the effective date of the Lease; and,

**WHEREAS**, the City wishes to ensure cohesive management of proximate City and State-owned conservation lands;

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, that:**

**Section 1.** The above recitals are true and correct and are incorporated herein


**Section 2.** The City Council hereby approves the draft Management Plan which is attached hereto as Exhibit A

**Section 3.** This resolution shall take effect immediately upon its adoption.




**PASSED AND APPROVED** by the City Council of the City of Marathon, Florida, this 13 day of November, 2007.

**THE CITY OF MARATHON, FLORIDA**

  
\_\_\_\_\_  
Edward P. Worthington, Mayor


AYES: Bull, Cinque, Tempest, Vasil, Worthington  
NOES: None  
ABSENT: None  
ABSTAIN: None

**ATTEST:**

  
\_\_\_\_\_  
Diane Clavier  
City Clerk

(City Seal)

**APPROVED AS TO FORM AND LEGALITY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:**

  
\_\_\_\_\_  
City Attorney

Handwritten signature or scribble.



Exhibit A

Draft Management Plan with associated Attachments



**The City of Marathon  
Land Management Plan  
DRAFT**

**Marathon Planning Department  
November 13, 2007**



State of Florida Management Plan Compliance Checklist	
Requirements	Page Numbers
<b>18-2.021 Acquisitions and Restoration Council.</b>	
1. Executive Summary (Example #1) This should be included in the packet and should be the first page.	
<b>Management Plans. Plans submitted to the division for ARC review under the requirements of Section 253.034 F.S. should be in a form and manner prescribed by rule by the board and in accordance with the provisions of S. 259.032 and should contain where applicable to the management of resources the following:</b>	
2. The common name of the property.	Managed Properties, page 3
3. A map showing the location and boundaries of the property plus any structures or improvements to the property. (Example #2)	Managed Properties, page 3
4. The legal description and acreage of the property.	Managed Properties, page 3
5. The degree of title interest held by the Board, including reservations and encumbrances such as leases.	Managed Properties, page 3
6. The land acquisition program, if any, under which the property was acquired.	Managed Properties, page 3
7. The designated single use or multiple use management for the property, including other managing agencies.	Managed Properties, page 3
8. Proximity of property to other significant State/local/federal land or water resources. (Example #3) <b>May be included in the map in item #2.</b>	Proximate Local, State and Federal Land and Water Resources, page 20
9. A statement as to whether the property is within an Aquatic Preserve or a designated Area of Critical State Concern or an area under study for such designation. If yes, make sure appropriate managing agencies are notified of the plan.	Special Designations, Page 17
<b>10. The location and description of known and reasonably identifiable renewable and non-renewable resources of the property including, but not limited to, the following:</b>	
A. Brief description of soil types, using U. S. D. A. maps when available;	Soils and Minerals, page 17
B. Archaeological and historical resources*;	Archaeological and Historic Resources, page 17
C. Water resources including the water quality classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Waters;	Water Resources, page 20
D. Fish and wildlife and their habitat;	Fish and Wildlife Habitat, page 8
E. State and federally listed endangered or threatened species and their habitat;	Fish and Wildlife Habitat and State and Federally Listed Endangered and Threatened Species, pages 8 and 15
F. Beaches and dunes;	Beaches and Dunes, page 16
G. Swamps, marshes and other wetlands;	Swamps, Marshes and Other Wetlands, page 17
H. Mineral resources, such as oil, gas and phosphate;	Soils and Minerals, page 17
I. Unique natural features, such as coral reefs, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams; and	Unique Natural Features, page 20
J. Outstanding native landscapes containing relatively unaltered flora, fauna, and geological conditions.	Outstanding Native Landscapes, page 20
11. A description of actions the agency plans , to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	Actions to Identify Unknown Historic, Prehistoric or Cultural Resources, page 17
12. The identification of resources on the property that are listed in the Florida Natural Areas Inventory. <i>Include letter from FNAI or consultant, where appropriate.</i>	Properties Listed in FNAI, page 20
13. A description of past uses, including any unauthorized uses of the property. (Example #4)	Past and Existing Uses of Property, page 20
14. A detailed description of existing and planned use(s) of the property. (Example #5)	Past and Existing Uses of Property and Recommended Uses, page 20 and page 22
15. A description of alternative or multiple uses of the property considered by the managing agency and an explanation of why such uses were not adopted.	Proposed Uses of Property, Approach, page 22
16. A detailed assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses.	Impact of Recommended Uses on Resources, page 22

<b>State of Florida Management Plan Compliance Checklist</b>	
<b>Requirements</b>	<b>Page Numbers</b>
17. A description of management needs and problems for the property.	Management Needs and Problems, page 23
18. Identification of adjacent land uses that conflict with the planned use of the property, if any.	Conflicts with Adjacent Uses, page 25
19. A description of legislative or executive directives that constrain the use of such property.	Description of Legislative or Executive Directives to Constrain Use, page 25
20. A finding regarding whether each planned use complies with the State Lands Management Plan adopted by the Trustees on March 17, 1981, and incorporated herein by reference, particularly whether such uses represent "balanced public utilization", specific agency statutory authority, and other legislative or executive constraints.	Finding of Compliance with State Management Plan, page 29
21. An assessment as to whether the property, or any portion, should be declared surplus.	Assessment of Surplus Property, page 30
22. Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. <b>Clearly defined map of parcels can be used.</b>	Identification of Future Purchases to Improve Management, page 30
23. A description of the management responsibilities of each agency and how such responsibilities will be coordinated, including a provision that requires that the managing agency consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archaeological or historic resources. (Example #6)	Description of Management Responsibilities of Each Agency, page 30
24. A statement concerning the extent of public involvement and local government participation in the development of the plan, if any, including a summary of comments and concerns expressed. (Example #7)	Public Involvement, page 31
<b>Additional Requirements—Per Trustees</b>	
25. Letter of Compliance of the management plan with the Local Government Comprehensive Plan. Letter from local government saying that the plan is in compliance with local government's comprehensive plan.	Consistency of Management Plan with Comprehensive Plan, page 31
<b>253.034 State-Owned Lands; Uses. —Each entity managing conservation lands shall submit to the Division of State Lands a land management plan at least every 10 years in a form and manner prescribed by rule by the Board.</b>	
26. All management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing entity plans to identify, locate, protect and preserve, or otherwise use fragile nonrenewable resources, such as archaeological and historic sites, as well as other fragile resources, including endangered plant and animal species.	Fragile and Non-Renewable Resources, page 31
27. The management plan shall provide for the conservation of soil and water resources and for the control and prevention of soil erosion.	Conservation of Soil and Water Resources, page 31
28. Land management plans submitted by an entity shall include reference to appropriate statutory authority for such use or uses and shall conform to the appropriate policies and guidelines of the state land management plan.	Conformance with Relevant Statutory Authorities, Policies and Guidelines, page 32
29. All land management plans for parcels larger than 1,000 acres shall contain an analysis of the multiple-use potential of the parcel, which analysis shall include the potential of the parcel to generate revenues to enhance the management of the parcel.	N/A
30. Additionally, the land management plan shall contain an analysis of the potential use of private managers to facilitate the restoration or management of these lands.	N/A
<b>253.036 Forest Management. —</b>	
31. For all land management plans for parcels larger than 1,000 acres, the lead agency shall prepare the analysis, which shall contain a component or section prepared by a qualified professional forester which assesses the feasibility of managing timber resources on the parcel for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices if the lead management agency determines that the timber resource management is not in conflict with the primary management objectives of the parcel. (Example #8)	N/A
<b>259.032 Conservation And Recreation Lands Trust Fund; Purpose. —</b>	

State of Florida Management Plan Compliance Checklist	
Requirements	Page Numbers
(10)(a) State, regional or local governmental agencies or private entities designated to manage lands under this section shall develop and adopt, with the approval of the Board of Trustees, an individual management plan for each project designed to conserve and protect such lands and their associated natural resources. Private sector involvement in management plan development may be used to expedite the planning process.	
32. Individual management plans required by s. 253.034(5), for parcels over 160 acres, shall be developed with input from an advisory group - <b>Management plan should list advisory group members and affiliations.</b>	N/A
33. The advisory group shall conduct at least one public hearing within the county in which the parcel or project is located. <b>Managing agency should provide DSL/OES with documentation showing date and location of public hearing.</b>	N/A
34. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. <b>Managing agency should provide DSL/OES with copy of notice.</b>	N/A
35. The management prospectus required pursuant to 259.032 (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	N/A
36. <b>Summary of Advisory Group Meeting should be provided to DSL/OES.</b>	N/A
37. Individual management plans shall conform to the appropriate policies and guidelines of the state land management plan and shall include, but not be limited to:	N/A
A. A statement of the purpose for which the lands were acquired, the projected use or uses as defined in s. 253.034, and the statutory authority for such use or uses.	N/A
B. Key management activities necessary to preserve and protect natural resources and restore habitat, and for controlling the spread of nonnative plants and animals, and for prescribed fire and other appropriate resource management activities.	N/A
C. A specific description of how the managing agency plans to identify, locate, protect, and preserve, or otherwise use fragile, nonrenewable natural and cultural resources.	N/A
D. A priority schedule for conducting management activities, based on the purposes for which the lands were acquired. (Example #10) <b>The schedule must include a goal, an objective, and a time frame for completion.</b>	N/A
E. A cost estimate for conducting priority management activities, to include recommendations for cost-effective methods of accomplishing those activities. <i>Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.</i>	N/A
F. A cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired. The cost estimate shall include recommendations for cost-effective methods of accomplishing those activities. <i>Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.</i> (Example #10) <b>Include approximate monetary cost and cost effective methods. Can be placed in the appendix.</b>	N/A
38. A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	Determination of Consistency of Public Uses and Accesses, page 32
<b>259.036 Management Review Teams.—</b>	
39. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. <b>Can be addressed in the body of the plan or addressed in an appendix. If not in agreement, the managing agency should reply in a statement in the appendix.</b>	N/A
<b>Other Requirements</b>	
40. This checklist table at front of plan (pursuant to request of ARC and consensus agreement of managing agencies.)	See Checklist

<b>State of Florida Management Plan Compliance Checklist</b>	
<b>Requirements</b>	<b>Page Numbers</b>
41. Accomplishments (implementation) from last plan (format variable by agency)	Amendments and Updates to the Plan; Accomplishments, page 34
42. FNAI-based natural community maps (may differ from FNAI in some cases)	See Attachment C
43. Fire management plans (either by inclusion or reference)( 259.032)	Fire Management, page 32
44. A statement regarding incompatible uses [ref. Ch. 253.034 (9)]	Incompatible Uses, page 32
45. Cultural resources, including maps of all sites except Native American sites*	See Attachment D

**City of Marathon  
Land Management Plan**

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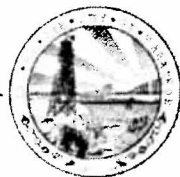
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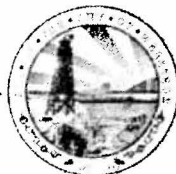
*Figure A, Site Locations and Management Zones*  
*Figure B, Soil Types Maps*

**LIST OF TABLES**

**Table A, Management Zones**  
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**LIST OF ATTACHMENTS**

**Attachment A** Federally Listed & Candidate Species in Monroe County, Florida  
**Attachment B** August 8, 2007, Florida Department of State, Division of Historic Resources Correspondence  
**Attachment C** May 23, 2007 Correspondence with FNAI  
**Attachment D** October 26, 2007, Correspondence regarding Comprehensive Plan Consistency



## Executive Summary

The City of Marathon manages more than 200 parcels of conservation land which together total over 37 acres of environmentally sensitive area. Roughly a third of this land is owned by the City; the remainder is owned by the State of Florida and managed by the City under a long term-lease. The purpose of the City of Marathon Land Management Plan is to provide a cohesive approach to managing all of these properties, regardless of ownership, in a manner which furthers the City's and State's land use and conversation goals. In addition, this plan meets applicable State statutory and rule requirements for a land management plan, as well as commitments in the City's April 17, 2007, lease with the State.



*The City manages more than 200 sites, most of which are small parcels, such as these on Grassy Key.*

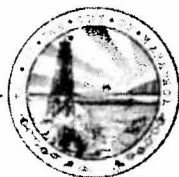
Parcels addressed in this plan are located in the following three areas:

- Grassy Key: Numerous small platted lots within Sunset Bay and Crains Subdivision as well as one larger parcel on Lake Edna;
- Cocoplum: Large platted lots along dredge and fill finger canals; and,
- Miscellaneous Lots: Isolated parcels primarily along US 1.

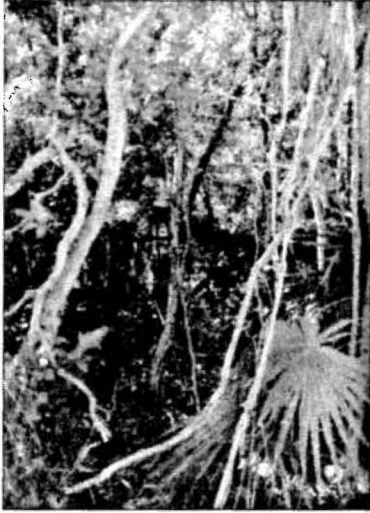
Because additional conservation parcels are continuously being acquired by the City and State, this plan includes a process for categorization and management of new parcels without requiring a complete update of the plan itself each time a parcel is added to the inventory. The establishment of "management zones" by proposed use and habitat types is an important aspect of the plan and a cornerstone to organizing properties by use and habitat type.

Two types of uses are proposed in this plan: 1. Passive recreational use within existing impacted areas now used by the public; and, 2. Conservation uses, including habitat restoration efforts where appropriate and as funding is available. Improvement of natural habitat values is proposed on all lands, regardless of use, as a general principal underlying the plan. The basic approach to site management and improving habitat values is summarized as follows:

- Floristic inventory and assessment of each site;
- Removal of debris;
- Removal of encroachments;
- Exotic vegetation control and removal;
- In-planting of appropriate native species;
- Fill removal; and,
- Access control and management.



The Plan calls for implementation under the guidance of the City Land Steward, and relies in part on volunteer work days and education efforts to help with debris removal and encroachment control. However, some implementation actions, including detailed



*Managed sites include tropical hardwood hammock habitat.*

inventories, exotic plant control and removal, in-planting with native species, fill removal, and access control are funding-dependent. The plan identifies several funding sources, including:

- Non-Profit, state and federal grants;
- City of Marathon Restoration Fund;
- City of Marathon Tree Mitigation Fund; and,
- City of Marathon Conservation Impact Fees (for capital items only).

The plan does not require any actions to occur unless funding is in place.

The plan is organized into four main elements: an Introduction to the managed properties; a Property Characterization section, which describes the existing uses and resources located on the properties; a Property Management, which describes existing management concerns and proposed management solutions; and, a

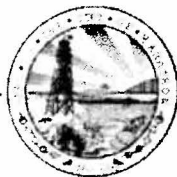
Plan Implementation Section, which outlines the expected approach to accomplishing management activities, including funding options.

### **Introduction**

This Plan is intended to guide the management of protected conservation lands which are either owned by the City of Marathon or for which the City has accepted management responsibilities.

Land addressed in this plan includes:

- Lot dedications received by the City as part of its Building Permit Allocation System (formerly known as the Rate of Growth Ordinance, or ROGO);
- Land acquired by the State of Florida through Florida Forever Funds, and which is under lease to the City of Marathon for management purposes; and,
- Other land which has been acquired by the City for conservation and protection of natural resources.



Land acquisition within the City of Marathon is a dynamic process, and new properties are continuously coming into public ownership. For example, between 2006 and 2007 the total acreage of land acquired through the Florida Forever program more than doubled, and land owned by the City through ROGO-lot dedications increased by 35%. Further, many of the properties addressed in this plan are small lots within platted subdivisions. Some lots are isolated from other conservation lands, others are adjacent to developed lots, and others may be surrounded by other publicly owned lots. Continued acquisition can improve management options by connecting sites, but it also means that the management plan must be flexible enough to accommodate an ever-evolving patchwork quilt of conservation opportunities.



Above: Wading birds on Grassy Key.

Preparation of this plan is required only for Florida Forever lands, per Chapter 253.034, Florida Statutes, and 18-2.021(4), Florida Administrative Code, as well as by the lease between the City and State dated April 17, 2007. In addition, the City has existing responsibilities for managing conservation lands as outlined in its adopted Comprehensive Plan. Therefore, because Florida Forever lands and City-owned parcels often form larger management areas, the City has determined that a single plan for all the sites, regardless of ownership, is the best way to ensure an integrated management approach to all these lands. The City of Marathon has sole responsibility for managing the land addressed in this plan.

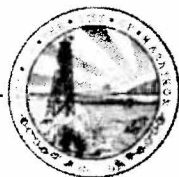
## Property Characterization

### Managed Properties

This plan addresses over two hundred different parcels ranging in size from 500 square feet to 5.73 acres. None of the properties have specific common names, however, most properties are grouped into three main areas:

- Grassy Key: Numerous small platted lots within Sunset Bay and Crains Subdivision as well one larger parcel on Lake Edna;
- Cocoplum: Large platted lots along dredge and fill finger canals; and,
- Miscellaneous Lots: Isolated parcels primarily along US 1.

A map series showing the location of parcels addressed in the plan is included as *Figure A, Site Locations and Management Zones*. The map series distinguishes between City-owned and State-owned parcels managed by the City. Parcels owned by the State were purchased under the Florida Forever Program and are leased to the City for management purposes. The total site area addressed in this plan at the time it was



written is 37.26 acres; however, acreage is expected to increase as acquisition continues. Due to the large number of parcels involved, legal descriptions are not attached to this plan but are on file with the City Land Steward. Land generally falls within Township 66 South, Range 33 East, Sections 5 (Cocoplum), Township 65 South, Range 33 East, Section 24 and 25 (Grassy Key), and Township 66 South, Range 33 East, Sections 6 (106<sup>th</sup> Street Parcel). None of the parcels have improvements or structures, other than residual physical alterations resulting from dredge and fill activities or mosquito ditching.

The designated management uses for the property are 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 public lands. Public activities include activities as allowed per 259.032, Florida Statutes, including: fishing, bicycling, hiking, nature study, birding, jogging, and other related outdoor activities as described in this management plan.

Because of the large number of small parcels addressed by this plan, the City has defined areas where similar habitat and management issues form logical "management zones" as a way to organize land into characteristic units. Six management zones, labeled A through F, are described in this plan, and are shown in *Figure A, Site Locations and Management Zones*. Each is summarized below:

**Zone A:** This zone consists of areas currently used by the public on Grassy Key. Habitat consists of disturbed areas, mangrove scrub and salt marsh.

**Zone B:** Zone B consists of hammock areas on Grassy Key. These areas are vegetated with tropical hardwood hammock with varying degrees of disturbance. No existing public uses are located in this zone.

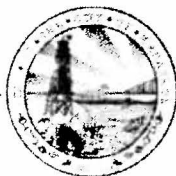
**Zone C:** This zone includes mangrove scrub areas on Grassy Key and includes scrub mangrove, salt marsh and disturbed areas. No existing public uses are located in this zone.

**Zone D:** Zone D consists of mangroves and associated submerged lands located on Grassy Key. No existing public uses are located in this zone.

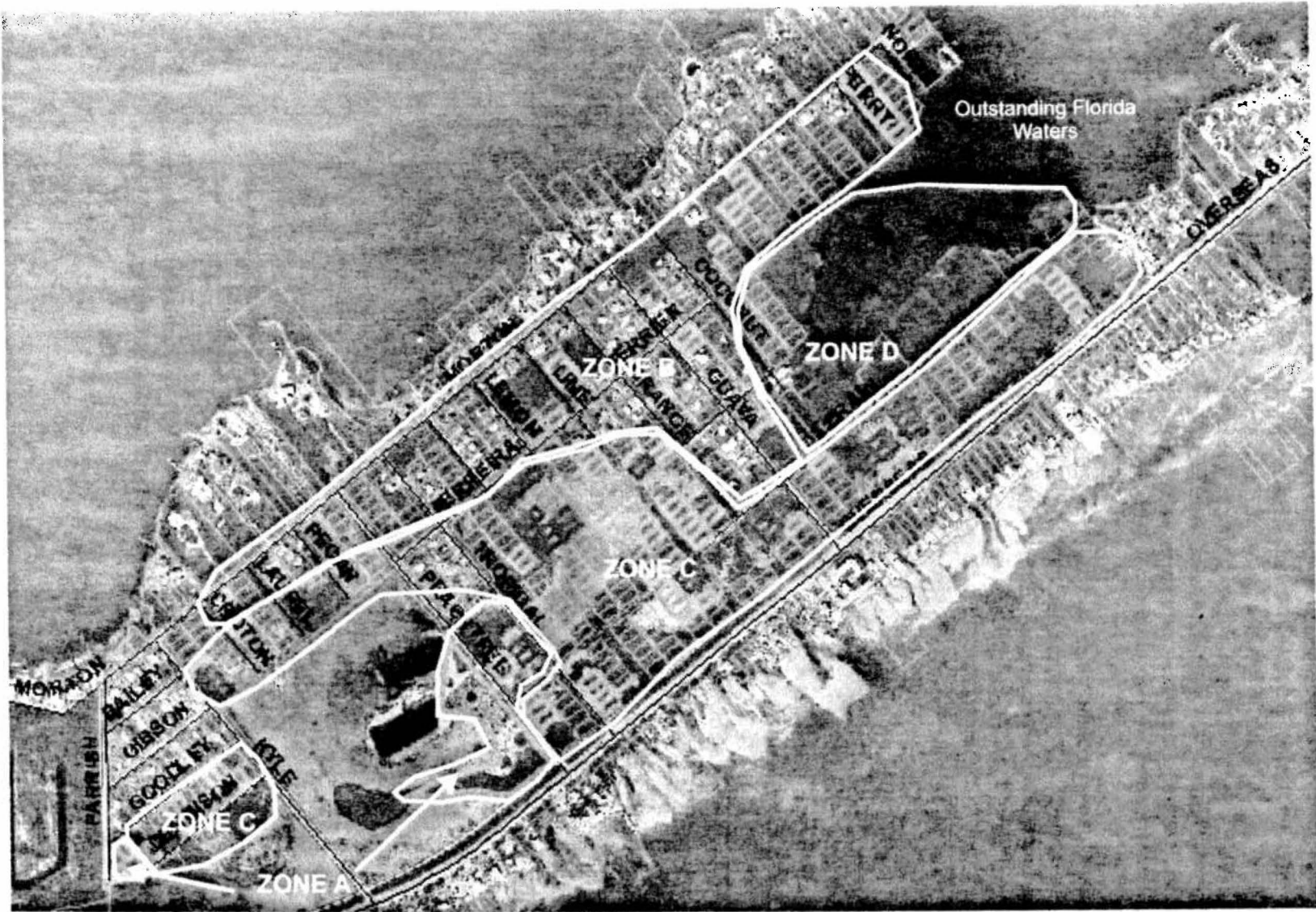


*Mangrove scrub adjacent to fill area in Zone A.*

**Zone E:** This zone consists of mangrove, salt marsh/low functioning wetlands, and disturbed areas located on Cocoplum finger canals. No existing public uses are located in this zone.







- LEGEND**
- ZONE X- Management Zone
  - - State-owned Lands (Leased to City)
  - - City-owned Lands
  - - Platted Lots

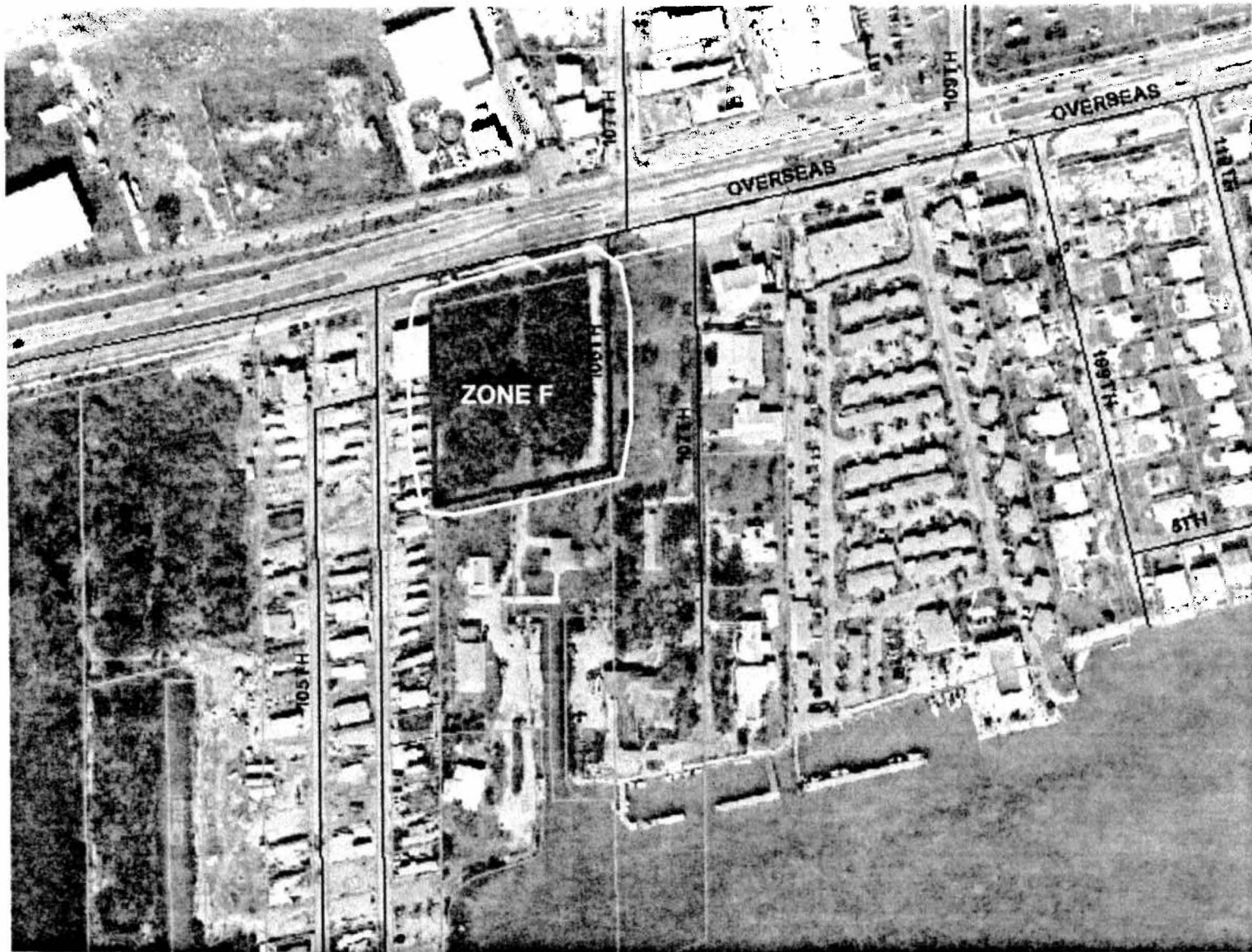
**Figure A, 1 of 3  
Management Sites and Zones  
Grassy Key  
City of Marathon  
Land Management Plan**



**LEGEND**

- ZONE X- Management Zone
- - State-owned Lands (Leased to City)
- - City-owned Lands
- - Platted Lots

**Figure A, 2 of 3**  
**Management Sites and Zones**  
**Cocoplum**  
**City of Marathon**  
**Land Management Plan**



**LEGEND**

- ZONE X- Management Zone
- - State-owned Lands (Leased to City)
- - City-owned Lands
- - Platted Lots

**Figure A, 3 of 3**  
**Management Sites and Zones**  
**Miscellaneous Lots**  
**City of Marathon**  
**Land Management Plan**



**Zone F:** This zone consists of miscellaneous, isolated parcels located along US 1. At this point in time, only one parcel is in this zone (although more are expected to be acquired in the future). That parcel consists of tropical hardwood hammock. No existing public uses are located in this zone.

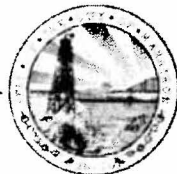
*Table A, Management Zones*, describes each zone, dominant habitat, existing conditions, and existing public uses.

### Site Resources

Site resources, including habitat, physical characterizations, features, special designations, and other qualities are described below.

**Fish and Wildlife Habitat:** The parcels addressed in this plan tend to support five main habitat types. Some of the information in these descriptions is derived from reports prepared for the City by Patricia McNeese, as well as from information available from the University of Florida IFAS extension and the Florida Department of Environmental Protection.

**Tropical Hardwood Hammocks:** Florida Keys tropical hardwood hammock is characterized by a closed canopy forest that occurs where limestone is very near the surface and often exposed. These hammocks generally occur in upland areas that do not usually flood. Due to development pressures hardwood hammocks within Marathon are primarily remnant habitats. Some typical plants include gumbo-limbo, stoppers, pigeon plum, poisonwood, wild tamarind, mahogany, inkwood, black ironwood, cat's claw, and sea grape. Tropical hardwood hammocks provide habitat for a variety of wildlife. Resident birds such as the threatened white crowned pigeon nest in these areas and rely on the fruit produced by trees found in tropical hardwood hammocks. The indigo snake has also been identified in hardwood hammocks, although it may also hunt for prey in adjacent mangrove areas. In addition, hardwood hammock habitats are valuable to migratory species as areas to feed and rest before continuing on their migration. An example of other animals that are endangered that may rely on tropical hardwood hammocks but have not been identified in Marathon and are unlikely to occur there are the Florida panther (*Puma concolor coryi*), Florida Key deer (*Odocoileus virginianus clavium*), Key Largo cotton mouse (*Peryomyscus gossypinus allapaticola*), Key Largo woodrat (*Neotoma floridana smallii*), Florida mastiff bat (*Eumops glaucinus floridanus*), Stock island tree snail (*Orthalicus reses*), and Schaus swallowtail butterfly (*Heraclides aristodemus ponceanus*).



**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone A - Grassy Key Public Use Areas</b></p> <p><b>Habitat:</b> Disturbed areas, mangrove scrub and salt marsh.</p> <p><b>Existing Conditions:</b> Zone contains shallow coastal wetlands as well as fill roads and pathways. No other site improvements exist.</p>	<p>Neighborhood/Community recreation areas located on disturbed areas used for observation of nature, social gatherings, picnicing and bird watching; some uses (camping and dumping) have been subject to enforcement actions in past</p>	<p>Dumping and inadvertent impacts to natural areas adjacent to disturbed areas are a concern. In addition, access is not managed or controlled. Exotic invasion in disturbed areas can be removed, but will revegetate with new exotics quickly and require perpetual maintenance unless in-planting and/or elevation changes occur. Public areas can become inundated during heavy rains, becoming impassable.</p>	<p>Location is near the Florida Heritage Trail, an important Florida Keys greenway and the main recreational corridor in Marathon; the sites may offer an appropriate recreational resource for trail users and City residents. Site improvements could include better access control, refuse collection containers, picnic benches, and signage. Bird activity, especially during the wet season and migratory periods, is especially good in submerged areas of salt marsh and/or scrub mangrove adjacent to this zone.</p>	<ol style="list-style-type: none"> <li>1. Continue to allow existing passive recreational uses, including social gatherings, bird watching, picnicking and bird watching in existing disturbed areas.</li> <li>2. Collaborate with Florida Heritage Trail managers to determine if linkages are appropriate.</li> <li>3. Provide trash cans and regular pick-up.</li> <li>4. Provide signage and markers to help control access and protect native vegetation, direct users to bird watching areas, and guide parking into appropriate areas, including educational signage as appropriate.</li> <li>5. Remove/herbicide invasive exotic vegetation and in-plant with native vegetation, as appropriate and as funding allows.</li> <li>6. Monitor area for illegal dumping and remove debris periodically.</li> </ol>



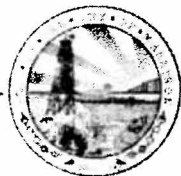
**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone B - Grassy Key Hammock Areas</b></p> <p><b>Habitat:</b> Tropical hardwood hammock with varying degrees of disturbance</p> <p><b>Existing Conditions:</b> Zone consists of small platted lots contained with an existing, partially developed subdivision. No site improvements exist</p>	<p>None</p>	<p>Dumping and inadvertent impact to natural areas; encroachments by neighboring development; exotic invasion (plant and animal)</p>	<p>Habitat can be improved through exotic removal, in-planting of native species, and vegetative maintenance. Regular maintenance will be required because elevation or other structural changes will not solve exotic invasion problems; rather, establishment of healthy communities over time is likely to be needed. Encroachments need to be eliminated when possible. Due to the number of isolated parcels, it is difficult to regularly check all areas for encroachments and dumping; however, a neighborhood stewardship/education program might result in existing homeowners becoming positively involved in parcel maintenance. Education may have better results than an enforcement approach.</p>	<ol style="list-style-type: none"> <li>1. Maintain for resource protection purposes and do not encourage or develop recreational resources.</li> <li>2. Improve quality of habitat through exotic removal/herbicide treatment and removal of hurricane related debris, in-planting of native material where appropriate.</li> <li>3. Initiate an education program to inform the neighborhood about the conservation areas and attempt to instill local stewardship and volunteerism on encroachment and dumping issues.</li> <li>4. Remove encroachments through volunteer and/or enforcement activities if education efforts are unsuccessful. Fencing may be indicated for certain problem areas.</li> <li>5. Monitor area for illegal dumping and remove debris periodically.</li> </ol>



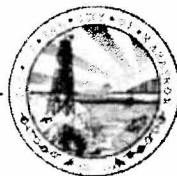
**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone C - Grassy Key Mangrove scrub</b></p> <p><b>Habitat:</b> Scrub mangrove, salt marsh and disturbed areas</p> <p><b>Existing Conditions:</b> Zone contains shallow coastal wetlands as well as disturbed edges. No site improvements exist.</p>	<p>No public uses are located in the zone; however, public access in Zone A provides visual access for nature viewing and birding in submerged areas within this zone.</p>	<p>Zone has fill areas, including roads. None of the lots in the zone are redeveloped</p>	<p>Dumping and inadvertent impacts to natural areas. Encroachments need to be eliminated when possible. Exotic invasion in disturbed areas. Disruption of natural connectivity caused by fill in some areas. Depending on acquisition patterns, fill removal may be appropriate.</p>	<ol style="list-style-type: none"> <li>1. Maintain for resource protection purposes and do not encourage or develop recreational resources.</li> <li>2. Improve quality of habitat through exotic removal and in-planting of native material where appropriate.</li> <li>3. Remove/herbicide invasive exotic vegetation and in-plant with native vegetation, as appropriate and as funding allows.</li> <li>4. Monitor area for illegal dumping and remove any dumped items periodically.</li> <li>5. As acquisition efforts continue on a lot by lot basis, assess the viability of scraping efforts to improve wetland connectivity and eliminate high spots prone to exotic invasion.</li> <li>6. Remove encroachments through volunteer and/or enforcement activities if education efforts are unsuccessful. Fencing may be indicated for certain problem areas.</li> </ol>



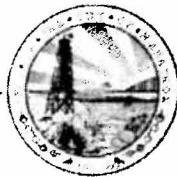
**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone D - Grassy Key Mangrove Area</b></p> <p><b>Habitat:</b> Mangrove/submerged lands</p> <p><b>Existing Conditions:</b> Primarily red mangroves and submerged areas, with exotic invasion along disturbed areas adjacent Old Crain Highway</p>	None	Dumping and inadvertent impact to natural areas; exotic invasion (plant and animal); debris from hurricanes	Site is adjacent to Crain Highway, a potentially historic road. Due to the remote location of the roadway, illegal dumping has been a problem and control of vehicular access on the road will help alleviate dumping	<ol style="list-style-type: none"> <li>1. Maintain for resource protection purposes and do not encourage or develop recreational resources.</li> <li>2. Improve quality of habitat through exotic removal and in-planting of native material where appropriate.</li> <li>3. Remove/herbicide invasive exotic vegetation and in-plant with native vegetation, as appropriate and as funding allows.</li> <li>4. Monitor area for illegal dumping and remove debris periodically.</li> <li>5. Install structures at entrance to Crain Highway at Guava Avenue to prevent vehicular access.</li> </ol>



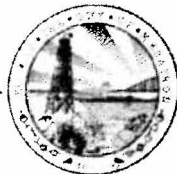
**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone E - Cocoplum Finger Canals</b></p> <p><b>Habitat:</b> Mangrove, salt marsh/low functioning wetlands; disturbed areas</p> <p><b>Existing Conditions:</b> Areas is fill created (prior to fill zone was submerged land); fill has eroded irregularly and resulting low spots have vegetated with mangrove and salt marsh; higher elevations support exotics</p>	<p>None</p>	<p>The variable elevations within this zone have resulted in a patchwork quilt of habitats; while scraping higher areas would remove elevations favorable to exotics, the small size of most upland areas, limited access, and privately owned adjacent areas make any site work difficult. In addition, some natural areas would be impacted due to their proximity to exotic areas as part of any restoration effort</p> <p>Dumping and inadvertent impact to natural areas; and, exotic invasion (plant and animal)</p>	<p>Acquisition of adjacent parcels will improve the possibility of favorable site elevation alterations; otherwise, exotic maintenance will continue to be needed regularly and likely perpetually</p>	<ol style="list-style-type: none"> <li>1. Maintain for resource protection purposes and do not encourage or develop recreational resources.</li> <li>2. Remove/herbicide invasive exotic vegetation, as appropriate and as funding allows.</li> <li>3. As acquisition efforts continue on a lot by lot basis, assess the viability of scraping efforts to improve wetland connectivity and eliminate high spots prone to exotic invasion. Restoration of native habitat, including submerged lands, will be considered.</li> <li>4. Monitor area for illegal dumping and remove debris periodically.</li> </ol>



**Table A, Management Zones  
City of Marathon Land Management Plan**

Management Zone/Predominant Habitat	Existing Public Uses	Management Concerns	Opportunities	Proposed Plan*
<p><b>Zone F - Miscellaneous Sites Along US1</b></p> <p><b>Habitat:</b> Various, including Tropical Hardwood Hammock</p> <p><b>Existing Conditions:</b> Isolated parcels along US 1 contain Hardwood Hammock with varying degrees of exotic invasion along disturbed roadways and adjacent parcels, as well as other habitat types</p>	None	Isolated parcels within developed areas of City with no connectivity to other natural areas; Dumping and encroachment	Provides important green space along US1 in Marathon	<ol style="list-style-type: none"> <li>1. Maintain for resource protection purposes and do not encourage or develop recreational resources.</li> <li>2. Remove/herbicide invasive exotic vegetation and in-plant with native vegetation, as appropriate and as funding allows.</li> <li>3. Remove encroachments through volunteer and/or enforcement activities if education efforts are unsuccessful. Fencing may be indicated for certain problem areas.</li> </ol>



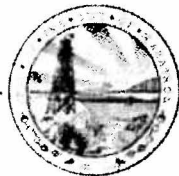
**Scrub Mangrove/Submerged Areas:** This habitat type is characterized by small trees that lack canopy height and consist of an understory of salt tolerant shrubs, herbs, and graminoids (grasses). Usually all three types of mangroves are found in this community; however, it is usually dominated by the black mangrove. Generally the trees are widely spaced and stunted. Some areas are submerged and without significant vegetation. This habitat type can be found in intertidal areas that do not experience daily tidal flushing. These areas can serve as important feeding sites for wading birds during the wet season.

**Mangrove Swamps/Submerged Areas:** Mangrove wetlands/swamps are primarily comprised of red, black, and white mangroves. This habitat type is further characterized by salt tolerant plants, (such as saltwort and glasswort) loose, wet, saline soil, and periodic submergence. Mangrove wetlands serve as a valuable habitat and food source for a variety of aquatic species. The root systems support attached invertebrates, marine algae, and provide protective cover for fish, mobile invertebrates, and feeding areas for wading birds. These fringe systems are important for erosion control and protective nursery areas for marine life. Some areas are submerged and without significant vegetation. In addition, wading birds, shore birds, white crowned pigeon and birds of prey may nest, feed, and roost in mangroves.

**Salt Marsh/Low Functioning Wetlands:** Salt marshes are an important transition zone between upland and intertidal areas. These areas are characterized by a buttonwood transitional zone along the upper elevations and the lowest elevations are comprised of primarily halophytic species of glasswort, saltwort and Key grass. Within the Florida Keys, the endangered rice rat, Lower Keys rabbit, and Key deer depend on salt marsh habitats. However, within Marathon, much of the original salt marsh habitat has been destroyed or altered through dredge and fill activities. Many areas that contain species consistent with salt marsh communities are localized and were formed when fill eroded resulting lower elevations became suitable for salt marsh formation.

**Disturbed Areas:** These areas consist of disturbed substrate, typically caused by dredge and fill activities. In some cases the fill has been compacted and little or no vegetation exists. In other cases, particularly along disturbed road edges, the fill has become vegetated with pestilent exotics, including Australian Pine, Brazilian, lead tree, and seaside mahoe.

**State and Federally Listed Endangered and Threatened Species:** A table identifying state and federal listed species identified in Monroe County is included as *Attachment A, Federally Listed & Candidate Species in Monroe County, Florida (updated July 8, 2007)*. Not all of these species are likely to be found in Marathon or on the sites addressed in this plan. Since species are associated with habitat sites, listed species known or likely to occur on managed sites are shown in *Table B, Species Likely to Occur*





in *Managed Areas*, which is derived from information provided by the Florida Natural Area Inventory (FNAI) table.

<p align="center"><b>Table B</b>  <b>Listed Species Likely to Occur in Managed Areas</b>  <b>City of Marathon</b>  <b>Florida Keys Natural Inventory (FNAI)</b></p>					
Scientific Name	Common Name	Documented	Likely	Federal Status	State Listing
<i>Accipiter cooperii</i>	Cooper's Hawk	X		N	N
<i>Argusia gnaphalodes</i>	Sea Lavender		X	N	LE
<i>Canella winteriana</i>	Wild Cinnamon		X	N	LE
<i>Caretta caretta</i>	Loggerhead Turtle		X	LT	LT
<i>Chamaesyce garberi</i>	Garber's Spurge		X	N	LT
<i>Cicindela olivacea</i>	Olive Tiger Beetle		X	N	N
<i>Coccothrinax argentata</i>	Silver Palm		X	N	LT
<i>Drypetes diversifolia</i>	Milkbark		X	N	LE
<i>Egretta rufescens</i>	Reddish egret		X	N	LS
<i>Elaphe guttata pop.1</i>	Red Rat Snake		X	N	LS
<i>Eumeces egregius egregius</i>	Florida Keys Mole Skink		X	N	LS
<i>Falco columbarius</i>	Merlin	X		N	N
<i>Falco peregrinus</i>	Peregrine Falcon	X		N	LE
<i>Gyminda latifolia</i>	False Boxwood	X		N	LE
<i>Jacquinia keyensis</i>	Joewood		X	N	LT
<i>Manilkara jaimiqui</i>	Wild Dilly		X	N	LT
<i>Menidia conchorum</i>	Key Silverside		X	SC	LT
Migratory Bird Concentration Area		X			
<i>Patagioenas leucocephala</i>	White crowned pigeon		X	N	LT
<i>Platalea ajaja</i>	Roseate spoonbill		X	N	LS
<i>Rhynchospora floridensis</i>	Florida white-top sedge		X	N	N
<i>Sterna antillarum</i>	Least tern	X		N	LT
<i>Strumpfia maritima</i>	Pride of big pine	X		N	LE
<i>Thrinax morrisii</i>	Thatch Palm		X	N	LE
<i>Thrinax radiata</i>	Florida Thatch Palm		X	N	LE
<i>Vireo altiloquus</i>	Black whiskered vireo		X	N	N

**LEGEND:** LE - Listed as Endangered; LT - Listed as Threatened; LS - Species of Special Concern; N - Not listed or being considered for listing  
**Source:** FNAI, 2007

**Beaches and Dunes:** None of the sites in the Management Plan have beaches or dunes.



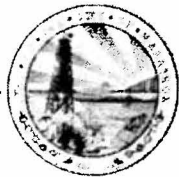
**Swamps, Marshes and Other Wetlands:** Many of the sites have wetlands, including scrub mangrove, mangrove swamps and salt marsh. More descriptions of these habitats is provided in the Fish and Wildlife Habitat section, above.

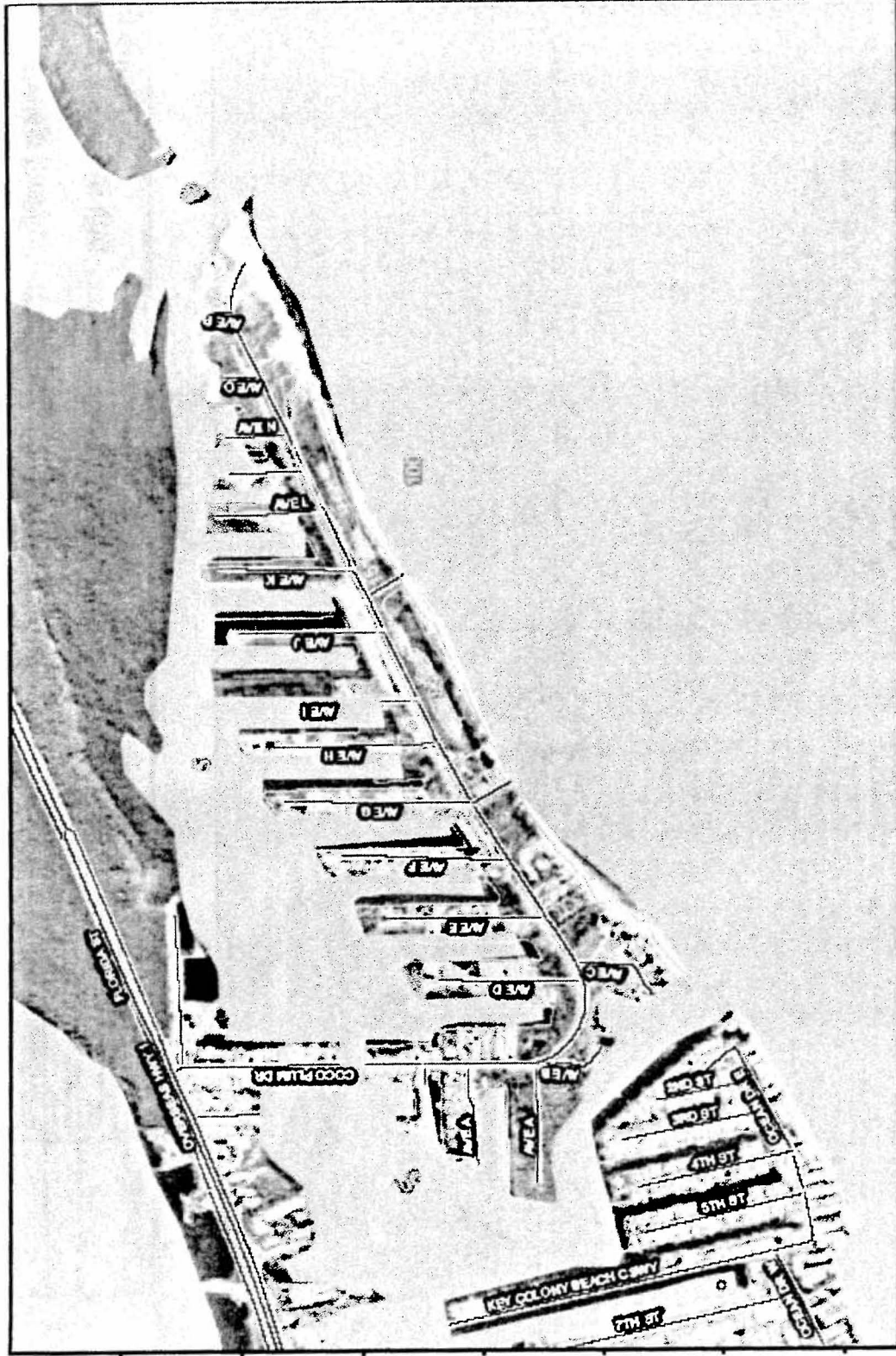
**Special Designations:** The City of Marathon is an Area of Critical State Concern, and this plan will be provided to the Department of Community Affairs; the City is not located in or adjacent to an Aquatic Preserve.

**Soils and Minerals:** Soil types for Management Zones are shown in the map series *Figure B, Soil Types Maps*. Most of the property is in urban land complexes (typical of dredge and fill areas), muck, rock outcroppings or marl. Other than limestone, no potentially commercially viable minerals are located within the management area.

**Archaeological and Historic Resources:** Correspondence from the Florida Department of State, Division of Historic Resources, dated August 8, 2007 (see *Attachment B, Florida Department of State, Division of Historic Resources Correspondence*), confirms that no archaeological or historic resources have been identified on any of the parcels addressed in this plan. However, two potentially historic sites are located adjacent to parcels on Grassy Key. The first is one of the borrow pits in Lake Edna, adjacent to Management Zone A; this management area is expected to include some recreational uses. The City will coordinate any improvements within Zone A adjacent to the borrow pit with the State to determine if indeed the site is significant, and, if so, whether the proposed activities are consistent with the designation status. The second is old Crain Highway, which runs between Zones D and C; no site alterations or recreational uses in this area are proposed and no further coordination with the State is expected to be necessary on this property.

**Actions to Identify Unknown Historic, Prehistoric or Cultural Resources:** The City's Land Steward has corresponded with the Division of Historic Resources regarding existing resources (see *Attachment B*). The City is in the process of obtaining State Historic Preservation Office (SHPO) clearance for any activities that may occur within management areas. Identification and protection of resources found during management activities on these sites are discussed in the implementation section of this plan.





**Figure B, 1 of 2**  
**Soil Resource Information**  
**City of Marathon**  
**Land Management Plan**

Map Line Symbol	Map Line Name
1	Historical Mark 1:5M
2	Historical Mark 1:5M
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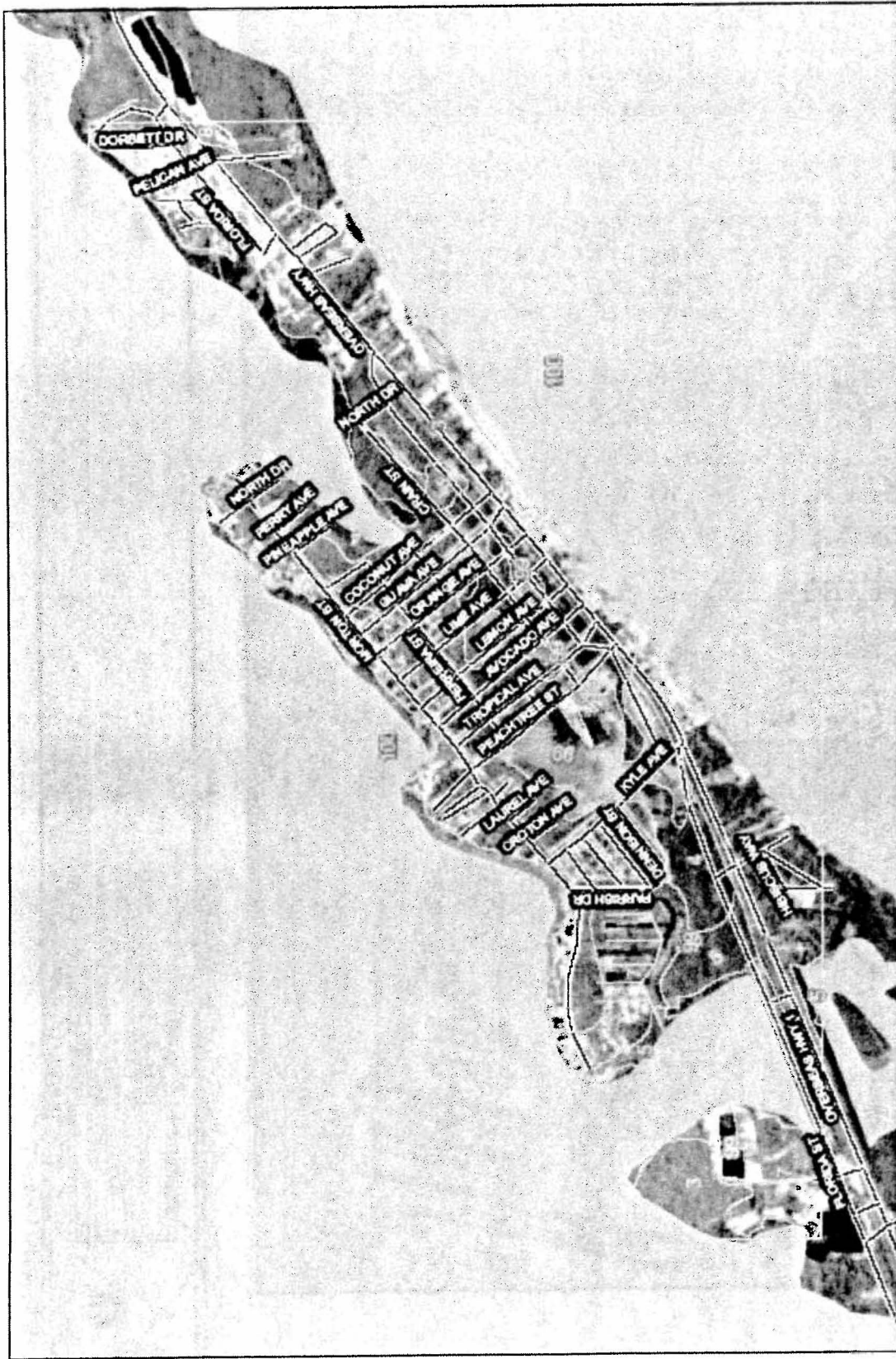


Figure B, 2 of 2  
 Soil Resource Information  
 City of Marathon  
 Land Management Plan

Map Unit Symbol	Map Unit Name	Soil Resource Information
1	Permaline gravelly muck, CQ parent scarp, extremely stony	Area: 1000 Soil: 1000
2	Permaline gravelly muck, CQ parent scarp, extremely stony	Area: 1000 Soil: 1000
3	Permaline muck, occurrence of facies	Area: 1000 Soil: 1000
4	Permaline muck, occurrence of facies	Area: 1000 Soil: 1000
5	Permaline muck, total	Area: 1000 Soil: 1000
6	Permaline muck, total	Area: 1000 Soil: 1000
7	Permaline muck, total	Area: 1000 Soil: 1000
8	Permaline muck, total	Area: 1000 Soil: 1000
9	Permaline muck, total	Area: 1000 Soil: 1000
10	Permaline muck, total	Area: 1000 Soil: 1000
11	Permaline muck, total	Area: 1000 Soil: 1000
12	Permaline muck, total	Area: 1000 Soil: 1000



**Water Resources:** Open waters surrounding the City of Marathon (not including manmade canals) in the Florida Keys National Marine Sanctuary have been designed as Outstanding Florida Waters (OFW) by the State. The majority of the parcels addressed in this plan are not connected to open waters; however, several parcels are adjacent to channels which are considered OFW. The general location of OFW is shown on *Figure A, Site Locations and Management Zones*; specific applicability of the designation will be determined as necessary if management plans result in discharges regulated under State Statute. For example, some site improvement work may trigger dredge and fill permitting for habitat improvement, and such work could involve application of OFW criteria. All waters in the City are designated as Class III waters, which are considered appropriate for recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife.

**Unique Natural Features:** Sites addressed in this plan do not contain any features that are unique to Monroe County, although the protected habitats are important to the ecological health of the county and the Florida Keys. However, portions of Grassy Key, specifically those areas within Zone A, are locally unique because they provide readily accessible, natural open areas in an otherwise developed and/or inaccessible landscape.

**Outstanding Native Landscapes:** Although the sites addressed within this plan have important natural resource characteristics, none of them possess unique characteristics or habitat quality that can be described as outstanding native landscapes.

**Properties Listed in FNAI:** The City Land Steward has coordinated with FNAI and a copy of relevant portions of the May 23, 2007, correspondence from FNAI to the City is included as *Attachment C*. A summary of documented and likely species occurrences identified in the FNAI report is provided in *Table B, Species Likely to Occur in Managed Areas*.

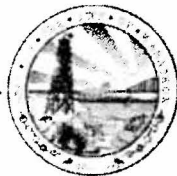
**Proximate Local, State and Federal Land and Water Resources:** Lands addressed in this plan are proximate to several important resource areas, including:

- Florida Keys National Marine Sanctuary, which includes all of the Florida Keys (managed by NOAA);
- Crain Point Hammock (privately owned and managed);
- Curry Hammock State Park (owned and managed by the State of Florida); and,
- The Florida Heritage Trail (managed by the State of Florida).

The proximity of these resources will be taken into consideration as applicable to the management planning process. The Florida Heritage Trail is directly adjacent to several parcels in the Grassy Key area and is expected to be of particular importance.

#### **Past and Existing Uses of Property**

None of the parcels addressed in this plan have been developed, although many parcels have been impacted by dredge and fill activities, construction of adjacent roadways, and





mosquito ditching. Most of the parcels addressed in this plan have been subject to platting and subdivision activities, and in some cases adjacent and nearby sites have been developed with single family homes or commercial uses.

Vegetative cover on many of the sites has been impacted by recent hurricanes, which damaged vegetation and resulted in accumulation of vegetative debris. In addition, some areas have been subjected to illegal dumping and camping, as well as encroachment from adjacent developed parcels, which has impacted habitat quality and in some cases created opportunities for pestilent exotic invasion. Several areas are used recreationally, either on a small scale by nearby neighbors, or on a slightly larger scale by community members attracted to resources on the sites. Recreational activities are generally passive and include observing nature, social gatherings, bird watching and nature exploration. More description of property uses is provided by Management Zone in *Table A, Management Zones*.

## Property Management

### Proposed Uses of Property

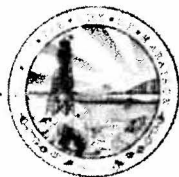
**Approach:** The City of Marathon Land Steward developed a methodology for assessing site conditions and existing uses, identifying management zones based on similar habitat types and site conditions, and then identifying a range of potential uses for consideration within each management zone. Because this plan addresses over 200 small



*Sites within Zone E, Cocoplum, are a patchwork quilt of exotic and native plants.*

platted lots, and because lots are continually being acquired or dedicated in these areas, establishment of management zones to accommodate existing and future parcels was a critical part of the planning process. Once zones were established, a variety of management options and associated uses, including multiple uses, were considered for each zone. Due to the environmental sensitivity of all the sites, conservation use was considered the primary use of all parcels, and multiple uses including recreation were only considered if a preexisting public use was already identified in the zone.

However, recreation uses are proposed only if those existing uses were located in areas with low habitat value and did not further impact or degrade the primary conservation use. For example, Management Zone A, currently attracts visitors for a variety of recreational activities on a daily basis, therefore recreation uses were considered. Because recreational uses there are located on existing fill areas which have little natural resource value, and because there was no demonstrated impact to adjacent resource areas due to the uses, those uses are proposed to continue. However, Management Zone B consists of lots without any precedent of public use and which are sensitive to



disruption and impacts; this zone was not considered for multiple uses, including recreational use, at all.

In general, management techniques which would protect and improve habitat values, reduce the intensity of future management efforts, maintain and manage existing public uses where consistent with habitat protection, and minimize new development unless clearly connected to a public use goal, were given the highest consideration in the process.

**Recommended Uses:** Recommended uses and management approaches for each management zone are shown on *Table A, Management Zones*. All management approaches are subject to funding availability.

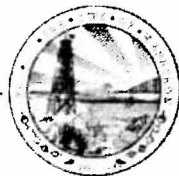
Two types of uses are proposed:

- Passive recreational use within existing impacted areas now used by the public; and,
- Conservation uses, including habitat restoration efforts where appropriate and as funding is available.

#### **Impact of Recommended Uses on Resources**

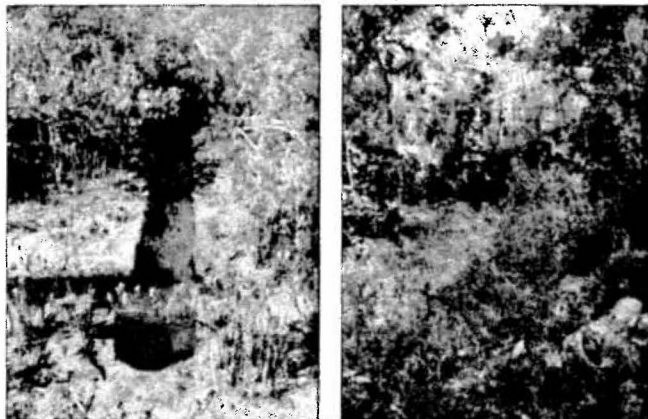
The two types of uses proposed in this plan – natural resource protection and passive recreation -- are the continuation of existing uses which are not expected to have a negative impact on either renewable or non-renewable resources. Both uses are consistent with conservation of the properties. A description of proposed uses, as well as a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses, is provided below.

**Natural Resource Protection Use:** Resource protection use is a single use and is expected to maintain and improve the value of resources on managed lands. No impacts from this use are foreseen. However, without active management the value of habitat may gradually degrade due to exotic vegetation invasion and expansion, encroachments, and dumping. Some management strategies may impact resources as a necessary means to improve overall habitat value and eliminate disturbed areas which can disrupt flushing and serve as conduits for harmful exotic vegetation. Habitat improvements through lowering fill elevations (also known as “scraping”) are one such technique recommended in this plan for some areas. Typically fill areas adjacent to wetlands are dominated by exotic vegetation, although occasionally some native upland or transitional vegetation may also be commingled with the exotic communities. Removal of fill and creation of elevations favorable for salt tolerant wetland vegetation will improve habitat value. However, this can be difficult to accomplish without some impact to wetland vegetation along the transitional edge between the fill and wetland areas. Some areas, such as those included in Zone E, Cocoplum, have small wetlands surrounded by exotic dominated uplands where fill has eroded over time. True



restoration of sites here would involve removal of all fill to enable fully submerged habitats to recover. Therefore, some scraping could result in impacts to native vegetation. These impacts will only be considered if the net restored area is larger than that impacted and if long term exotic management will result from the impact. Since any wetland impact must be permitted, the state will be a party to any implementation of scraping with such wetland impacts, and will help determine if mitigation will be required as part of restoration activities.

**Passive Recreational Use:** This plan recommends that passive recreational uses existing in Zone A continue to be allowed, although the plan does recommend that minimal improvements to better guide and manage the public on the sites be implemented. These activities are now located on existing



*Above left: A mosquito ditch in mangrove scrub area; above right: debris litters many lots*

compacted fill areas which are generally barren. Impacts to natural areas are not expected to occur as a result of continued passive recreational uses in these areas; in fact, better management of these areas, including marking and controlling access, installation of signage and provision of trash cans, is expected to prevent impacts to adjacent wetland areas which are more sensitive. Increased use of these areas is possible, especially if a linkage to the Florida Heritage Trail is deemed appropriate after coordination efforts with the State are complete. However, the modest increase in usage is considered appropriate in designated areas, and the City strongly supports managed access to natural areas as a means to educate the public about the importance and value of the City's native habitats. If damage does occur to resources due to passive recreational uses, methods to further restrict access to the uses will be evaluated and viable methods will be implemented. Resources that do not recover as a result of restricting access, mitigation will be provided. At this time the only type of impact considered possible from normal use is unanticipated vegetative impacts.

### **Management Needs and Problems**

Management challenges include:

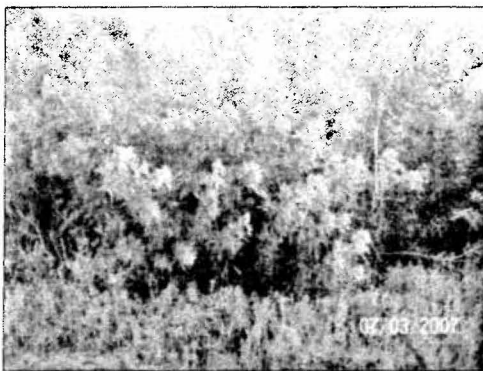
- Preventing/controlling illegal dumping: Areas adjacent to vehicular access routes (paved and unpaved roadways) have experienced illegal dumping, typically of household items and trash. Because some of these areas are relatively remote, it is unlikely that site monitoring by the City will alleviate dumping. However, education and stewardship programs targeted at neighbors near sites, as well as limits to vehicular access, where possible, are potential solutions.
- Removal of dumped objects from sites: Illegal dumping has resulted in a





number of large items, such as household appliances, on the sites. Removal of these objects may require heavy equipment and contracted labor

- Encroachment by neighboring uses: Many sites are platted parcels adjacent to lots developed with single family homes. Other parcels are adjacent to areas developed with residential and commercial uses. In some cases adjacent land owners or other neighbors have encroached upon the sites, and homeowner improvements, storage areas, and play areas have been located on public lands. It appears that the majority of these encroachments are inadvertent. Because continual monitoring and enforcement is labor intensive, the City is proposing a combination of education and stewardship programs as the first approach to all but the most egregious encroachments. Enforcement of cases that are not resolved voluntarily will follow.
- Private ownership of adjacent lands: Private ownership of adjacent lands can prevent or limit potential restoration activities, such as lowering elevations through scraping, due to continued access needs, proximity of developed uses, homeowner objections, or related issues.
- Elimination and control of pestilent exotic plants: Exotic plant invasion in mangrove and mangrove scrub sites is directly related to changes in elevation caused by past fill activities. When ever fill can reasonably be removed, exotic management will be greatly enhanced. However, some management zones

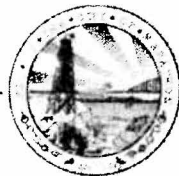


*Pestilent exotic vegetation poses a threat to natural areas*

present particularly difficult problems due to the proximity and blending of native and exotic habitats, as well as private ownership of adjacent areas. Management Area E, Cocoplum, is such an area where creation of new habitat for wetland species through scraping may damage some native species due to physical logistics, and would not be practical unless most or all of surrounding areas are acquired. Continued acquisition efforts may result in consolidation of individual platted lots into larger parcels,

enabling the City to better manage the land.

- Site access: Some sites are extremely difficult to access because they aren't marked in the field and/or they are not adjacent to roads.
- Education of public and neighborhoods/recruitment of local stewards: Initiate an education program to inform the neighborhood about the conservation areas and attempt to instill local stewardship and volunteerism on encroachment and dumping issues
- Control of exotic animal species: Several exotic animal species have been identified as particular management concerns in the City of Marathon. Each is described below:



Gambian Giant Pouch Rats on Grassy Key: Reportedly, the Gambian giant pouch rats first appeared on Grassy Key sometime between 1999 and 2001 after being released by a resident. It is further believed that the Gambian giant pouch rat is contained on Grassy Key. The City of Marathon has been working with the Fish and Wildlife Conservation Commission and the U.S. Department of Agriculture to coordinate eradication efforts by setting up public education meetings. The City of Marathon has been informed of progress at all stages of the process so that we may continue to provide updated and accurate information to the public.

Feral Cats: In response to the FEMA Flood Insurance Injunction in September 2005, the City of Marathon has been working with FEMA, U.S. Fish and Wildlife Service, Monroe County and other municipalities within Monroe County to create and distribute informational brochures with building permits on the possible impact of feral cats on threatened and endangered species.

Iguanas: The City of Marathon has been in contact with Monroe County, local animal shelters, Fish and Wildlife Services, and other agencies regarding the increasing iguana population. At this time no steps have been taken to control iguanas, but we continue to remain available to participate in any discussions regarding establishment of a uniform policy on the iguana populations.

#### **Conflicts with Adjacent Uses**

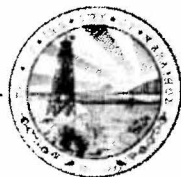
Most of the sites are located in existing platted subdivisions, portions of which have been developed. In addition, other sites are located adjacent to developed areas, including roadways and commercial development. Encroachment and dumping are both problems which generate from adjacent developed uses and can result in degradation of habitat as well as requiring perpetual management. The City has pursued enforcement actions in the case of harmful and egregious encroachments, but recognizes that education and stewardship programs are likely to be more effective, especially given the realities of managing over 200 small sites. This plan includes an education program aimed at adjacent homeowners and businesses, as well as a means to evaluate the effectiveness of the program at the end of the ten year planning period. In some cases education may not prove sufficient to address encroachment problems, and chronic problem areas may require City Code Enforcement approaches and structural separations, such as fencing, to secure conservation areas.

#### **Description of Legislative or Executive Directives to Constrain Use**

Use of the property is constrained by both State and City directives. They are generally described below:

Chapter 259.032, Florida Statutes:

- (4) Lands acquired under this section shall be for use as state-designated parks, recreation areas, preserves, reserves, historic or archaeological sites, geologic or botanical sites, recreational trails, forests, wilderness areas, wildlife management areas, urban open space, or other state-designated



recreation or conservation lands; or they shall qualify for such state designation and use if they are to be managed by other governmental agencies or nonstate entities as provided for in this section.

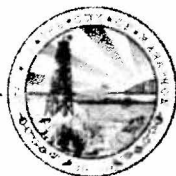
- (9) All lands managed under this chapter and s. 253.034 shall be:
- (a) Managed in a manner that will provide the greatest combination of benefits to the public and to the resources.
- (b) Managed for public outdoor recreation which is compatible with the conservation and protection of public lands. Such management may include, but not be limited to, the following public recreational uses: fishing, hunting, camping, bicycling, hiking, nature study, swimming, boating, canoeing, horseback riding, diving, model hobbyist activities, birding, sailing, jogging, and other related outdoor activities compatible with the purposes for which the lands were acquired.
- (c) Managed for the purposes for which the lands were acquired, consistent with paragraph (11)(a).
- (11)(a) The Legislature recognizes that acquiring lands pursuant to this chapter serves the public interest by protecting land, air, and water resources which contribute to the public health and welfare, providing areas for natural resource based recreation, and ensuring the survival of unique and irreplaceable plant and animal species. The Legislature intends for these lands to be managed and maintained for the purposes for which they were acquired and for the public to have access to and use of these lands where it is consistent with acquisition purposes and would not harm the resources the state is seeking to protect on the public's behalf.



*Open water and mangrove scrub near Lake Edna*

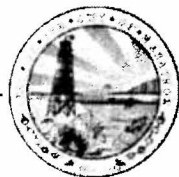
#### Chapter 253.034, Florida Statutes

- (1) All lands acquired pursuant to chapter 259 shall be managed to serve the public interest by protecting and conserving land, air, water, and the state's natural resources, which contribute to the public health, welfare, and economy of the state. These lands shall be managed to provide for areas of natural resource based recreation, and to ensure the survival of plant and animal species and the conservation of finite and renewable natural resources. The state's lands and natural resources shall be managed using a stewardship ethic that assures these resources will be available for the benefit and enjoyment of all people of the state, both present and future. It is the intent of the Legislature that, where feasible and consistent with the goals of protection and conservation of natural resources associated with lands held



in the public trust by the Board of Trustees of the Internal Improvement Trust Fund, public land not designated for single-use purposes pursuant to paragraph (2)(b) be managed for multiple-use purposes. All multiple-use land management strategies shall address public access and enjoyment, resource conservation and protection, ecosystem maintenance and protection, and protection of threatened and endangered species, and the degree to which public-private partnerships or endowments may allow the entity with management responsibility to enhance its ability to manage these lands. The council created in s. 259.035 shall recommend rules to the board of trustees, and the board shall adopt rules necessary to carry out the purposes of this section.

- (2) As used in this section, the following phrases have the following meanings:
  - (a) "Multiple use" means the harmonious and coordinated management of timber, recreation, conservation of fish and wildlife, forage, archaeological and historic sites, habitat and other biological resources, or water resources so that they are utilized in the combination that will best serve the people of the state, making the most judicious use of the land for some or all of these resources and giving consideration to the relative values of the various resources. Where necessary and appropriate for all state-owned lands that are larger than 1,000 acres in project size and are managed for multiple uses, buffers may be formed around any areas that require special protection or have special management needs. Such buffers shall not exceed more than one-half of the total acreage. Multiple uses within a buffer area may be restricted to provide the necessary buffering effect desired. Multiple use in this context includes both uses of land or resources by more than one management entity, which may include private sector land managers. In any case, lands identified as multiple-use lands in the land management plan shall be managed to enhance and conserve the lands and resources for the enjoyment of the people of the state.
  - (b) "Single use" means management for one particular purpose to the exclusion of all other purposes, except that the using entity shall have the option of including in its management program compatible secondary purposes which will not detract from or interfere with the primary management purpose. Such single uses may include, but are not necessarily restricted to, the use of agricultural lands for production of food and livestock, the use of improved sites and grounds for institutional purposes, and the use of lands for parks, preserves, wildlife management, archaeological or historic sites, or wilderness areas where the maintenance of essentially natural conditions is important. All submerged lands shall be considered single-use lands and shall be managed primarily for the maintenance of essentially natural conditions, the propagation of fish and wildlife, and public recreation, including hunting and fishing where deemed appropriate by the managing entity.



- (c) "Conservation lands" means lands that are currently managed for conservation, outdoor resource-based recreation, or archaeological or historic preservation, except those lands that were acquired solely to facilitate the acquisition of other conservation lands. Lands acquired for uses other than conservation, outdoor resource-based recreation, or archaeological or historic preservation shall not be designated conservation lands except as otherwise authorized under this section. These lands shall include, but not be limited to, the following: correction and detention facilities, military installations and facilities, state office buildings, maintenance yards, state university or state community college campuses, agricultural field stations or offices, tower sites, law enforcement and license facilities, laboratories, hospitals, clinics, and other sites that possess no significant natural or historical resources. However, lands acquired solely to facilitate the acquisition of other conservation lands, and for which the land management plan has not yet been completed or updated, may be evaluated by the Board of Trustees of the Internal Improvement Trust Fund on a case-by-case basis to determine if they will be designated conservation lands.

State Lease with the City:

- 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.

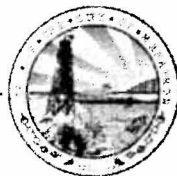


The historic location Crain Highway is located adjacent to Zone C.

- Section 8: ... The Management Plan shall emphasize the original management concept as approved by Lessor at the time of acquisition which established the primary public purpose for which the leased premises were acquired...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.

City of Marathon:

- The City of Marathon Comprehensive Plan includes numerous objectives and polices pertaining to land management activities. These are summarized in Letter of Compliance which is included as *Attachment D, Correspondence regarding Comprehensive Plan Consistency*, to this plan.





### **Finding of Compliance with State Management Plan**

This plan furthers the following applicable policies of the Conceptual State Lands Management Plan, Adopted March 17, 1981, as amended, as follows:

- Maintains desirable vegetation cover while providing multi-use benefits;
- Allows multi-use management where appropriate, in this case areas with existing public access;
- Prohibits access except in designated areas; no off-road vehicles are allowed;
- Encourages the establishment or reestablishment and management of indigenous plant species appropriate to the habitat on each site;
- Protects listed plant and plant and animals and their habitats;
- Locates and removes exotic plant species;
- Recognizes natural topographic features, including restoration of natural topography and soils where appropriate in order to improve habitat value;
- Provides for coordination with the state Division of Historic Resources in order to locate, evaluate, and mitigation any damage to cultural and historic resources;
- Support the retention and storage of surface waters in wetlands, and increase storage through restoration of wetland elevations;
- Provide for management and improvement of water quality and waters of the state;
- Ensure that management activities will comply with applicable water quality designations and standards;
- Maintain a natural diversity of habitats for fish and wildlife;
- Require dredge and fill permitting for restoration activities involving the removal of fill to ensure coordination with the State on potential impacts to fish and wildlife and water quality;
- Encourage the non-consumptive public use of resources on sites where existing access is provided;
- Accelerate inventory fish and wildlife habitats, including identification of listed species and collection of other baseline data;
- Restore and enhance habitat, especially for listed species;
- Protect wetlands and maintain and improve natural conditions;
- Encourage public use of natural areas consistent with the protection of natural values and functions; and,
- Support the preservation of a full range of genetic diversity in native plant and animal populations.

State policies regarding beaches and dunes, development within natural hazard areas, submerged grass beds, mineral resources, and unique natural resources are not applicable to the type of lands and proposed uses in this plan.



### **Assessment of Surplus Property**

No existing properties are considered surplus at this time. The City will reevaluate this issue in five years.

### **Identification of Future Purchases to Improve Management**

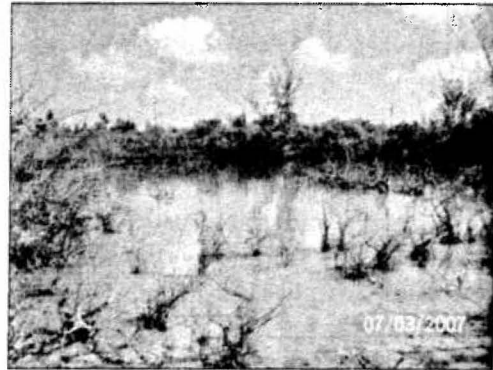
Zones A, B, C, D and E all contain platted parcels which have been targeted for future acquisition. The State of Florida has approached property owners in these areas and acquisition from willing owners is ongoing. The City is coordinating with the State to determine if local acquisition efforts can supplement state efforts, particularly where property owners have declined acquisition in the past but may be willing to reconsider due to changes in the market or other factors.

This plan includes a process for categorization and management of new parcels without requiring a complete update of the plan itself each time a parcel is added to the inventory.

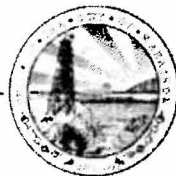
### **Description of Management Responsibilities of Each Agency**

The City of Marathon is the only managing entity for the properties identified in this plan. The City's Land Steward is responsible for preparing and assisting in the implementation of land management plans for City-owned lands; addressing issues such as reporting, scheduling community events and work days; invasive exotic vegetation removal, restoration of native vegetation and recreation, where appropriate; assisting in achieving the goals of the land acquisition and conservation programs from the City Comprehensive Plan and Land Acquisition Program Mission Statement; and, coordinating land management issues with City staff, the Monroe County Land Authority, the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Commission, Florida Department of Environmental Protection, Florida Department of State, Division of Archives, History and Records Management, and other agencies as appropriate. The City of Marathon will consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archeological or historic resources.

On August 9, 2005 (via Resolution Number 2005-108) the City of Marathon created a Land Acquisition Advisory Committee (LAAC) with the goal of identifying and prioritizing affordable/workforce housing, public use, and conservation sites, as well as developing an acquisition program. The LAAC is funded through the capital improvement program and supported by a full time land steward. The LAAC maintains a prioritized list of potential acquisition sites and works with other agencies and entities to identify and review sites. Conservation



*Submerged area near Peachtree Street*





efforts are focusing on sites with proximity to other public lands for management purposes.

### **Public Involvement**

State plan criteria do not require an advisory group, public hearings or adoption of this plan. However, this plan was presented to the Marathon City Council on November 13, 2007, for public review and comment. The plan was approved by the City Council on that date.

### **Consistency of Management Plan with Comprehensive Plan**

This plan is consistent with the City of Marathon Comprehensive Plan. A letter from the Planning Director is included as *Attachment D, Correspondence regarding Comprehensive Plan Consistency*.

### **Potential Use of Private Land Managers**

The City is not considering the use of private land managers at this time.

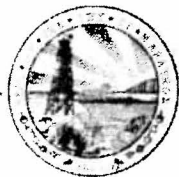
### **Fragile and Non-Renewable Resources**

The City has not specifically identified any fragile or non-renewable resources, such as archaeological and historic sites or endangered plant and animal species, on sites managed in this plan. The likelihood of historic or prehistoric resources being located on sites is considered low; however, prior to any site alteration, further coordination with the Department of State is proposed. It is more likely that listed plant and animal species may be identified on sites if an inventory is conducted. Therefore, this plan calls for a general floristic inventory of each site, including identification of any listed plants, as part of initial management efforts, and prior to any site alteration which could impact plant or animal species. Because all the efforts in this plan are aimed at improving habitat value, actions in this plan are expected to improve conditions for fragile resources.

### **Conservation of Soil and Water Resources**

None of the management activities included in this plan are expected to have negative impacts on soil and water resources. In fact, management activities are expected to gradually improve soil and water conditions.

Many parcels included in this plan have had significant alterations to native soils, primarily due to dredge and fill activities. Some restoration of original elevations is proposed when appropriate and when funding is available. In some cases restoration could include removal of fill material down to original soils. Some fill areas are subject to minor erosion due to the lack of structural containment (such as bulkheads or rip rap) or natural vegetation. Efforts described in this plan may help address erosion; however, these efforts are dependent on other factors, including acquisition of adjacent parcels, funding availability, and permitting from appropriate outside agencies. In much the same way, improvements to wetlands on managed sites will improve water resources,



having a positive benefit on water quality.

#### **Conformance with Relevant Statutory Authorities, Policies and Guidelines**

The management of properties addressed in this plan will comply with the statutory authorities, policies and guidelines as established in the earlier section of this plan entitled Description of Legislative or Executive Directives.

The use of these properties for conservation and limited public recreation is consistent with Chapter 259.032, F.S., which requires that Florida Forever lands be used as state-designated parks, recreation areas, preserves, reserves, historic or archaeological sites, geologic or botanical sites, recreational trails, forests, wilderness areas, wildlife management areas, urban open space, or other state-designated recreation or conservation lands. Further, some properties are proposed to be managed for public outdoor recreation which is compatible with the conservation and protection of public lands, and will allow hiking, nature study, birding, and other related outdoor activities compatible with the purposes for which the lands were acquired. Further, this plan is consistent with the City's lease with the state, which specifically references Chapter 259.032 (11). That reference states that the Legislature intends for lands to be managed and maintained for the purposes for which they were acquired and for the public to have access to and use of these lands where it is consistent with acquisition purposes and would not harm the resources the state is seeking to protect on the public's behalf.

#### **Determination of Consistency of Public Uses and Accesses**

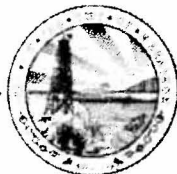
This plan recommends that passive recreational uses continue to be allowed and that minimal improvements to better guide and manage the public on the sites be implemented. These activities are now located on existing compacted fill areas which are generally barren. Impacts to natural areas are not expected to occur as a result of continued passive recreational uses; in fact, better management of these areas is expected to prevent impacts to adjacent wetland areas which are more sensitive. The proposed public use and public access within specifically designated areas is consistent with the purposes for which the land was acquired, and is consistent with the governing statutes and rules for Florida Forever lands. Chapter 253.034, FS, states that "conservation lands" means lands that are currently managed for conservation, outdoor resource-based recreation, or archaeological or historic preservation. The proposed uses in this plan are completely consistent with the acquisition for conservation purposes.

#### **Incompatible Uses**

This plan proposes conservation uses (as defined by statute) only; other uses will be considered incompatible and not allowed on the properties.

#### **Fire Management**

The use of controlled burns for habitat management is not proposed in this plan. The habitat types included in the plan are not fire dependent and the use of fire is not recommended (and in fact may be deleterious) for these areas. In addition, the location



of single family dwelling units and other development in close proximity to management areas is not conducive to fire management, even if it were a management option. Therefore, a fire management plan is not included in this document.

## Plan Implementation and Updates

### Priority Activities

The basic approach to site management and improving habitat values is summarized as follows:

- Removal of debris;
- Removal of encroachments;
- Exotic vegetation control and removal;
- Floristic inventory and assessment of each site;
- In-planting of appropriate native species;
- Fill removal; and,
- Access control and management.



*Debris removal can typically be accomplished with volunteer labor*

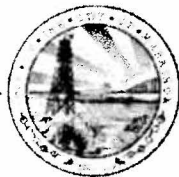
Priority activities anticipated in this plan are as follows:

#### *Property Management*

1. Remove trash, debris, and dead brush;
2. Remove or eradicate invasive exotics;
3. Provide trash receptables in public use areas; and,
4. Conduct floristic and listed species inventories of sites.

#### *Community Outreach*

1. Prepare a neighborhood stewardship brochure for adjacent landowners stressing the importance of controlling dumping and encroachments and exotic control.
2. Organize volunteer clean-up/debris removal days, including obtaining sponsorship and community involvement.
3. Coordinate with the local middle and high schools regarding community service projects which would provide appropriate implementation of management plan goals, such as debris removal;
4. Coordinate with the local Department of Juvenile Justice for required community service, including trash removal, for sites, and also determine if convict labor can be used appropriately;
5. Create and implement children's education programs, possibly in conjunction with other City programs, Curry Hammock State Park and Crane Hammock, including possible site visits.



## **Funding Options**

Activities described in this plan are funding dependent. Funding may be available from the following sources:

- Non-Profit, state and federal grants;
- City of Marathon Restoration Fund;
- City of Marathon Tree Mitigation Fund; and,
- City of Marathon Conservation Impact Fees (for capital items only).
- Transplantation/Mitigation receiver site

Because management actions are funding dependent, accomplishment of management objectives will depend in part on funding availability.

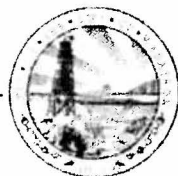
## **Parcel Additions**

This plan includes a process for categorization and management of new parcels without requiring a complete update of the plan itself each time a parcel is added to the inventory.

## **Amendments and Updates to the Plan**

**Planning Period:** This management plan addresses a ten year planning period. At the end of the planning period, the City of Marathon shall evaluate the effectiveness of the plan and the need to update and modify the plan.

**Accomplishments:** This is the first management plan for the subject parcels, therefore, no accomplishments from the last plan can be provided. Future updates will evaluate accomplishments, as required.



**Attachment A**  
**Federally Listed & Candidate Species in Monroe County, Florida**

## Federally Listed & Candidate Species in Monroe County, Florida

Updated July 18, 2007

	Common Name	Scientific Name	Federal Status	Notes
<b>Mammals</b>	Florida panther	<i>Puma (= Felis) concolor coryi</i>	E	
	Puma (=mountain lion)	<i>Puma (= Felis) concolor (all subsp. except coryi)</i>	T/SA	
	Key deer	<i>Odocoileus virginianus clavium</i>	E	Keys only
	Key Largo cotton mouse	<i>Peromyscus gossypinus alla puticola</i>	E	Key Largo only
	Key Largo woodrat	<i>Neotoma floridana smalli</i>	E	Key Largo only
	Lower Keys marsh rabbit	<i>Sylvilagus palustris he fieri</i>	E	Keys only
	Rice rat	<i>Oryzomys palustris natator</i>	E, CH	Keys only
	West Indian manatee	<i>Trichechus manatus</i>	E, CH	
<b>Birds</b>	Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	T	Last documented in 1993
	Bachman's warbler	<i>Vermivora bachmanii</i>	E	Migrant 1880s?
	Cape Sable seaside sparrow	<i>Ammodramus maritimus mirabilis</i>	E, CH	
	Everglade snail kite	<i>Rostrhamus sociabilis plumbeus</i>	E	
	Ivory-billed woodpecker	<i>Campycolaptes curvipennis</i>	E	Last documented in 1919
	Piping plover	<i>Charadrius melodus</i>	T, CH	
	Red knot	<i>Calidris canutus ru fii</i>	C	
	Roseate tern	<i>Sterna dougallii dougallii</i>	T	Keys only
	Wood stork	<i>Mycteria americana</i>	E	
<b>Reptiles</b>	American crocodile	<i>Crocodylus acutus</i>	T, CH	
	American alligator	<i>Alligator mississippiensis</i>	T/SA	
	Eastern indigo snake	<i>Drymarchon corais couperi</i>	T	
	Green sea turtle <sup>1</sup>	<i>Chelonia mydas</i>	E	
	Hawksbill sea turtle <sup>1</sup>	<i>Eretmochelys imbricata</i>	E	
	Leatherback sea turtle <sup>1</sup>	<i>Dermochelys coriacea</i>	E	
	Loggerhead sea turtle <sup>1</sup>	<i>Caretta caretta</i>	T	
<b>Fish</b>	Smalltooth sawfish <sup>2</sup>	<i>Pristis pectinata</i>	E	
<b>Invertebrates</b>	Bartram's hairstreak butterfly	<i>Strymon acis bartrami</i>	C	
	Elkhorn coral <sup>2</sup>	<i>Acropora palmata</i>	PT	
	Florida leafwing butterfly	<i>Anaea troglodyta foridalis</i>	C	

	Miami blue butterfly	<i>Cyclargus (= Hemiargus) thomasi bethunebakeri</i>	C	
	Schaus swallowtail butterfly	<i>Heracles aristodemus ponceanus</i>	E	
	Staghorn coral <sup>2</sup>	<i>Acropora cervicornis</i>	PT	
	Stock Island tree snail	<i>Orthalicus reses (not incl. nesodryus)</i>	T	
<b>Plants</b>	Big Pine partridge pea	<i>Chamaecrista lineata keyensis</i>	C	Keys only
	Blodgett's silverbush	<i>Argythamnia blodgettii</i>	C	Keys only
	Cape Sable thoroughwort	<i>Chromolaena frustrata</i>	C	Excluding Keys
	Everglades bully	<i>Sideroxylon reclinatum austro foridense</i>	C	
	Florida indigo	<i>Indigo fera mucronata keyensis</i>	C	Keys only
	Florida prairie clover	<i>Dalea carthagenensis foridana</i>	C	Last documented in 1966 on Key Biscayne
	Florida semaphore cactus	<i>Consolea corallicola</i>	C	Keys only
	Garber's spurge	<i>Chamaesyce garberi</i>	T	
	Key tree-cactus	<i>Pilosocereus robinii</i>	E	Keys only
	Sand flax	<i>Linum arenicola</i>	C	Keys only
	Wedge spurge	<i>Chamaesyce deltoidea serpyllum</i>	C	Keys only

E=Endangered; T=Threatened; PE=Proposed Endangered; PT=Proposed Threatened; C=Candidate; SA=Similarity of Appearance to a listed taxon; XN=Experimental Population, Non-Essential; CH=Critical Habitat; PCH=Proposed Critical Habitat; <sup>1</sup>=National Marine Fisheries Service has lead for this species in the water, please contact National Marine Fisheries Service for more information and/or consultation for aquatic projects; <sup>2</sup>=National Marine Fisheries Service has lead for this species, please contact National Marine Fisheries Service for more information and/or consultation.





U.S. Fish &amp; Wildlife Service

USFWS Threatened and Endangered Species System (TESS)

TESS

Contact ECOS

**Florida***Notes:*

- This report shows the listed species associated in some way with this state.
- This list does not include experimental populations and similarity of appearance listings.
- This list includes non-nesting sea turtles and whales in State/Territory coastal waters.
- This list includes species or populations under the sole jurisdiction of the National Marine Fisheries Service.
- Click on the highlighted scientific names below to view a Species Profile for each listing.

**Listings and occurrences for Florida -- 113 listings**

- 109 occurring in Florida
- 4 not occurring in Florida
- 1 species listed in some other state occurring in Florida

**Animals -- 58 listings**

- 55 occurring in Florida
- 3 not occurring in Florida
- 1 species listed in some other state occurring in Florida

**Status Species listed in this state and that occur in this state**

T	Bankclimber, purple (mussel) ( <i>Elliptoideus sloatianus</i> )
E	Bat, gray ( <i>Myotis grisescens</i> )
E	Butterfly, Schaus swallowtail ( <i>Heraclides aristodemus ponceanus</i> )
T	Caracara, Audubon's crested FL pop. ( <i>Polyborus plancus audubonii</i> )
T	Coral, elkhorn ( <i>Acropora palmata</i> )
T	Coral, staghorn ( <i>Acropora cervicornis</i> )
T	Crocodile, American ( <i>Crocodylus acutus</i> )
E	Darter, Okaloosa ( <i>Etheostoma okaloosae</i> )
E	Deer, key ( <i>Odocoileus virginianus clavium</i> )
T	Jay, Florida scrub ( <i>Aphelocoma coerulescens</i> )
E	Kite, Everglade snail FL pop. ( <i>Rostrhamus sociabilis plumbeus</i> )
E	Manatee, West Indian ( <i>Trichechus manatus</i> )
E	Moccasinshell, Gulf ( <i>Medionidus penicillatus</i> )

E	Moccasinshell, Ochlockonee ( <i>Medionidus simpsonianus</i> )
E	Mouse, Anastasia Island beach ( <i>Peromyscus polionotus phasma</i> )
E	Mouse, Choctawhatchee beach ( <i>Peromyscus polionotus allophrys</i> )
E	Mouse, Key Largo cotton ( <i>Peromyscus gossypinus allapaticola</i> )
E	Mouse, Perdido Key beach ( <i>Peromyscus polionotus trissyllepsis</i> )
T	Mouse, southeastern beach ( <i>Peromyscus polionotus niveiventris</i> )
E	Mouse, St. Andrew beach ( <i>Peromyscus polionotus peninsularis</i> )
E	Panther, Florida ( <i>Puma (=Felis) concolor coryi</i> )
E	Pigtoe, oval ( <i>Pleurobema pyriforme</i> )
T	Plover, piping except Great Lakes watershed ( <i>Charadrius melodus</i> )
E	Pocketbook, shinyrayed ( <i>Lampsilis subangulata</i> )
E	Rabbit, Lower Keys marsh ( <i>Sylvilagus palustris hefneri</i> )
E	Rice rat lower FL Keys ( <i>Oryzomys palustris natator</i> )
T	Salamander, flatwoods ( <i>Ambystoma cingulatum</i> )
E	Sawfish, smalltooth ( <i>Pristis pectinata</i> )
E	Sea turtle, green FL, Mexico nesting pops. ( <i>Chelonia mydas</i> )
T	Sea turtle, green except where endangered ( <i>Chelonia mydas</i> )
E	Sea turtle, hawksbill ( <i>Eretmochelys imbricata</i> )
E	Sea turtle, Kemp's ridley ( <i>Lepidochelys kempii</i> )
E	Sea turtle, leatherback ( <i>Dermochelys coriacea</i> )
T	Sea turtle, loggerhead ( <i>Caretta caretta</i> )
E	Seal, Caribbean monk ( <i>Monachus tropicalis</i> )
T	Shrimp, Squirrel Chimney Cave ( <i>Palaemonetes cummingi</i> )
T	Skink, bluetail mole ( <i>Eumeces egregius lividus</i> )
T	Skink, sand ( <i>Neoseps reynoldsi</i> )
T	Slabshell, Chipola ( <i>Elliptio chipolaensis</i> )
T	Snail, Stock Island tree ( <i>Orthalicus reses (not incl. nesodryas)</i> )
T	Snake, Atlantic salt marsh ( <i>Nerodia clarkii taeniata</i> )
T	Snake, eastern indigo ( <i>Drymarchon corais couperi</i> )

- E Sparrow, Cape Sable seaside (*Ammodramus maritimus mirabilis*)
- E Sparrow, Florida grasshopper (*Ammodramus savannarum floridanus*)
- E Stork, wood AL, FL, GA, SC (*Mycteria americana*)
- T Sturgeon, gulf (*Acipenser oxyrinchus desotoi*)
- E Sturgeon, shortnose (*Acipenser brevirostrum*)
- T Tern, roseate Western Hemisphere except NE U.S. (*Sterna dougallii dougallii*)
- E Three-ridge, fat (mussel) (*Amblema neisleri*)
- E Vole, Florida salt marsh (*Microtus pennsylvanicus dukecampbelli*)
- E Whale, finback (*Balaenoptera physalus*)
- E Whale, humpback (*Megaptera novaeangliae*)
- E Whale, right (*Balaena glacialis (incl. australis)*)
- E Woodpecker, red-cockaded (*Picoides borealis*)
- E Woodrat, Key Largo (*Neotoma floridana smalli*)

**Status Species listed in this state that do not occur in this state**

- E Beetle, American burying (*Nicrophorus americanus*)
- E Curlew, Eskimo (*Numenius borealis*)
- E Wolf, gray Lower 48 States, except where delisted; where XN; and Mexico. (*Canis lupus*)

**Status Listed species occurring in this state that are not listed in this state**

- E Wolf, red except where XN (*Canis rufus*)

**Plants -- 55 listings**

- 54 occurring in Florida
- 1 not occurring in Florida
- 0 species listed in some other state occurring in Florida

**Status Species listed in this state and that occur in this state**

- E Aster, Florida golden (*Chrysopsis floridana*)
- E Beargrass, Britton's (*Nolina brittoniana*)
- E Beauty, Harper's (*Harperocallis flava*)

E	Bellflower, Brooksville ( <i>Campanula robinsiae</i> )
T	Birds-in-a-nest, white ( <i>Macbridea alba</i> )
E	Blazingstar, scrub ( <i>Liatris ohlingerae</i> )
T	Bonamia, Florida ( <i>Bonamia grandiflora</i> )
T	Buckwheat, scrub ( <i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i> )
T	Butterwort, Godfrey's ( <i>Pinguicula ionantha</i> )
E	Cactus, Key tree ( <i>Pilosocereus robinii</i> )
E	Campion, fringed ( <i>Silene polypetala</i> )
E	Chaffseed, American ( <i>Schwalbea americana</i> )
E	Cladonia, Florida perforate ( <i>Cladonia perforata</i> )
E	Fringe-tree, pygmy ( <i>Chionanthus pygmaeus</i> )
T	Gooseberry, Miccosukee ( <i>Ribes echinellum</i> )
E	Gourd, Okeechobee ( <i>Cucurbita okeechobeensis</i> ssp. <i>okeechobeensis</i> )
E	Harebells, Avon Park ( <i>Crotalaria avonensis</i> )
E	Hypericum, highlands scrub ( <i>Hypericum cumulicola</i> )
E	Jacquemontia, beach ( <i>Jacquemontia reclinata</i> )
E	Lead-plant, Crenulate ( <i>Amorpha crenulata</i> )
E	Lupine, scrub ( <i>Lupinus aridorum</i> )
E	Meadowrue, Cooley's ( <i>Thalictrum cooleyi</i> )
E	Milkpea, Small's ( <i>Galactia smallii</i> )
E	Mint, Garrett's ( <i>Dicerandra christmanii</i> )
E	Mint, Lakela's ( <i>Dicerandra immaculata</i> )
E	Mint, longspurred ( <i>Dicerandra cornutissima</i> )
E	Mint, scrub ( <i>Dicerandra frutescens</i> )
E	Mustard, Carter's ( <i>Warea carteri</i> )
E	Pawpaw, beautiful ( <i>Deeringothamnus pulchellus</i> )
E	Pawpaw, four-petal ( <i>Asimina tetramera</i> )
E	Pawpaw, Rugel's ( <i>Deeringothamnus rugelii</i> )
T	Pigeon wings ( <i>Clitoria fragrans</i> )

- E Pinkroot, gentian (*Spigelia gentianoides*)
- E Plum, scrub (*Prunus geniculata*)
- E Polygala, Lewton's (*Polygala lewtonii*)
- E Polygala, tiny (*Polygala smallii*)
- E Prickly-apple, fragrant (*Cereus eriophorus* var. *fragrans*)
- E Rhododendron, Chapman (*Rhododendron chapmanii*)
- E Rosemary, Apalachicola (*Conradina glabra*)
- E Rosemary, Etonia (*Conradina etonia*)
- E Rosemary, short-leaved (*Conradina brevifolia*)
- E Sandlace (*Polygonella myriophylla*)
- T Seagrass, Johnson's (*Halophila johnsonii*)
- T Skullcap, Florida (*Scutellaria floridana*)
- E Snakeroot (*Eryngium cuneifolium*)
- E Spurge, deltoid (*Chamaesyce deltoidea* ssp. *deltoidea*)
- T Spurge, Garber's (*Chamaesyce garberi*)
- T Spurge, telephus (*Euphorbia telephoides*)
- E Torreya, Florida (*Torreya taxifolia*)
- E Warea, wide-leaf (*Warea amplexifolia*)
- E Water-willow, Cooley's (*Justicia cooleyi*)
- T Whitlow-wort, papery (*Paronychia chartacea*)
- E Wireweed (*Polygonella basiramia*)
- E Ziziphus, Florida (*Ziziphus celata*)

**Status Species listed in this state that do not occur in this state**

- E Pondberry (*Lindera melissifolia*)

**Attachment B**  
**August 8, 2007, Florida Department of State, Division of Historic Resources**  
**Correspondence**



**FLORIDA DEPARTMENT of STATE**

**CHARLIE CRIST**  
Governor

**KURT S. BROWNING**  
Secretary of State

August 8, 2007

*Patti Childress*  
*City of Marathon*  
*10045-55 Overseas Highway*  
*Marathon, FL 33050*  
Fax: 305-743-3667

In response to your inquiry of August 8, 2007, the Florida Master Site File lists one previously recorded archaeological site, and no standing structures in the following parcels of Monroe County:

T66S, R33E, Sections 05 & 06

In interpreting the results of our search, please remember the following points:

- **Areas which have not been completely surveyed, such as yours, may contain unrecorded archaeological sites or historical structures.**
- **While many of our records relate to historically significant properties, the entry of an archaeological site or an historical structure on the Florida Master Site File does not necessarily mean that the structure is significant.**
- **Since vandalism is common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.**
- **As you may know, federal and state laws require formal environmental review for some projects. Record searches by the staff of the Florida Master Site File do not constitute such a review. If your project falls under these laws, you should contact the Compliance Review Section of the Bureau of Historic Preservation at 850-245-6333 or at this address.**

If you have any further questions concerning the Florida Master Site File, please contact us as below.

Sincerely,

  
Celeste Ivory

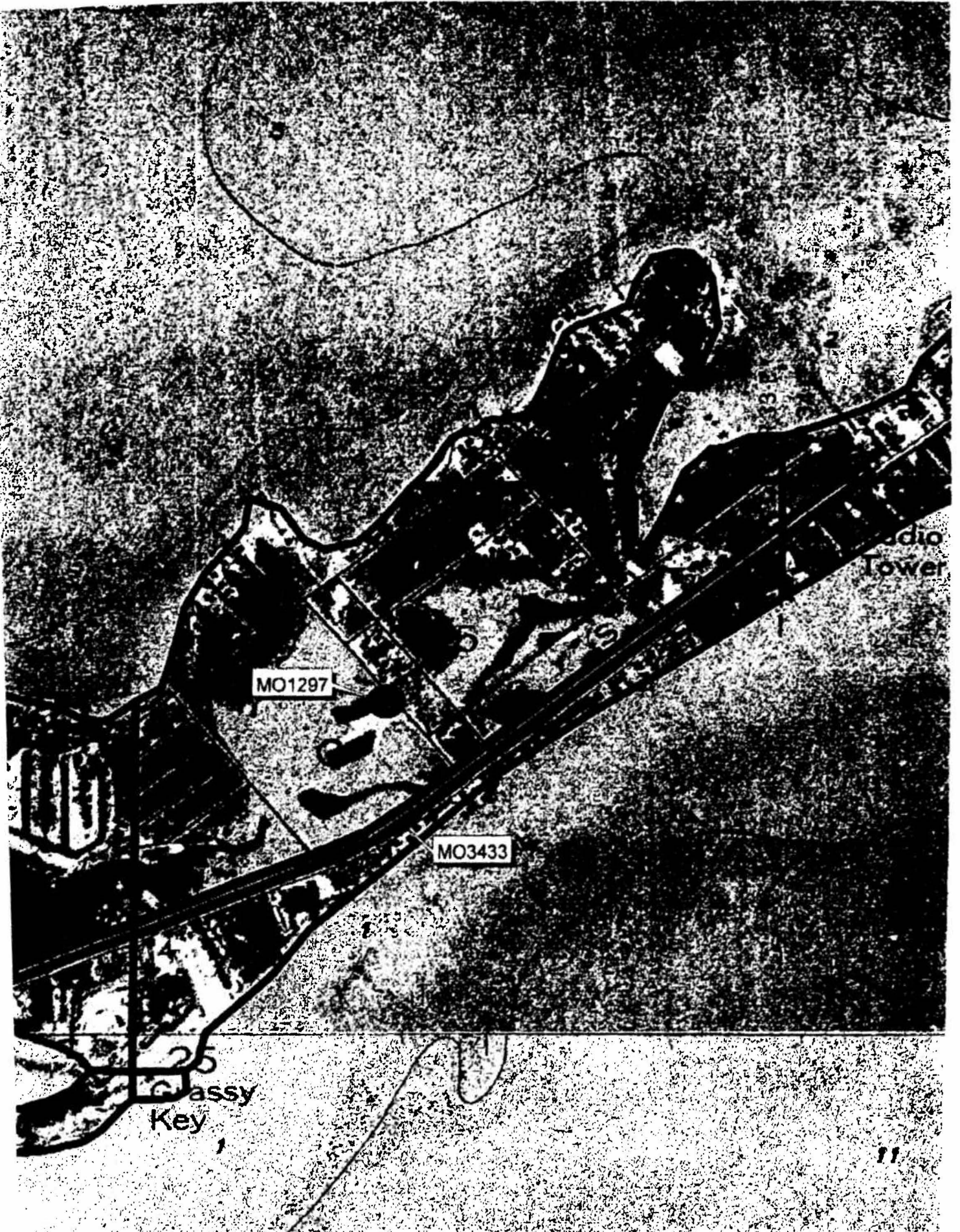
Archaeological Data Analyst,  
Florida Master Site File  
Division of Historical Resources  
R. A. Gray Building  
500 South Bronough Street  
Tallahassee, Florida 32399-0250

Phone: 850-245-6440  
Fax: 850-245-6439  
Email: [sitefile@dos.state.fl.us](mailto:sitefile@dos.state.fl.us)  
Web: <http://flheritage.com/preservation>  
<http://dhr.dos.state.fl.us/comments/>



SITID	FORMNO	T-R-S	CR	SITENAME	MRLIST SURVEY	LOCATION	OTHER
001297	199004	65S/33E/25	AR	GRASS KEY ROCK PIT	2595	Map: GRAS	Culture: POPI Sitetype: BURP, SING
003433	200306	67S/26E/21	AR	OLD STATE ROAD 4A/OLD US 1	9368	Map: BOCK	Culture: 20TH Sitetype: LAND, ROAD
003494	200108	65S/33E/25	SS	58112 US 1	7640	58112 UNSP US 1 UNSP, MARATHON	Uses: RESI Built: C1933
003495	200108	65S/33E/25	SS	TRAILERS BY THE SEA	7640	NONE UNSP UNSP, MARATHON	Uses: OTHR Built: C1952
003720	200304	65S/33E/25	SS	194 GUAVA AVENUE, GRASSY KEY	9277	194 GUAVA AVE, GRASSY KEY	Uses: RESI Built: C1940
003721	200304	65S/33E/25	SS	266 TROPICAL AVENUE, GRASSY KEY	9277	266 TROPICAL AVE, GRASSY KEY	Uses: RESI Built: C1950
003722	200304	65S/33E/25	SS	286 TROPICAL AVENUE, GRASSY KEY	9277	286 TROPICAL AVE, GRASSY KEY	Uses: RESI Built: C1950
003723	200304	65S/33E/25	SS	57537 GOODLEY STREET, GRASSY KEY	9277	57537 GOODLEY ST, GRASSY KEY	Uses: RESI Built: C1950

site(s) evaluated; 8 form(s) evaluated. (2 AR, 6 SS)  
 rpt date: 8/8/2007 11:25:04 AM





## FLORIDA DEPARTMENT OF STATE

**CHARLIE CRIST**  
Governor

**KURT S. BROWNING**  
Secretary of State

August 8, 2007

*Patti Childress*  
*City of Marathon*  
*10045-55 Overseas Highway*  
*Marathon, FL 33050*  
Fax: 305-743-3667

In response to your inquiry of August 8, 2007, the Florida Master Site File lists two previously recorded archaeological sites, and six standing structures in the following parcels of Monroe County:

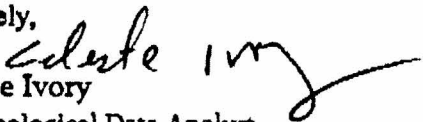
T65S, R33E, Sections 24 & 25

In interpreting the results of our search, please remember the following points:

- Areas which have not been completely surveyed, such as yours, may contain unrecorded archaeological sites or historical structures.
- While many of our records relate to historically significant properties, the entry of an archaeological site or an historical structure on the Florida Master Site File does not necessarily mean that the structure is significant.
- Since vandalism is common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.
- As you may know, federal and state laws require formal environmental review for some projects. Record searches by the staff of the Florida Master Site File do not constitute such a review. If your project falls under these laws, you should contact the Compliance Review Section of the Bureau of Historic Preservation at 850-245-6333 or at this address.

If you have any further questions concerning the Florida Master Site File, please contact us as below.

Sincerely,

  
Celeste Ivory

Archaeological Data Analyst,  
Florida Master Site File  
Division of Historical Resources  
R. A. Gray Building  
500 South Bronough Street  
Tallahassee, Florida 32399-0250

Phone: 850-245-6440  
Fax: 850-245-6439  
Email: [sirefile@dos.state.fl.us](mailto:sirefile@dos.state.fl.us)  
Web: <http://flheritage.com/preservation>  
<http://dhr.dos.state.fl.us/comments/>

SITEID	FORMNO	T-R-S	CR	SITENAME	NRLIST SURVEY	LOCATION	OTHER
4002093	198711	66S/33E/S	AR	FAT DEER 1	1514	Map: MARA	Culture: GL, NIST Sitetype: SCSH

1 site(s) evaluated; 1 form(s) evaluated. (1 AR)  
 Print date: 8/8/2007 11:25:22 AM



...nion Shores

**Attachment C**  
**May 23, 2007, Correspondence with FNAI**



1018 Thomasville Road  
Suite 200-C  
Tallahassee, FL 32303  
850-224-8207  
fax 850-681-9364  
www.fnai.org

May 23, 2007

Patti Childress  
Marathon, City of  
10045-55 Overseas Highway  
Marathon, FL 33050

Dear Ms. Childress:

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

**Project:** Florida Keys Ecosystem/City of Marathon  
**Date Received:** May 15, 2007  
**Location:** Monroe County

**Based on the information available, this site appears to be located within a significant region of natural areas and habitat for several rare species. Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.**

#### **Element Occurrences**

A search of our maps and database indicates that currently we have several Element Occurrences mapped within the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The Element Occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, Element Occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant.

Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

#### **Likely and Potential Rare Species**



Florida Resources  
and Environmental  
Analysis Center

Institute of Science  
and Public Affairs

The Florida State University

*Tracking Florida's Biodiversity*



In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on landcover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the most rare species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

### **Managed Areas**

Portions of the site appear to be located within the City of Marathon Conservation Lands, managed by the City of Marathon. Portions of the site also appear to be located within the Curry Hammock State Park, managed by the Florida Department of Environmental Protection, Division of Recreation and Parks. Portions of the site appear to be located within the Florida Keys Wildlife and Environmental Area, managed by the Florida Fish and Wildlife Conservation Commission.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

### **Land Acquisition Projects**

This site appears to be located within the Florida Keys Ecosystem Florida Forever BOT Project, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. A description of this project is enclosed. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no regulatory authority over these lands until they are purchased.

The Inventory always recommends that professionals familiar with Florida's flora and fauna should conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit [www.fnai.org/trackinglist.cfm](http://www.fnai.org/trackinglist.cfm) for county or statewide element occurrence distributions and links to more element information.

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. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

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

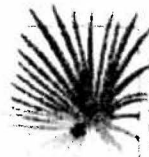
Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Sincerely,

*Jason A. Griffin*

Jason A. Griffin  
Data Services Coordinator

encl



1018 Thomasville Road  
Suite 200-C  
Tallahassee, FL 32303  
(850) 224-8207  
(850) 681-9364 Fax  
www.fnai.org

## FLORIDA Natural Areas INVENTORY

### Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

⊕ Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service  
Scrub Jay Survey 1992-96

### Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

### Land Acquisition Projects

- Florida Forever
- Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad (inactive railroads shown in Gray)
- Water

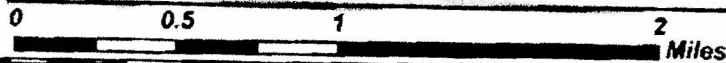
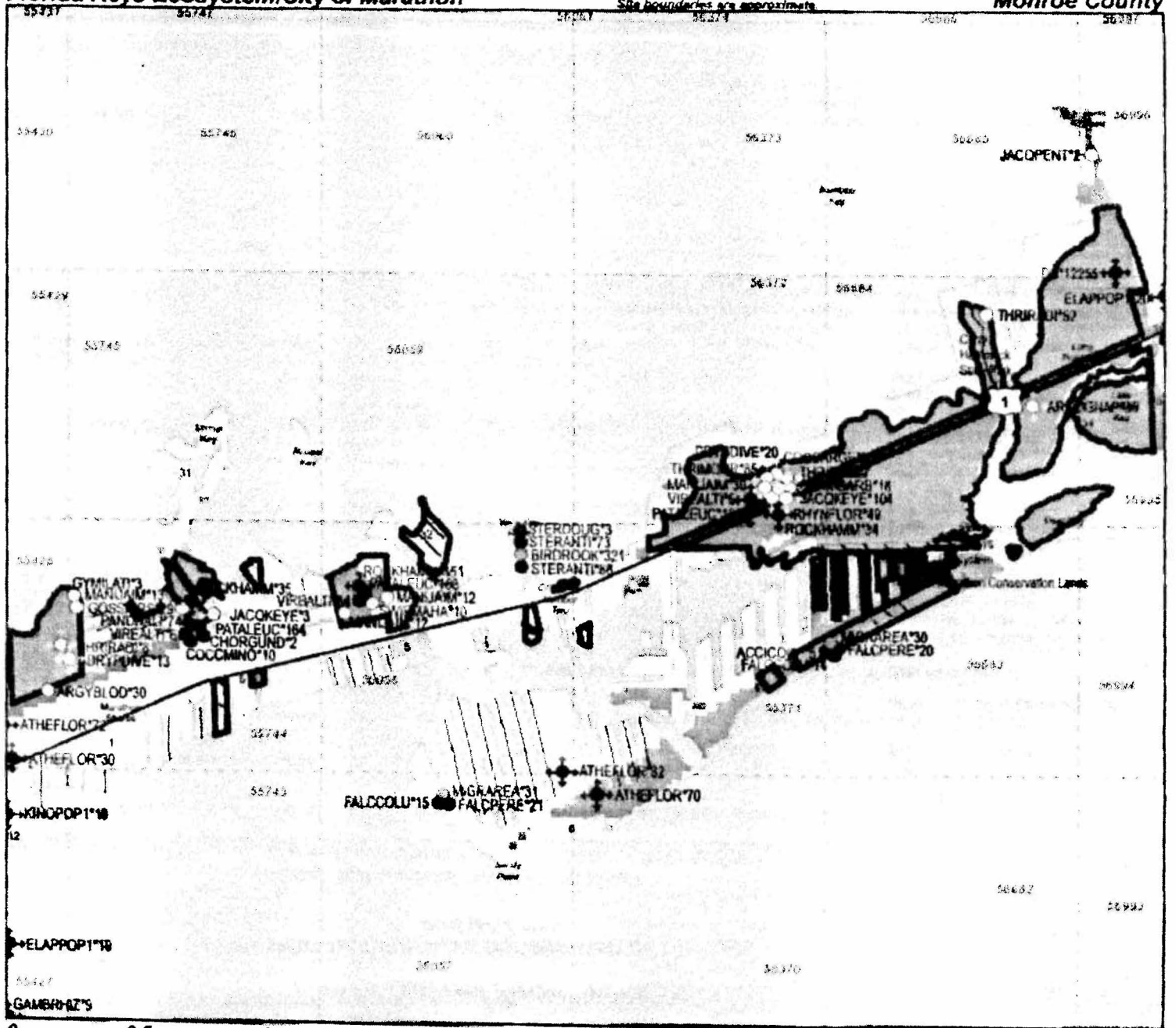


**NOTE**  
Map should not be interpreted without accompanying documents

## Florida Keys Ecosystem/City of Marathon

S&W boundaries are approximate

Monroe County



Map produced by JAG  
Map Date 23 MAY 2007



1018 Thomasville Road  
Suite 200-C  
Tallahassee, FL 32303  
(850) 224-8207  
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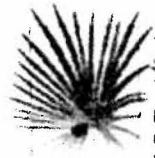
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Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
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ATHEFLOR*70	<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS	1989	No general description given	1987-89: 11 burrows occupied in 1987-88 and 1988-89 (Oct-July)(J A. Hovis, GFC)
JACQPENT*2	<i>Jacquemontia pentanthos</i>	Skyblue Clustervine	G4G5	S2	N	LE	1996	1996: Edge of rockland hammock (PNDBRA04FLUS).	1996: Present on plant list Occurrence size unknown (PNDBRA04FLUS).
THRIRADI*52	<i>Thrinax radiata</i>	Florida Thatch Palm	G4G5	S2	N	LE	ZZ	BEACH BERM (COASTAL BERM)	1990: SPECIES OCCASIONAL ON BEACH BERM (U90HOF02FLUS)
DS*12255	Data Sensitive Element	Data Sensitive	G57T1Q	S1	C	LE	2005-10-11	Data Sensitive	Data Sensitive
SWIEMAHA*10	<i>Swietenia mahagoni</i>	West Indies Mahogany	G3G4	S3	N	LT	1991	2005-01-20: Rockland hammock with heavy invasion of <i>Schinus terebinthifolius</i> (PNDJEN03FLUS). ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK); RELATIVELY MATURE HAMMOCK. CANOPY DOMINATED BY GUMBO LIMBO, POISONWOOD, JAMAICA DOGWOOD AND FLORIDA THATCH PALM.	2005-01-20: Surveyed parcel and did not locate this species. Could not do a thorough survey because the parcel is private property (PNDJEN03FLUS; PNDSCH03FLUS). 1991: BANCROFT DESCRIBES SPECIES AS PRESENT ON SITE (U92NAS01FLUS).
STERANTI*88	<i>Sterna antillarum</i>	Least Tern	G4	S3	N	LT	1991-05-31	ROOF TOP NESTING SITE.	NO BIRDS NESTING IN 1992 - REASON UNKNOWN. 11 NESTING PAIRS 5-13-91. 10 NESTING PAIRS 6-19-87 (A89HOV01FL).
PATALEUC*164	<i>Patagioenas leucocephala</i>	White-crowned Pigeon	G3	S3	N	LT	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY. DOMINATED BY GUMBO LIMBO, BUTTONWOOD, POISONWOOD, JAMAICA DOGWOOD, AND FLORIDA THATCH PALM. A FEW SHORT-LEAF FIGS AND INKWOODS PRESENT. UNDERSTORY CONSISTS OF SPANISH STOPPER, SAFFRON PLUM, LI	FORAGING SITE, CONSIDERED IMPORTANT FOR POPULATION. NAS HAS POPULATION DATA FOR THIS SITE. BIRDS FORAGING HERE MAY ALSO FORAGE IN OTHER HAMMOCKS AND UTILIZE OFFSHORE MANGROVE AND ISLANDS FOR NESTING (U92NAS01). GABY AND GABY (U89GAB02) REPORTED SPECIES AS OC
FALCCOLU*14	<i>Falco columbarius</i>	Merlin	G5	S2	N	N	1991-FALL	Impounded area with Australian pines in which raptors roost. Beachspring and canal areas used for foraging.	Usually seen in concentrations during spring and fall. No data given.



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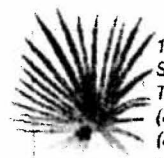
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CHORGUND*2	<i>Chordeiles gundlachi</i>	Antillean Nighthawk	G4	S2	N	N	1991	ROCKLAND HAMMOCK (= TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY, DOMINATED BY GUMBO LIMBO, BUTTONWOOD, POISONWOOD, JAMAICA DOGWOOD, AND FLORIDA THATCH PALM. A FEW SHORT-LEAF FIGS AND INKWOODS PRESENT. UNDERSTORY CONSISTS OF SPANISH STOPPER, SAFFRON PLUM, L	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON.
FALCPERE*20	<i>Falco peregrinus</i>	Peregrine Falcon	G4	S2	N	LE	1991-FALL	Impounded area with Australian pines in which raptors roost. Beach and canal areas used for foraging.	Usually seen in concentration during spring and fall. No data given.
COCCMINO*10	<i>Coccyzus minor</i>	Mangrove Cuckoo	G5	S3	N	N	1991	ROCKLAND HAMMOCK (= TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY, DOMINATED BY GUMBO LIMBO, BUTTONWOOD, POISONWOOD, JAMAICA DOGWOOD, AND FLORIDA THATCH PALM. A FEW SHORT-LEAF FIGS AND INKWOODS PRESENT. UNDERSTORY CONSISTS OF SPANISH STOPPER, SAFFRON PLUM, L	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON.
PATALEUC*163	<i>Patagioenas leucocephala</i>	White-crowned Pigeon	G3	S3	N	LT	ZZ	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) RELATIVELY MATURE HAMMOCK, CANOPY DOMINATED BY GUMBO LIMBO, POISONWOOD, JAMAICA DOGWOOD AND FLORIDA THATCH PALM. THE UNDERSTORY CONTAINS BLOLLY, LIMBER CAPER, PIGEON PLUM AND OILDO CACTUS.	FORAGING SITE, CONSIDERED IMPORTANT FOR POPULATION. HAS POPULATION DATA FOR THIS SITE. BIRDS FORAGING HERE MAY ALSO FORAGE IN OTHER HAMMOCKS AND UTILIZE OFFSHORE MANGROVE ISLANDS FOR NESTING.



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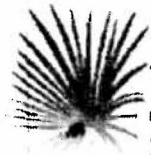
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PANDHALI*74	Pandion haliaetus	Osprey	G5	S3S4	N	LS*	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY, DOMINATED BY GUMBO LIMBO, BUTTONWOOD, POISONWOOD, JAMAICA DOGWOOD, AND FLORIDA THATCH PALM. A FEW SHORT-LEAF FIGS AND INKWOODS PRESENT. UNDERSTORY CONSISTS OF SPANISH STOPPER, SAFFRON PLUM, LI	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON (U92NAS01).
ACCICOOP*5	Accipiter cooperii	Cooper's Hawk	G5	S3	N	N	1991-FALL	Impounded area with Australian pines in which raptors roost. Beachspring and canal areas used for foraging.	Usually seen in concentration during spring and fall. No data given.
STERANTI*73	Sterna antiillarum	Least Tern	G4	S3	N	LT	1992-05-29	No general description given	1992: 6 ADULTS AT SITE, SOME IN INCUBATING POSTURE, UNABLE TO SEE EGGS. ADULTS FEEDING IN VICINITY OF ROCK (PNDROB06FLUS). 1990: 13 Jun - Robson reports 5 flightless young and 15 adults (adults feeding young) (U97GFC02FLUS).
VIREALTI*6	Vireo altiloquus	Black-whiskered Vireo	G5	S3	N	N	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY, DOMINATED BY GUMBO LIMBO, BUTTONWOOD, POISONWOOD, JAMAICA DOGWOOD, & FLORIDA THATCH PALM. UNDERSTORY CONSISTS OF SPANISH STOPPER, SAFFRON PLUM, LIMBER CAPER, PIGEON PLUM, MILKBARK, BLOLLY, WIL	WEINER (IN B79WEI01) LISTS SPECIES AT SITE (NO FURTHER DATA). BANCROFT (U92NAS01): SPECIES PRESENT DURING THE BREEDING SEASON.



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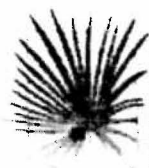
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			Rank	Rank					
VIREALTI*34	Vireo altiloquus	Black-whiskered Vireo	G5	S3	N	N	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) RELATIVELY MATURE HAMMOCK, CANOPY DOMINATED BY GUMBO LIMBO, POISONWOOD, JAMAICA DOGWOOD AND FLORIDA THATCH PALM. THE UNDERSTORY CONTAINS BLOLLY, LIMBER CAPER, PIGEON PLUM AND DILDO CACTUS.	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON
MIGRAREA*30	Migratory Bird Concentration Area		GNR	SNR	N	N	1991-FALL	Impounded area with Australian pines in which raptors roost. Beach and canal areas used for foraging.	Raptor migration site. Peregrine Falcons 020, American Kestrels, Merlins 014, Northern Harriers, Sharp-shinned Hawks, Cooper's Hawks.005, and Broad-winged Hawks. No data on numbers seen.
STERDOUG*3	Sterna dougallii	Roseate Tern	G4	S1	LT	LT	1992-05-29	No general description given	1992: 6 PAIRS INCUBATING ON 29 MAY. 1991: 31 MAY NO BIRDS OBSERVED. 1990: 14 ADULTS, APPEARED TO BE INCUBATING 13 JUNE; 14 ADULTS, 1 YOUNG, ADULTS OBSERVED FEEDING YOUNG ON 10 JULY. 1990 GFC WildObs data: Roseates appeared to be incubating (M.S. Robson).
BIRDROOK*321	Bird Rookery		GNR	SNR	N	N	1992-05-29	No general description given	MULTI-SPECIES ROOKERY, 2 SPECIES. 6 ADULT LEAST TERNS, 1992; 6 PAIR ROSEATE TERNS INCUBATING 5/92; NO ACTIVITY, 5/91; 14 ADULT AND 1 YOUNG ROSEATE TERN 7/90.
MIGRAREA*31	Migratory Bird Concentration Area		GNR	SNR	N	N	1992-SPRG	No general description given	Raptor migration site. Merlins, peregrine falcons and kestrels. In fall, 3 merlins and/or peragines seen flying per hour
FALCCOLU*15	Falco columbarius	Merlin	G5	S2	N	N	1992-SPRG	Grassy undeveloped areas used for foraging.	Up to 3 seen flying per hour.
FALCPERE*21	Falco peregrinus	Peregrine Falcon	G4	S2	N	LE	1992-SPRG	Grassy undeveloped areas used for foraging.	Up to 3 seen flying per hour.
ELAPPOP1*19	Elaphe guttata pop. 1	Red Rat Snake, FI Lower Keys Pop	G5T2Q	S2	N	LS	ZZ	No general description given	SPEC (AMNH-71385), COLLECTOR N/A, DATE N/A.





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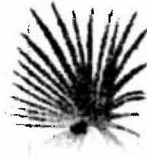
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KINOPOP1*19	Kinostemon bairii pop. 1	Key Mud Turtle	G5T2Q	S2	N	LE	ZZ	No general description given	SPEC (UM-105936), COLLECTOR N/A, DATE N/A.
GAMBRHIZ*9	Gambusia rhizophorae	Mangrove Gambusia	G3	S3	N	N	1969-pre	NO DATA	22 SPECIMENS COLLECTED (USNM 203227).
ATHEFLOR*72	Athene cucularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS	1989	No general description given	1987-89: 3 burrows occupied in 1987-88 and in 1988-89 (J.A. Hovis, GFC).
JACQKEYE*104	Jacquinia keyensis	Joewood	G4	S3	N	LT	1997	1993: Low 16-20' canopy dominated by Thinnax radiata or Bursera simaruba, Drypetes diversifolia, Krugiodendron ferreum and Eugenia spp. (U93ROS01FLUS).	1997: species present (PNDIRC01FLUS). 1993: Species present in coastal strand and wetlands (U93ROS01FLUS).
DRYPDIVE*20	Drypetes diversifolia	Milkbark	G4	S2	N	LE	1997-08-23	1997-08-23: no description provided (PNDIRC01FLUS). (1993: Low 16-20' canopy dominated by Thinnax radiata or Bursera simaruba, Drypetes diversifolia, Krugiodendron ferreum and Eugenia spp.	1997-08-23: species present (PNDIRC01FLUS). 1993: Species present in the rockland hammock and coastal strand (U93ROS01). 1978-05-24: Species occasional in rockland hammock (B79WIE01).
VIREALT*5	Vireo altiloquus	Black-whiskered Vireo	G5	S3	N	N	1979-pre	LOW 16-20' CANOPY DOMINATED BY FLORIDA THATCH PALM OR GUMBO LIMBO, MILKBARK, TORCHWOOD, BLACK IRONWOOD & STOPPERS.	HOFFMAN (IN U93ROS01) SAYS THIS SPECIES MAY BREED HERE. WEINER (IN B79WEI01) LISTED BIRD AT THIS SITE (NO FURTHER DATA).
PATALEUC*15	Patagioenas leucocephala	White-crowned Pigeon	G3	S3	N	LT	1979-pre	LOW 16-20' CANOPY DOMINATED BY FLORIDA THATCH PALM OR GUMBO LIMBO, MILKBARK, TORCHWOOD, BLACK IRONWOOD & STOPPERS.	HOFFMAN (IN U93ROS01) SAYS THIS SPECIES MAY BREED HERE. WEINER (IN B79WEI01) REPORTS SIGHTINGS AT THIS SITE (NO FURTHER DATA).
ATHEFLOR*30	Athene cucularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS	1992	No general description given	1991: 3 BURROWS. 2 DESTROYED BY LAWN MOWER. 1992: 1 PAIR PRESENT BUT NOT NESTING.



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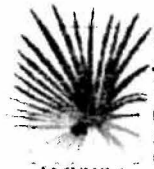
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THRIRADI*7	<i>Thrinax radiata</i>	Florida Thatch Palm	G4G5	S2	N	LE	1997-08-23	1993, 1979: LOW 16-20' CANOPY DOMINATED BY FLORIDA THATCH PALM OR GUMBO LIMBO, MILKBARK, TORCHWOOD, BLACK IRONWOOD & STOPPERS.	1997-08-23: species present (U97GAN01FLUS). 1993: SPECIES PRESENT IN HAMMOCK AND ADJACENT COASTAL STRAND (U93ROS01). 1979-05-24: SPECIES VERY ABUNDANT AT SITE. A COMMUNITY DOMINANT, MORE ABUNDANT THAN ANY OTHER CONSTITUENT SPECIES. NORTHERN HAMMOCK THE M
ELAPPOP1*20	<i>Elaphe guttata</i> pop. 1	Red Rat Snake, FI Lower Keys Pop	G5T2Q	S2	N	LS	ZZ	No general description given	SPEC (UK-92702), COLLECTOR N/A, DATE N/A.
ATHEFLOR*32	<i>Athene cucularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS	1992	No general description given	SURVEYS CONDUCTED SINCE 1987. 19 BURROWS ON MAP, BUT ONLY 50% ACTIVE DURING A BREEDING SEASON.
RHYNFLOR*49	<i>Rhynchospora floridensis</i>	Florida White-top Sedge	G3	S2	N	N	1997-08-23	1993: Low 16-20' canopy dominated by <i>Thrinax radiata</i> or <i>Bursera simaruba</i> , <i>Drypetes diversifolia</i> , <i>Krugiodendron ferreum</i> and <i>Eugenia</i> spp. (U93ROS01FLUS).	1997-08-23: "doubtfully present" (PNDIRC01FLUS). 1993: species present in roadsides and disturbed areas (U93ROS01FLUS)
ARGUGNAP*39	<i>Argusia gnaphalodes</i>	Sea Lavender	G4	S3	N	LE	2001-02-14	2001-02-14: No description given (U01DUQ01FLUS). 1959-02-02: Open coral rock exposures (PNDGOD01FLUS).	2001-02-14: Species present (U01DUQ01FLUS). 1959-02-02: Shrub to approximately 1.5 meters high, much branched and compact (PNDGOD01FLUS).
COCCARGE*5	<i>Coccothrinax argentata</i>	Silver Palm	G4	S3	N	LT	1997	1993-01: LOW 16-20' CANOPY DOMINATED BY FLORIDA THATCH PALM OR GUMBO LIMBO, MILKBARK, TORCHWOOD, BLACK IRONWOOD & STOPPERS.	1997: "doubtfully present" (PNDIRC01FLUS). 1993-01: U93ROS01 DID NOT LIST THIS SPECIES. B79WEI01 LISTS SPECIES AS VERY RARE AT SITE.
MANIJAIM*30	<i>Manilkara jaimiqui</i>	Wild Dilly	G4	S3	N	LT	2005-07-26	Low 16-20' canopy dominated by <i>Thrinax radiata</i> or <i>Bursera simaruba</i> , <i>Drypetes diversifolia</i> , <i>Krugiodendron ferreum</i> and <i>Eugenia</i> spp.	2005-07-26: species present throughout rockland hammock (PNDDUQ02FLUS). 1997: species present U97GAN01FLUS). 1993-01: Species present in rockland hammock and adjacent coastal strand and wetlands (U93ROS01FLUS). 1978-05-24: Species abundant in rockland ha



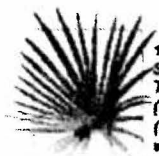
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THRIMORR*85	<i>Thrinax morrisii</i>	Brittle Thatch Palm	G4G5	S3	N	LE	1997-08-23	Low 16-20' canopy dominated by <i>Thrinax radiata</i> or <i>Bursera simaruba</i> , <i>Drypetes diversifolia</i> , <i>Krugiodendron ferreum</i> and <i>Eugenia</i> spp.	1997: species assumed to be present (PNDICR01FLUS). Information confirmed by PNDDUQ02FLUS. 1993: species present (U93ROS01FLUS).
CHAMGARB*18	<i>Chamaesyce garberi</i>	Garber's Spurge	G1	S1	LT	LE	1993	1993: Low 16-20' canopy dominated by <i>Thrinax radiata</i> or <i>Bursera simaruba</i> , <i>Drypetes diversifolia</i> , <i>Krugiodendron ferreum</i> and <i>Eugenia</i> spp. (U93ROS01FLUS)	2005: species not in park, but just outside boundary in ROW (PNDDUQ02FLUS) 1993: species present in sandy areas at several locations north of US 1 (U93ROS01FLUS).
GYMILATI*3	<i>Gyminda latifolia</i>	False Boxwood	G4	S2	N	LE	2005-01-20	2005-01-20: Mature rockland hammock. Road edges and tidal swamp (especially interior area) areas heavily infested with <i>Schinus terebinthifolius</i> and <i>Leucaena leucocephala</i> (F05FNA01FLUS). 1991: ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY D	2005-01-20: Two plants observed, one at each point. Very rare at site, observed as single plants. Plants to 12 feet tall and one budding (F05FNA01FLUS). 1991: BANCROFT DESCRIBES SPECIES AS PRESENT ON SITE (U92NAS01FLUS). 1985: SPECIES VERY RARE (U86WEI01F)
DRYPDIVE*13	<i>Drypetes diversifolia</i>	Milkbark	G4	S2	N	LE	2005-01-20	2005-01-20: Mature rockland hammock. Road edges and tidal swamp areas heavily infested with <i>Schinus terebinthifolius</i> and <i>Leucaena leucocephala</i> (F05FNA01FLUS). 1991: ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY DOMINATED BY GUMBO LIMBO, BU	2005-01-20: In Blue Heron Hammock, very common throughout hammock, often to 25 feet and occupying the highest canopy layer. In Stirrup Hammock, 100-1000 plants and occasional throughout hammock polygon (F05FNA01FLUS). 1991: SPECIES PRESENT ON SITE (U92NA
MANIJAIM*13	<i>Manikara jaimiqui</i>	Wild Dilly	G4	S3	N	LT	2005-01-20	2005-01-20: Occurs on ecotone between mature rockland hammock and tidal swamp. Tidal swamp heavily infested with <i>Schinus terebinthifolius</i> and <i>Leucaena leucocephala</i> (F05FNA01FLUS). 1991: ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK): 25-30' CANOPY DOMINAT	2005-01-20: Common along edges of rockland hammock. Observed to 20 feet tall and abundant on NE shoreline just landward of the tidal swamp (F05FNA01FLUS). 1991: BANCROFT DESCRIBES SPECIES AS PRESENT ON SITE (U92NAS01FLUS). 1985: WEINER DESCRIBES SPECIES



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**Element Occurrences**

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service  
 Scrub Jay Survey 1992-96

**Conservation Lands**

- Federal
- State
- Local
- Private
- State Aquatic Preserves

**Land Acquisition Projects**

- Florida Forever
- Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix
- Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

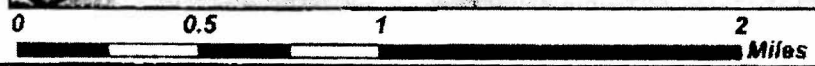
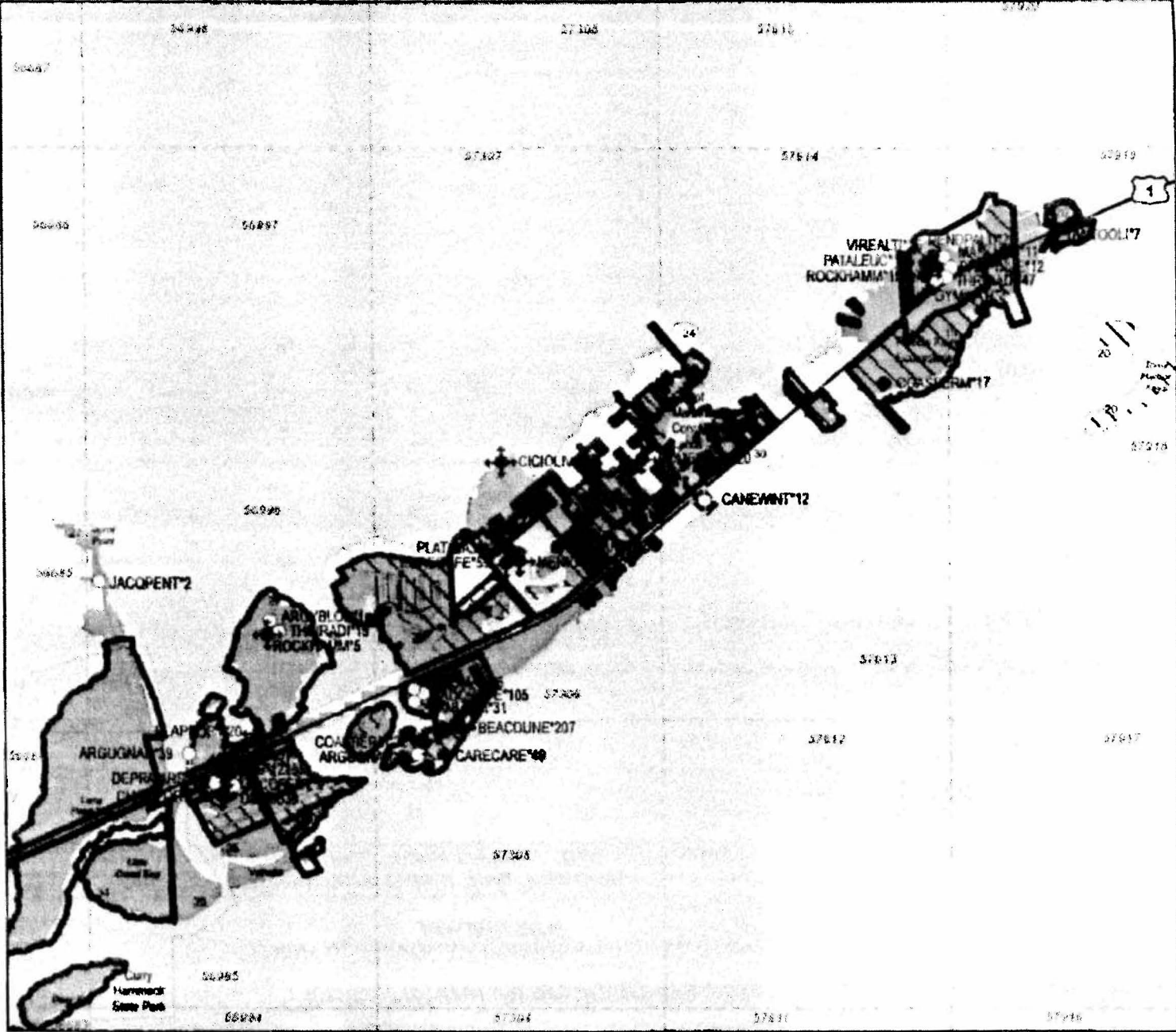


**NOTE**  
 Map should not be interpreted without accompanying documents

**Florida Keys Ecosystem/City of Marathon**

Site boundaries are approximate

**Monroe County**



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 Map Date: 23 MAY 2007

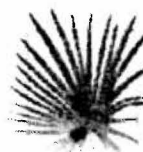


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MENICONC*20	Menidia conchorum	Key Silverside	G3Q	S2	SC	LT	1978	MARINE LAGOON; DISTURBANCES: PARTLY IMPOUNDED, CIRCULATION IMPEDED, WATERSHED REDUCED, ROAD & RESIDENTIAL MATERIALS. PESTICIDES.	GETTER COLL. SPECIES HERE. 10 SPECIMENS (UF/FSU 27164) COLL. 15 AUG 1977 BY C. DUGGINS (CFD-6). COWDERY, C. TEAF, D. LESLIE.
CANEWINT*12	Canetta winteriana	Wild Cinnamon	G5?	S2	N	LE	1969-06-12	[None given in best source.]	1969-06-12: Specimen taken [?!] (Meagher and Andorfer).
EGRERUFE*55	Egretta rufescens	Reddish Egret	G4	S2	N	LS	1992-04	1992-04: shallow pond in middle of Grassy Key (estuarine?) (PNDHOF01FLUS).	1992-04: Three to four birds use this site, year around (PNDHOF01FLUS).
PLATAJAJ*52	Platalea ajaja	Roseate Spoonbill	G5	S2	N	LS	1992-04	Shallow pond in middle of Grassy Key (estuarine?).	Birds forage here regularly, after nesting season (late spring/early summer).
CICIO LIV*1	Cicindela olivacea	Olive Tiger Beetle	G3	SH	N	N	1980-07-09	Coral rock shore along Gulf of Mexico	1980: Brzoska observed >70 individuals on 1980-07-09, characterized species as common at site; took specimens at lights at night, as beetles' habit of hiding among sharp rocks make them very difficult to catch.
JACQPENT*2	Jacquemontia pentanthos	Skyblue Clustervine	G4G5	S2	N	LE	1996	1996: Edge of rockland hammock (PNDBRAD04FLUS).	1996: Present on plant list. Occurrence size unknown (PNDBRAD04FLUS).
STRUMARI*6	Strumpfia maritima	Pnde-of-big-pine	G4	S1	N	LE	1990-00-00	NATIVE PLANT COMMUNITY ADAPTED TO THE LOW SUPRATIDAL AND OCCASIONALLY TIDAL CONDITIONS. A SHALLOW, SANDY DEPRESSION CHARACTERIZED BY HIGH TEMPERATURES AND SCARCITY OF FRESH WATER. THE SAND AND CORAL RUBBLE IS QUITE DEEP AND COVERS A LARGE AREA.	PRESENT ON SITE.



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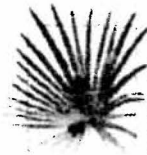
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DRYPDIVE*12	<i>Drypetes diversifolia</i>	Milkbark	G4	S2	N	LE	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	BANCROFT (U92NAS01) DESCRIBES SPECIES AS PRESENT ON SITE
GYMILATI*2	<i>Gyminda latifolia</i>	False Boxwood	G4	S2	N	LE	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	BANCROFT (U92NAS01) DESCRIBES SPECIES AS PRESENT ON SITE
JACQKEYE*105	<i>Jacquinia keyensis</i>	Joewood	G4	S3	N	LT	1988	Native plant community adapted to the low supratidal and occasionally tidal conditions. A shallow, sandy depression characterized by high temperatures and scarcity of fresh water. The sand and coral rubble is quite deep and covers a large area.	Very large stand.
MANIJAIM*31	<i>Manihara jaimiqui</i>	Wild Dilly	G4	S3	N	LT	1988	1988: Native plant community adapted to the low supratidal and occasionally tidal conditions. A shallow, sandy depression characterized by high temperatures and scarcity of fresh water. The sand and coral rubble is quite deep and covers a large area (UB	1988: Present on site (U68SKI02FLUS)
DS*12255	Data Sensitive Element	Data Sensitive	G5?T1Q	S1	C	LE	2005-10-11	Data Sensitive	Data Sensitive



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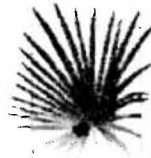
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JACQPENT*9	Jacquemontia pentanthos	Skyblue Clustervine	G4G5	S2	N	LE	1999	1999: Common in sunny areas in coastal rock barren, Oceanside of key, adjacent to US1. With Opuntia triacanthos, Indigofera mucronata var. keyensis. Also collected on this island by Small in 1909 (PNDBRA04FLUS).	1999: 101-1000 (PNDBRA04FLUS).
THRIRADI*19	Thrinax radiata	Florida Thatch Palm	G4G5	S2	N	LE	1982-10-17	CACTUS HAMMOCK; FORESTIERA HAMMOCK, PATCHWORK OF HAMMOCK, SINKHOLE OPENINGS AND PALM STANDS.	CA 50 TREES, ALL MATURE; NO SEEDLINGS NOTED. CLEAR TRUNKS 5-10 FT. DROPPED LEAVES OF THRINAX MAY INHABIT UNDERSTORY SPECIES THAT ARE ABUNDANT IN THE REST OF THE HAMMOCK.
DS*28539	Data Sensitive Element	Data Sensitive	G2G4	S1	N	LE	1998-03-06	Data Sensitive	Data Sensitive
THRIRADI*47	Thrinax radiata	Florida Thatch Palm	G4G5	S2	N	LE	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	BANCROFT (U92NAS01) REPORTS SPECIES AS PRESENT ON SITE.
MANIJAIM*11	Manilkara jaimiqui	Wild Dilly	G4	S3	N	LT	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	BANCROFT (U92NAS01) DESCRIBES SPECIES AS PRESENT ON SITE.





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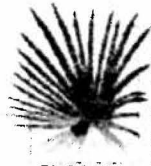
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ARGYBL0D*1	<i>Argythamnia blodgettii</i>	Blodgett's Wild-mercury	G2	S2	C	LE	1982-10-17	CACTUS HAMMOCK; FORESTIERA HAMMOCK. PATCHWORK OF HAMMOCK, SINKHOLE OPENINGS AND PALM STANDS.	GROWING UNDER THRINAX FLORIDANA TREES IN NW PART OF HAMMOCK. CA. 10 PLANTS SEEN. HEALTHY LOOKING. KNEE HIGH. DROPPED LEAVES OF THRINAX MAY INHIBIT MOST OTHER UNDERSTORY SPECIES HERE. FLOWERING AND FRUITING 1982-10-17.
ARGUGNAP*36	<i>Argusia gnaphalodes</i>	Sea Lavender	G4	S3	N	LE	1988	Coastal Berm (EO #22): Vegetation includes <i>Scaevola</i> <i>plumieri</i> , <i>Hymenocallis latifolia</i> , <i>Suriana maritima</i> , native species of <i>poinsettia</i> , two species of sea <i>oxeye daisy</i> and sea oats.	Present on site.
CARECARE*49	<i>Caretta caretta</i>	Loggerhead	G3	S3	LT	LT	1992	The beach forms a wide spit at its westernmost extension. It consists of calcareous sand, mostly derived from large beds of finger coral ( <i>Porites porites</i> ), located very close to shore, and calcareous algae. From its westernmost point, the beach narrows 1	Nesting beach. Number of km monitored and effort have varied by year. Nesting season has begun as early as May 16 and ended as late as July 18. Number of nests observed by year, with km monitored: 1992 (6, 4.0 km); 1991 (3, 4.0 km); 1990 (1, 4.0 km);
TANTOOLI*7	<i>Tantilla oolitic</i>	Rim Rock Crowned Snake	G1G2Q	S1S2	N	LT	1978-06	SMALL KEY; SPECIMENS TAKEN UNDER CONCRETE IN YARD & RUSTED METAL IN FIELD NEAR TROPICAL HARDWOOD HAMMOCKS.	2 FEMALE SPECIMENS: #UF-42578 COLL. 4 FEB 1978 BY J. FERNANDEZ (LDW-4991); #UF-42607 COLL. 25 JUNE 1978 BY LARRY DAVID WILSON (LDW-5014). MEASUREMENTS & COLOR NOTES IN A79POR01.
STERANTI*85	<i>Sterna antillarum</i>	Least Tern	G4	S3	N	LT	1992-04	Shallow ponds in middle of Grassy Key (estuarine?).	5-10 pair nesting, 4/92.
DENDPALU*20	<i>Dendroica discolor</i> <i>paludicola</i>	Florida Prairie Warbler	G5T3	S3	N	N	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON.



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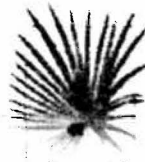
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COASBERM*17	Coastal berm		G3	S2	N	N	1999	COASTAL BERM COMPOSED OF CARBONATE SANDS.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1991) (U05FNA02FLUS). OCEAN-SIDE BEACH-BERM (=COASTAL BERM) OCCURS AT EDGE OF GRASSY KEY HAMMOCKS.
PATALEUC*165	Patagioenas leucocephala	White-crowned Pigeon	G3	S3	N	LT	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	FORAGING SITE, CONSIDERED IMPORTANT FOR POPULATION. HAS POPULATION DATA FOR THIS SITE. BIRDS FORAGING HERE MAY ALSO FORAGE IN OTHER HAMMOCKS AND UTILIZE OFFSHORE MANGROVE ISLANDS FOR NESTING.
DEPRMARS*1	Depression marsh		G4	S4	N	N	1999	TINY (30' ACROSS) ROUND DEPRESSION WITH FW MARSH VEGETATION. SURROUNDED BY DISTURBED CACTUS BARREN.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1982-10-17) (U05FNA02FLUS). RING OF SPERMATOCOE TENUIOS AROUND MARGIN.
VIREALTI*35	Vireo altiloquus	Black-whiskered Vireo	G5	S3	N	N	1991	ROCKLAND HAMMOCK (=TROPICAL HARDWOOD HAMMOCK) EO #152; RELATIVELY YOUNG, DEVELOPING NICELY. CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD, AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILD	INDIVIDUAL(S) OBSERVED IN THE BREEDING SEASON.
ELAPPOP1*20	Elaphe guttata pop. 1	Red Rat Snake, FI Lower Keys Pop	G5T2Q	S2	N	LS	ZZ	No general description given	SPEC (UK-92702). COLLECTOR N/A, DATE N/A.
ARGUGNAP*39	Argusia gnaphalodes	Sea Lavender	G4	S3	N	LE	2001-02-14	2001-02-14: No description given (U01DUQ01FLUS). 1959-02-02: Open coral rock exposures (PNDGOD01FLUS).	2001-02-14: Species present (U01DUQ01FLUS). 1959-02-02: Shrub to approximately 1.5 meters high, much branched and compact (PNDGOD01FLUS).



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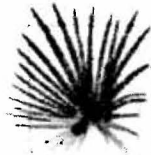
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CHAMPORT*38	<i>Chamaesyce porteri</i>	Porter's Broad-leaved Spurge	G2	S2	N	LE	1998-03-06	1998-03-06: In open sun on rocky substrate with <i>Cyperus fulgineus</i> , <i>Evolvulus convolvuloides</i> , <i>Indigofera mucronata</i> var. <i>keyensis</i> , <i>Opuntia triacantha</i> , <i>Opuntia stricta</i> , and <i>Agave decipiens</i> (S98BRASFFLUS).	1998-03-06: None given (S98BRASFFLUS)
BEACDUNE*207	Beach dune		G3	S2	N	N	1999	The beach forms a wide spit at its westernmost extension. It consists of calcareous sand, mostly derived from large beds of finger coral ( <i>Porites porites</i> ), located very close to shore, and calcareous algae. From its westernmost point, the beach narrows.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1988) (U05FNA02FLUS).
COASBERM*22	Coastal berm		G3	S2	N	N	1999	Vegetation includes <i>Scaevola plumieri</i> , <i>Hymenocallis latifolia</i> , <i>Suriana maritima</i> , <i>Tournefortia gnaphalodes</i> , native species of poinsettia, two species of sea oxeye daisy and sea oats.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1988) (U05FNA02FLUS).
ROCKHAMM*152	Rockland hammock		G2	S2	N	N	1999	CANOPY DOMINATED BY GUMBO LIMBO, BLACK IRONWOOD, JAMAICA DOGWOOD, POISONWOOD AND FLORIDA THATCH PALM. UNDERSTORY PLANTS INCLUDE SAFFRON PLUM, JAMAICA CAPER, DILDO CACTUS, SNOWBERRY, HOGPLUM, BLOLLY AND SPANISH STOPPER.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1991) (U05FNA02FLUS). SIZABLE HAMMOCK FRAGMENTS ON BOTH SIDES OF US 1; RELATIVELY YOUNG, BUT DEVELOPING NICELY. BOUNDARIES OF NC NOT REPORTED IN U92NAS01.
ROCKHAMM*5	Rockland hammock		G2	S2	N	N	1999	PATCHWORK OF HAMMOCK, SINKHOLE OPENINGS, AND PALM STANDS EXTENDING TO ROCK ROAD PARALLEL TO 20' WIDE ROCKY SHORE ON NORTH SIDE OF KEY. BORROW PIT SE. TRASH, CAMPSITES. SOME EXOTICS.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1982-10-17) (U05FNA02FLUS). FOREST OF GUMBO LIMBO, POISONWOOD, JAMAICA DOGWOOD, ETC. WITH UNDERSTORY & SINKHOLES DOMINATED BY AGAVE, OPUNTIA STRICTA, & CE
DS*7817	Data Sensitive Element	Data Sensitive	G1	S1	N	N	1999	Data Sensitive	Data Sensitive



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EUMEEGRE*20	Eumeces egregius egregius	Florida Keys Mole Skink	G5T2	S2	N	LS	1990-pre	No general description given	1990-pre: Christman (in B92MOL01FLUS) cites species as known from here but gives no further data.

**Attachment D**  
**October 26, 2007, Correspondence regarding Comprehensive Plan Consistency**



## CITY OF MARATHON, FLORIDA

### Planning Department

10045-55 Overseas Highway, Marathon, Florida 33050

Phone: (305) 289-4121 Fax: 305-289-4148

October 26, 2007

Florida Department of Environmental Protection  
Division of State Lands  
Bureau of Public Land Administration, Mail Station 130  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000

**RE: Consistency with City of Marathon Comprehensive Plan  
Draft City of Marathon Land Management Plan**

To Whom It May Concern:

The City of Marathon Land Management Plan (draft dated October 26, 2007) is consistent with the City of Marathon Comprehensive Plan, as adopted on July 7, 2005, as amended. Particularly relevant Objectives and Policies are listed below.

***GOAL 4-1 CONSERVE, MANAGE, USE AND PROTECT NATURAL AND ENVIRONMENTAL RESOURCES***

*It is the goal of the City to conserve, manage, use and protect the natural and environmental resources within the City to ensure continued resource availability and environmental quality and to manage development activities to protect coastal resources, protect human life and limit public expenditures in areas subject to destruction by natural disasters. 9J-5.013(2)(a)*

***Objective 4-1.6 Restoration***

*The City shall initiate a program to restore and maintain disrupted native marine, wetland, beach, berms and native upland vegetation systems. 9J-5.012(3)(b)4*

***Policy 4-1.6.4 Establish a Program for Invasive Vegetation Removal on City Lands***

*Within three years of the effective date of the Plan, a program shall be developed for removing invasive exotic vegetation from City owned lands. This program shall include establishing and prioritizing a list of sites, monitoring and plans for re vegetation.*

***Policy 4-1.6.5 Establish a Program for Restoration of City Owned Lands***

*Within three years of the effective date of the Plan, a program shall be developed and updated for restoring City owned beaches and beach berm areas. This program shall include monitoring and plans for re-vegetation.*

*Policy 4-1.6.6            Restoration Funding Sources  
Restoration projects shall be completed as funding, as established through Policy 4-1.6.7 and other sources, becomes available. Local, State, Federal and private funding sources shall be pursued and used to support restoration projects.*

*Policy 4-1.6.7            Establish a Restoration Fund  
Within one year of the effective date of the Plan, the City shall establish a restoration fund. Local, State, Federal and private funding sources shall be pursued and used to support restoration projects.*

*Objective 4-1.7            Protect and Enhance Fisheries, Wildlife and Wildlife Habitat  
The City shall protect and enhance fisheries, wildlife and wildlife habitat from the adverse impacts of development by regulating the location, density and intensity of those activities that cause the adverse impact. The City shall coordinate with all Federal, State and local government agencies to promote protection of fisheries, wildlife and wildlife habitats. The Land Development Regulations shall provide for flexible development alternatives, including density transfers from wetlands to adjacent uplands, allowing more flexible development options on developable portions of the site.*

*Policy 4-1.7.2            Protect Native Wildlife from Free-roaming Domestic Pets  
Within two years of the effective date of the Plan, the City shall develop regulations to protect native wildlife species, especially State and Federally designated species, from disturbance and predation by free-roaming domestic pets, particularly cats and dogs. The City Biologist shall meet periodically with the Monroe County Animal Control Department to review priorities for animal control.*

*Policy 4-1.7.3            Protect Native Wildlife from Invasive Exotic Wildlife Species  
Within two years of the effective date of the Plan, the City shall develop regulations to protect native wildlife species, especially State and Federally designated species, from invasive exotic wildlife species, particularly iguanas and Gambian rats. The City Biologist shall coordinate with the FFWCC and the US FWS to develop a list of undesirable exotic wildlife species. In accordance with this list, the City shall adopt an exotic wildlife ordinance which shall restrict the sale and handling of listed undesirable exotic species.*

*Policy 4-1.2.13            List and Prioritize Sensitive Sites for Acquisition*



*The City shall update on an annual basis the prioritized list of environmentally sensitive sites for potential acquisition which includes, but is not limited to the following:*

- a. Nesting sites of the southern bald eagle (*Haliaeetus leucocephala*), the osprey (*Pandion haliaetus*), the brown pelican (*Pelecanus occidentalis*) and the roseate tern (*Sterna dougallii*); and*
- b. Wintering grounds for the peregrine falcon (*Falco peregrinus*) and the piping plover (*Charadrius melodus*); and*
- c. Native upland habitats used by species listed by a State or Federal agency as threatened or endangered, such as the white-crowned pigeon (*Columba leucocephala*); and*
- d. Transitional habitat with potential for wildlife corridors, tropical flyways or buffers for environmentally sensitive lands.*

*Objective 4-1.6 Restoration*

*The City shall initiate a program to restore and maintain disrupted native marine, wetland, beach, berms and native upland vegetation systems. 9J-5.012(3)(b)4*

*Policy 4-1.6.1 Prioritize Wetland Restoration Sites*

*Within three years of the adoption of the Plan, a list of priority wetland restoration sites shall be drafted and updated every other year. This list shall be developed by the City in consultation with representatives of the ACOE, EPA, FWS, DEP, and FWCC and as information is gained through the development review process. Priority wetland restoration sites shall be those disturbed wetlands having the greatest potential functional value after restoration (determined by the KEYWEP) as defined in the Florida Keys ADID Program.*

*Policy 4-1.6.2 Prioritize Beach and Upland Restoration Sites*

*A list of priority beach berms and upland, native vegetative restoration sites shall be drafted and updated every other year. This list shall be developed by the City in consultation with the Florida Department of Agriculture and Consumer Services (Division of Plant Industries), the Florida Natural Areas Inventory and the National Audubon Society Research Department and other agencies as appropriate. Priority upland restoration sites shall be identified based on findings of the general evaluation of upland vegetation. Priority sites shall be those disturbed areas where restoration will result in the greatest habitat benefit at the least cost. Candidate restoration sites shall include publicly owned as well as privately owned sites.*

*Policy 4-1.2.14 Establish and Coordinate Acquisition Programs*

*By October 1, 2005, the City shall establish a land acquisition program and prepare a Capital Investment Plan for the acquisition of environmentally sensitive land, land for affordable housing, open space, parks and recreation, and the purchase of development rights in coordination with regional, State, Federal and private programs, including but not limited to the DEP, the Monroe County Land Authority, the Department of Community Affairs (DCA) and other agencies with*

*an interest in conservation lands. This Capital Investment Plan shall be incorporated into the City's Capital Improvement Program.*

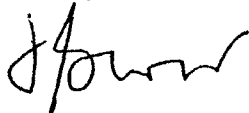
*Objective 4-1.10 Preservation of Historical, Cultural, or Archaeological Features*

*The City shall ensure the preservation of historical, cultural, or archaeological features of local, regional, State and National significance. 9J-5.006(3)(b)4; 9J-5.012(3)(b)10*

*Policy 4-1.10.1 Implement Historic and Archaeological Site Policies  
The City shall coordinate with the State and Federal government to develop programs for implementing City, State and Federal policies for identifying, preserving and enhancing sites of historical and archaeological significance. Programs for identification, evaluation of relative significance, protection, preservation and enhancement shall be promoted, utilizing all available local, State, Federal and private sector resources.*

Please call me with questions and comments.

Sincerely,



Fred Gross  
Planning Director

Xc: Patti Childress

