# THE KEY WEST SALT PONDS

A Proposal for Acquisition by the State of Florida Under the Conservation and Recreation Lands Program

Sponsored by

The City of Key West and Florida Audubon Society

July 1986

(Revised July, 1987)

# PART I

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	13 14 15
	19 20 23-26 29,30 32 33 34
	59,60 61-69 70 71-85 86-88

#### **ACKNOWLEDGEMENTS**

This proposal is sponsored jointly by the City of Key West, Florida and Florida Audubon Society in recognitition of the value and vulnerability of Key West's last natural expanse. It was prepared with assistance from Art Mosley, Tom Wilson, Rosemary Vogeney, Joan Borel, Curtis Kruer, Jodi Naderi, Ann Williams, Marge Brown, William Westray, and Renate Skinner.

Cover illustration is by John James Audubon, who observed Flamingoes in the Key West Salt Ponds in 1832.

City of Key West

Mayor Tom Sawyer Commissioner Emma Cates Commissioner George:Halloran Commissioner Sally Lewis Commissioner Jimmy Weekley

Florida Audubon Society

Leah Schad, Chair Karsten Rist, Vice Chair Mamie Durham, Vice Chair Alan W. Steinberg, Trasurer Bernard J. Yokel, Ph. D., President

# RESOLUTION NO. 86-169

A RESOLUTION SUPPORTING THE INCLUSION OF THE KEY WEST SALT PONDS ON THE LIST OF PRIVATE PROPERTIES TO BE CONSIDERED FOR PURCHASE BY STATE OF FLORIDA UNDER THE PROVISIONS OF THE CONSERVATION AND RECREATION LANDS (CARL) PROGRAM, ON A VOLUNTARY BASIS; PROVIDING AN EFFECTIVE DATE

WHEREAS, the Key West Salt Ponds provide one of the only remaining natural areas within the City, and

WHEREAS, the Salt Ponds are of great ecological, recreational, and educational value to the entire State of Florida and are important nursery areas for many varieties of commercial and sport fish species, now therefore,

BE IT RESOLVED by the City Commission of the City of Key West, Florida, that said City Commission proposes and strongly supports the inclusion of the Key West Salt Ponds on the list of private properties to be consdered for purchase by the State of Florida under the provisions of the Conservation and Recreation Lands (CARL) Program, on a voluntary basis.

This Resolution shall go into effect immediately upon its passage and adoption and authentication by the signatures of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this

15 day of July , 1986.

TOM SAWYER, MAYOR

ATTEST:

PARICER, CITY CLERK

Name of Person Proposing Acquisition: The City Commissioners

manization: City of Key West press: P. O. Box 1550

Key West, Florida 33040

Proposed jointly by:



Name of Person Proposing Acquisition: Dr. Bernard Yokel, President Organization: Florida Audubon Soc

Address: 1101 Audubon Way

Maitland. Florida 32751

ephone No: 294-3721 ACQUISITION PROJECT PROPOSAL INFORMATION Telephone No: (305) 647-2615

Please return to: Division of State Lands Department of Natural Resources 3900 Commonwealth Boulevard Tallahassee, Florida 32303

This form should be completed to the greatest extent possible based on the information available to the applicant. Where sections are not applicable to your proposal, N/A should be used to indicate that the section was considered. If additional space is needed to complete any section, continue the response on a separate sheet and attach to the form. Please submit 10 copies of this information.

#### Part I

- Property Name Key West Salt Ponds Town Key West County Monroe State Florida Acres 407.9 How determined? survey X tax map X deed X other planimetering of aerials (1:1200) with habitat and property lines. Attach legal description, including a survey, if available, and any deed restriction or encumbrances. Legal description, pg. 1.
- 2. Attachments.

Attach a section of Department of Transportation highway map with location of property drawn in. Attach a topographic quadrangle map with boundaries of property sketched in. If an assemblage program is planned, show individual parcels intended for acquisition. Figures 1, 2, 3.

Attach an aerial photograph with property boundaries sketched Also attach as many of the following as possible: photographs Att. B. ecological survey reports N/A DNR-52-007 (Page 1 of 7) 3/80

endorsements N/A species list Att. A. publications Att. F.

X other (specify) See Table of contents, pg.l plat map

N/A tax assessor's map N/A.

These will become property of the State of Florida and will not be returned.

- 3. General Description.
  - A. What land/water types occur on this property? Give approximate acreage for each type: See Figures 6, 7 & 8 and Project Assessment.

	N/A	_ Abandoned field	N/A
Tidal	Natural Pond/XXXe 161.6	Cultivated	N/A
Transiti	Swamp96.1	Meadow/Grassland	
Wetland	Marsh 55.0	Tree Plantation	N/A
Hardwood	Beach/Dunes Ad jacent	XXXXXXXXX XXXX/Pond _	2.7
Hammock	Forest/Woodland 3.8	Prairie	N/A
	Stream/River N/A  Open disti	Canal/XXXXX	8.7
	Other (specify) Uplands wi	th exotics	19.5

- B. Plants and animals. Describe most common and especially interesting individuals or groups. Name rare, endangered, or unique species. Give scientific names wherever possible. Attach inventories. Delineate aerial extent and location of unique communities on a map of the property. Figure 7 & Project
- C. Archaeological and historical sites. Describe known archaeologically or historically valuable remains. Describe the
  significance of known remains. Attach inventories. Show
  locations on a map of the property. Estimate and potential
  of unrecorded or undiscovered remains. Figure 9 & Project Assessment.
- D. Other features. Describe aquatic, geologic, scenic and other physical features of significance. Include such things as terrain, soil, climate, caves, waterfalls, rock outcroppings, etc. Attach articles and research papers. See Project Assessment. (Page 2 of 7)

E.	Reference. Name and address of ecologist(s) with knowledge
	of property. Attach supporting letters or reports.
	Name See Project Assessment & Attachment D.
	Address
	Zip_

- 4. Influences on property.
  - A. General history. Describe the occurrence of significant past disturbances, both natural and human. Include approximate dates (if possible) of storm damage, fires, floods, infestations, farming, grazing, mowing, mining, looting or disturbance of archaeological or historical sites, etc. Discuss the degree of recovery from the disturbance. Describe any structures, roads, trails, fences, and other evidences of man. Key these discussions to the topo map or aerial. See Figure 9 & Project Assessment.
  - B. Future impacts. Describe possible impacts of current or anticipated surrounding land uses including commercial and residential developments, farming, logging, drainage, damming, etc. Key these discussions to the topo map or aerial. See Project Assessment.
  - C. Attach copy of County and Regional Land Use Plan showing and describing the current and projected land use and zoning of the property and surrounding area. Include a discussion of any zoning changes that have occurred in the previous ten years. Attachment E, Figure 11 and Project Assessment.
- 5. Recognition. Indicate if the area is listed in a natural or cultural area inventory, as a National Natural Landmark, National Register of Historic Places, Florida Natural Feature's Program, Scenic River, or has been given other recognition or designation. See Figure 13.

Management.
A. Significant problems. Check appropriate spaces and explain.
Hunting Picnicking Fire Trespass X Off-road
vehicles X Camping X Over-browsing Access
Pollution X Introduced species X Erosion Stray
animals X Litter X Siltation X Safety hazards
Looting or disturbance of archaeological or historical
sites X Other See Project Assessment.
B. State proposed use and plans for management of the area. List special opportunities for educational and scientific activity, hunting and fishing, recreational opportunities, including canoeing, boating, camping, etc. See Project Assessment and Figure 12 C. Name of entity who is recommended to manage the project (Attach endorsements if available).
Florida Department of Natural Resources, Division of Parks
and Recreation. Other entities are City of Key West, Monroe
County and Florida Audubon Society.
Directions: How to get to property. Road directions or other (mention any access problem or right of way), See Project Assessment and Figure 1.
Ownership of property. Give name, address & telephone numbers.  See Figure 14.
Valuation and acquisition.
A. Fair market value \$ N/A . Attach documentation such as an appraisal.
<ul> <li>B. Attach documentation of current assessed value by County Tax Assessor. A letter signed by Tax Assessor is desirable.</li> <li>See Figure 15.</li> <li>C. Attach documentation of owner's willingness to sell.</li> </ul>

Threat, endangerment, or vulnerability. See Project Assessment and Attachemnt C.

6.

7.

8.

9.

10.

(Page 4 of 7)

#### Part II

- 1. Ecological Evaluation: Elements are rated and assigned numerical values as follows: Excellent = 2 Good = 1 Poor = 0
- A. Viability the ability of area to maintain the integrity of the natural system over time. (Consider size, watershed, and bufferage).
- B. Diversity -, rating based on such factors as the number of habitats represented, relative species, diversity, variety of archaeological and historical sites, etc.
- 2 C. Uniqueness Uniqueness or rarity of the ecosystem, uniqueness or rarity of archaeological or historical sites in the U.S. & Florida.
- 1 D. Freedom from human impact-2 = if there has been no appreciable influence by man; 1 = some human interference but not enough to change natural community entity; 0 = if area is dominated by man's influence.
- 1 E. Defensibility the ability to protect a natural area from destruction or alteration by man.
- 2. Aquatic System. Identify and indicate whether the aquatic system is eutrophic, mesotrophic, oligotrophic, polluted, unpolluted, clear or turbid. Additional modifiers such as intermittent, permanent, ophermeral, estuarine, marine, tidal, intertidal, vernal, artificial, may be used where appropriate.

	mann n		*
	TYPE	PRESENCE	MODIFIER(S)
	A. Bog	N/A	
	B. Coastline	clear	permanent, tidal, marine
	C. Estuary	clear	permanent, tidal, intertidal,
	D. Lake	N/A	marine
	E. Lagcon	clear	
	F. Marsh	clear	permanent, tidal, intertidal, permanent, supratidal, marine
	G. Pool	N/A	permanent, supratioal, marine
	H. Pond	clear	manufacture 123 a
	I. Rivon	N/A	permanent, tidal, marine
	J. Solution Hole	N/A	
	K. Spring	N/A	
	L. Stream	N/A	
	M. Shoreline	clear	namanant intentidal maning
	N. Swamp	clear	permanent, intertidal, marine permanent, tidal, intertidal,
	O. Canal	clear/turbid	permanent, artificial, marine
	P. Other		tidal
			traar
3.	Reasons for Acquis	ition: (more than one	may be chosen)
	A. Scenic X	P. Ov	erwintering concentration X
	B. Scientific docu	mentation X Q. Mi	gratory concentration X
	C Buffer zone		gracory concentration X

R.

s.

T.

Other

Local rare animal

Remnant community

Endemic plant species

C. Buffer zone

habitat X

D. Open space X
E. Goological formations

G. Local rare terrestrial

F. Local rare aquatic habitat X U.

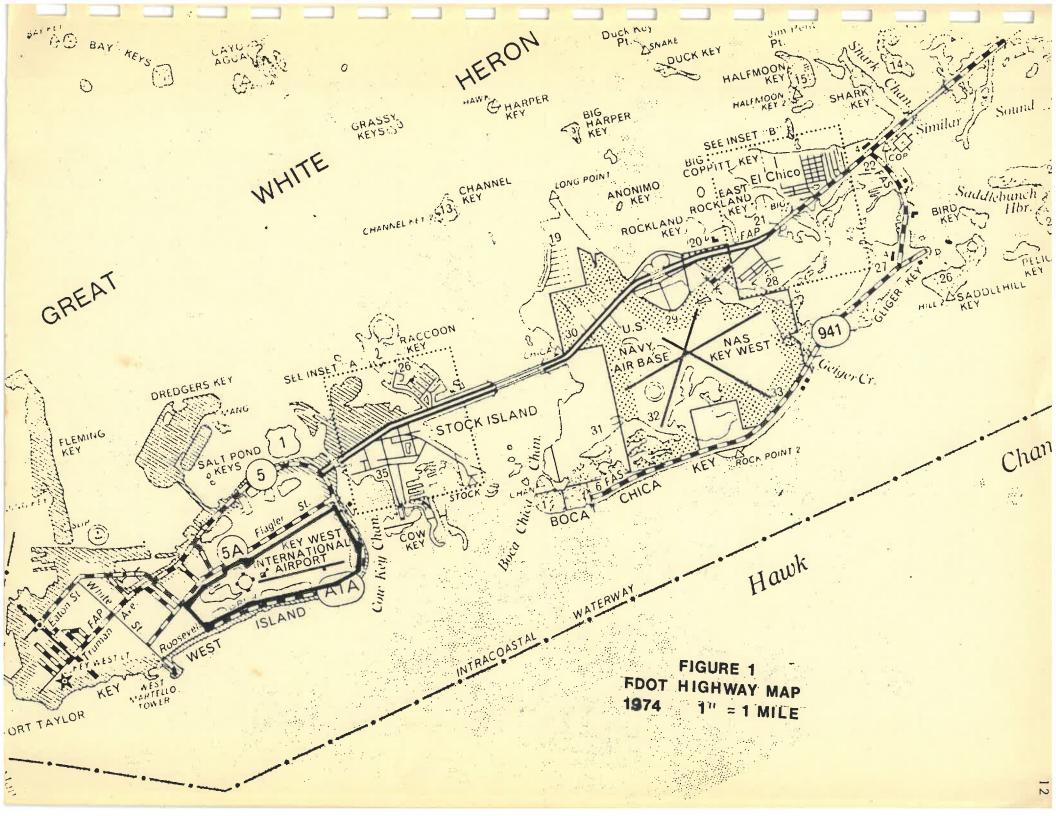
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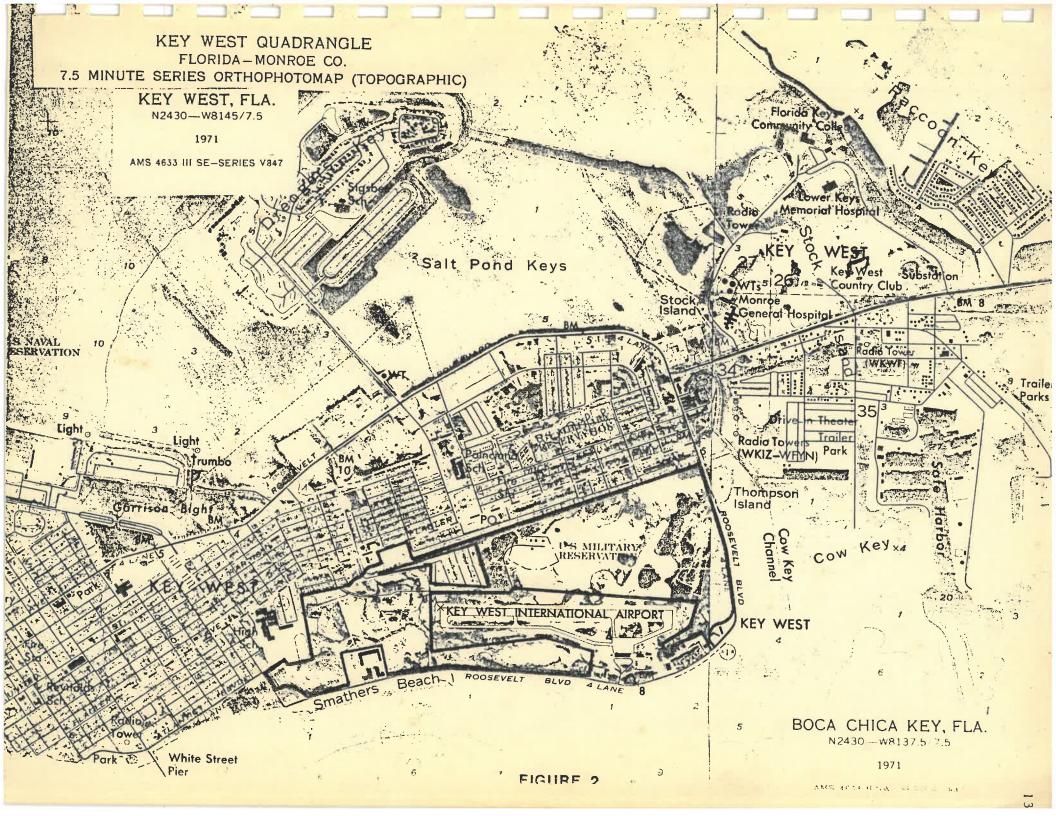
	II. Animal endemics
	I. Recreation opportunities (no hunting) y
	J. Archaeological or historical site
	K. Natural floodplanning marsh or estuary X
	L. To enhance or protect water quality X
	M. State forest Wilderness area
	N. Wildlife management area (hunting)
	O. Restoration of altered ecosystem X (high potential)
	EXPLAIN (Attach additional comments to indicate the public purpose
	for which the property should be purchased)
	See Figures 10 & 12 and Project Assessment.
4	. Topographic Ouadrangle must be attached Figure 2
	Name of Ound Koll Wort (Pose Obine all 1 acr
	High & low elevations of Project +5' and -3' MSL
	High & low elevations of Project +5' and -3' MSL Coordinates of Project 24° 33' 30" N.  81° 45' 40" W.
	81° LK 1/10" W
	01, T) TO W.

# PART III

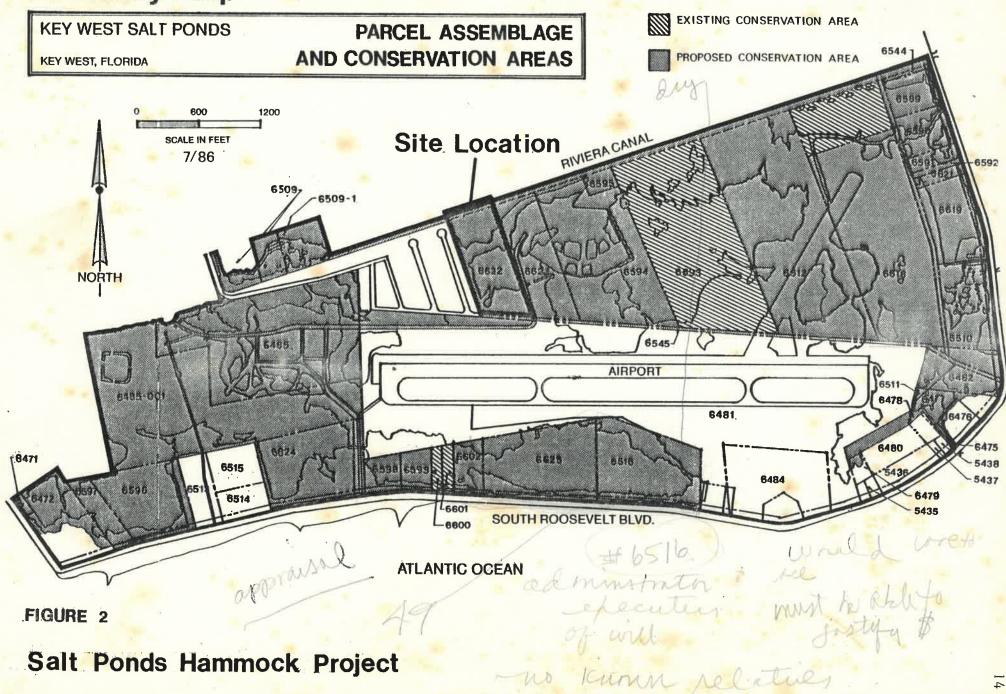
# C.A.R.L. APPLICATION ADDENDUM (to be completed by project sponsor)

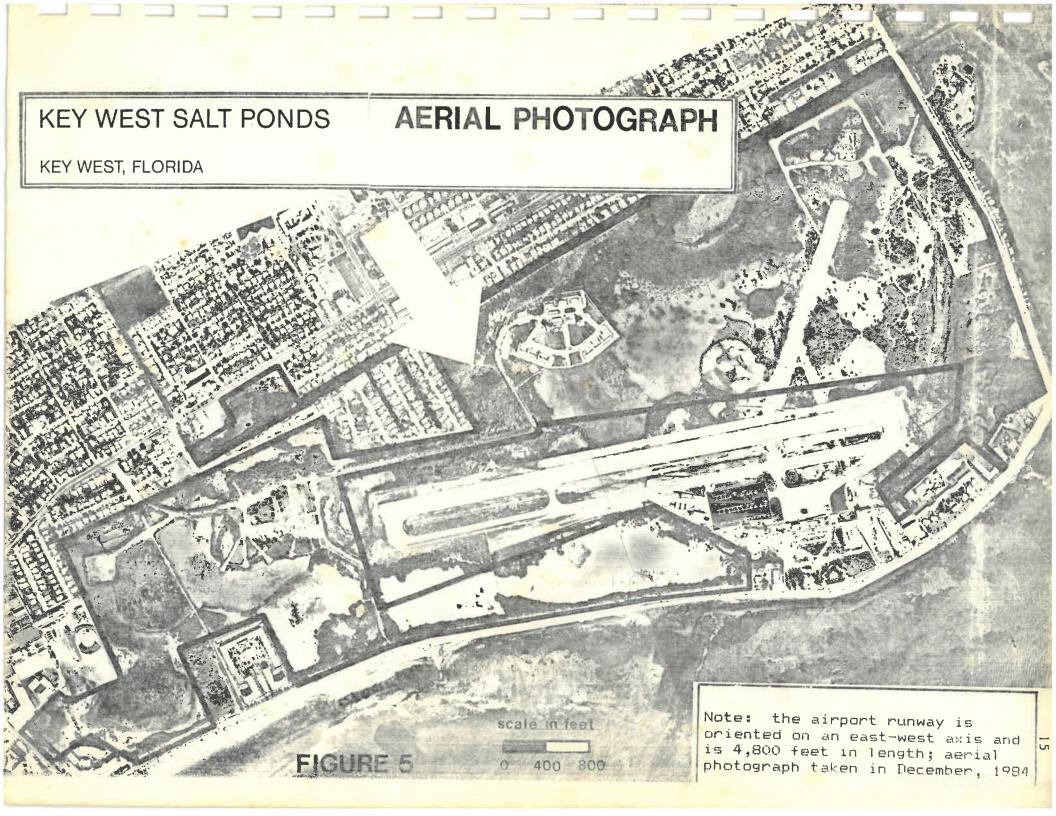
Please contact the appropriate local government to determine the following:	-
<ol> <li>If development for public convenience and recreational facilities were done on this property, would waivers be available for:</li> </ol>	
a) Impact fees? Yes	
b) Other development fees? Yes	
Please provide name and address of local government contact(s).	
Art Mosley, City Planner Box 1550, Key West, Fl., 33040	) =
Comissioner George Halloran Box 1550, Key West, Fl. 33040	
Charles Pattison, Director, Monroe Co. Building & Planning, Stock Is  Key West, Florida, 33040	
Mey west, Florida, 53040	
<ol> <li>Is there an economical means of obtaining utility services, including:</li> </ol>	
a) Water supply? Adequate and available	2
b) Sewage disposal? Hook up to central collection system or septic tank & drainfield possible. c) Electrical power? Adequate and available	
If so, please provide name and address of local government contact(s	).
Greg Harkness, chief engineer, Florida Keys Aqueduct Authority 1100 Kennedy Dr., Key West, Fl.	
Dan Lagowsky, Sewer Director, City of Key West, Box 1550, Key West,	Fl.
Bob Padron, Director, City Electric System, 1001 James St., Key West,	
(Page 7 of 7) Florida, 33040	





# **Boundary Map**





### 3. General Description.

A. What land /water types occur on this property? Give approximate acreage for each.

Figures 6 and 7 represent the current extent of the

various habitats within the system.

The present day Salt Ponds are a series of tidally influenced, shallow water ponds (approx. -0.0 to -3.0 msl) which experience some seasonal variation in salinity due to evaporation during the the dry, windy conditions of the late winter and spring and the influence of consistent rainfall in the summer and fall. Based on field measurements, the maximum range of salinity appears to be from about 20 to 70 ppt in the inner portions of the semi-impounded ponds, while the ponds immediately adjacent to Riviera Canal and the tidal culverts maintain salinities near ambient (ocean). Storm events with unusually heavy rainfall lower salinities for brief periods, particularly where storm-water runoff from developed areas is present. Figure 8 is a representation of existing tidal circulation in the system.

The conditions in the Salt Ponds have resulted in an interesting range of habitats delineated in Figure 7. Depending on the location and substrate, the seagrass habitats vary from lush (turtle grass, Thalassia testudinum, Cuban shoalgrass, Halodule wrightii and manatee grass, Syringodium filiforme) in the large open ponds and tidal creeks to sparse but persistent in the semi-impounded ponds (Halodule and widgeon grass Ruppia maritima). Marine algae communities (epiphytic and benthic) are varied and

Batophora is most common in the inner ponds.

Surrounding these ponds and forming dense stands scattered throughout the ponds are mixed mangrove wetlands consisting of red, black and white mangroves. Red mangroves in places reach 30 to 40 feet tall. The intertidal air root and prop root zones of the dense black and red mangrove forests support diverse populations of marine algae and various attached invertebrates including sponges, molluscs, hydrozoans and tunicates, as well as providing protective cover to a variety of fish and mobile invertebrates.

Extensive transitional wetland areas vegetated by typical Keys wetland plants such as key grass, saltwort, glasswort, sea oxeye, dropseed, sea purslane, salt grass, buttonwood, bay cedar and joewood are present landward of the mangrove fringe in many portions of the ponds. These areas predictably flood during spring and fall high tides and provide valuable feeding habitat for a variety of wading birds when water depths are too great in other feeding areas. Like mangrove wetlands, these high marsh wetlands supply organic nutrients to the tidal system and perform water quality maintenance functions of filtration, buffering, stabilization of sediments and absorption of nutrients.

Naturally occuring, low tropical hardwood hammocks exist in two locations within the Salt Pond system (Figure 7). These areas are remnants of hammocks which existed on intrusions of

(1300) (2000)

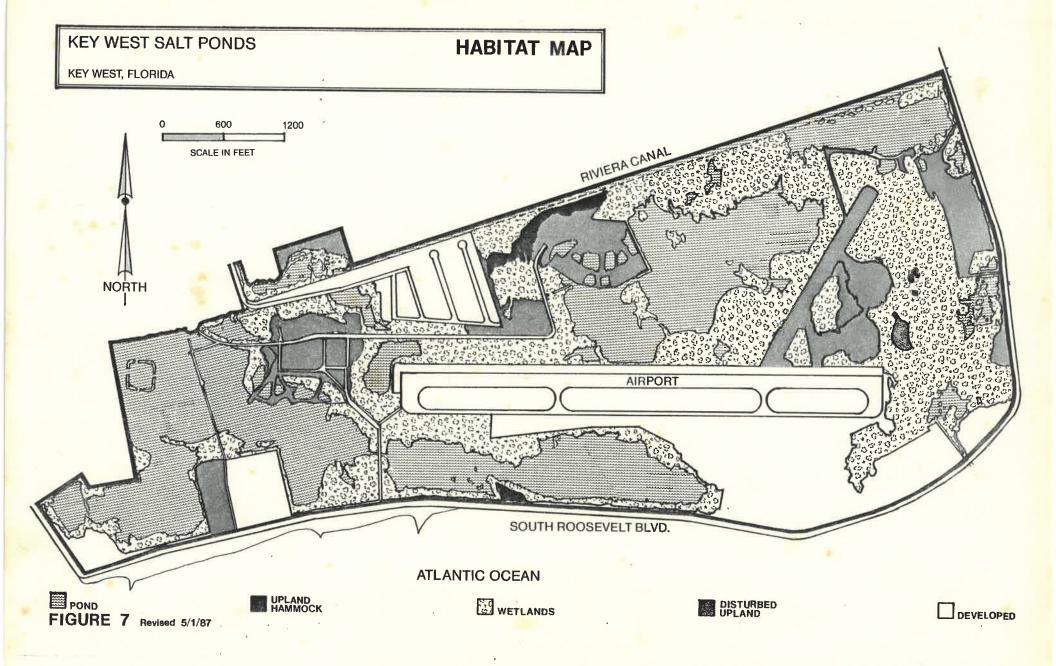
#### ACREAGES OF ALL HABITATS WITHIN PARCELS PROPOSED FOR INCLUSION

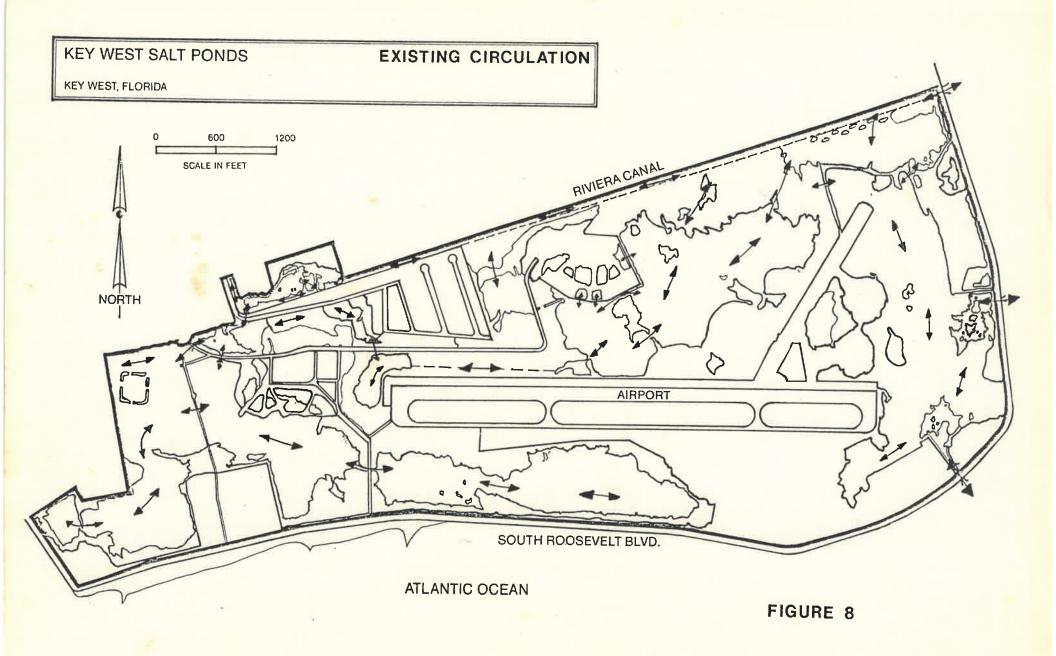
OWNERSHIP	RE#	TIDAL POND	MANG WET	TRANS WET	OPEN DIS'TRB	DEV UPLAND LAND EXOTICS	INPOUND POND	CANAL	UPLAND HAMMOCKS	TOTAL	ASSESSED VALUE
John Spottswood	6471		0.1		0.4					0.5	70,477
La Brisa East Condominium	6472	1.9	0.8							1 2.7 1	NA
Key Ambassador Co.	-6477	0.3	0.9							1.2	NA
Monroe County-KW Airport	6481	0.1	1.2	0.8	1.2	1.6				4.7	NA
Monroe County	6482		2.3		0.3					2.7	1111
Monroe County	6482	0.3	1.3		0.7					2.3	
Monroe County	6482	A	0.2							0.2	
Monroe County	6482		1.4		0.8					2.2	80,675
USA	6485	11.9	7.7	8.1	8.5	7.2	1.1			44.5	330,000
Monroe County	6485-1	31.9	6.6	0.3	0.7	0.2	1.1			39.6	
Dioc of Miami Rom	6509	0.6	1.1	0.0	1.4	0.2				3.2	328,713
Robert Lopez	6509.1	2.0	1.4		0.8						NA NA
Vincent Conley	6510	2.2	5.6		/1.9					4.2	195,000
Marjorie Allen-Key Ambassador					( 1.7					9.7	128,488
Vincent Conley	6511	0.1	0.1		180 m	550,00		14		0.2	2,275
	4512	8.9	15.2	6.4	10.9	1.9				43.3	333,897
Vincent Conley	6516	9.5	1.5	2.3	1.3					14.5	(168,000
Central Bank & Trust Co.	6541							8.7		8.7	915
Nat. Bank of Leesburg F1.	6544	0.6				'				0.6	549
City of Key West-Proposed Road	6545	1.6	2.7	2.2	1.3	0.2	0.2			8.2	41,175
A.E. Golan	6589	2.7	1.6		0.2					4.4	50,400
Joan T.Knight	6590	1.0	1.7		1.2		0.8			4.7 [	98,194
Ed B. & Marie Knight	6591		0.4		1.0		0.2			1.6	76,450
Marks.	6592		0.8	0.2	0.5	0.1				1.6	58,544
State of Florida-DNR	6593	22.8	10.5	3.3	3.1					1 39.8 1	147,335
USA	6594	14.7	2.8	1.2	8.4	1.2			0.6	1 2B.9 1	312,165
USA	6595		0.6	0.8						1.3	18,941
A.E. Golan	6596	10.4	1.4	0.6	0.7					1 13.2 [	110,600
A.M. Adams	6597	2.3	0.9	0.3	0.2					1 3.7 1	32,424
Albert J. Brown	6598	1.2	0.8		0.3					1 2.3 1	44,520
Florence Barnes	6599	1.6	0.4	0.1	0.3					2.4	44,520
Florida Keys Land Trust, Inc.	6600	0.6	0.1		0.1					0.9	15,120
Florida Keys Land Trust, Inc.	6601	0.5	0.1		0.1					0.7	
Raymond W. & Irene Mackay	6602	1.9	0.7	0.1	0.3					3.0 1	45,780
Context-Marks Corp-Isle In Sun	6618	1.3	10.1	19.8	5.1	1.0			0.3	37.5	2,678,649
City of Key West	6618	9.2	0.5	- 7 - 6	0.3	2.00			0.0	10.0	
Pan American Bank	6619	,	1.2	0.9	3.5	1.5	0.4	•		7.5	
Ed B. & Marie Knight	6621		0.1	0.1	0.5	0.4	V.7			1.1	87,026
Nature Conservancy	6622		1.9	3.7	0.3	3.1			1.6	10.5	214,036
USA	6623	1.9	2.5	1.4	1.8	0.2			1.4	1 9.3 1	
Pan American Bank	6624	7.1	5.0			0.2			1 +4		132,930
				1.6	1.0					14.7	133,630
Poticha, Marorstein, Graditor Monroe County-Right of Way	6625	10.5	0.3	0.7	1.3	1.0				14.3	171,000 NA
			0.3	0.1	0.1	1.0				1.5	MH
TOTAL		161.6	96.1	55.0	60.5	0.0 19.5	2.7	B.7	3.8	407.9	6,767,881

NOTE: Acreage figures are taken by planimeter and may differ slightly from Tax Assessor figures.

#### ACREAGES OF ALL HABITATS WITHIN SALT PONDS SYSTEM

OWNERSHIP	RE#	TIDAL POND	MANG WET	TRANS WET	OPEN DIS'TRB	DEV LAND	UPLAND EXOTICS	INPOUND POND	CANAL	UPLAND HAMMOCKS	! TOTAL
	5435					0.3					0.3
Hyatt-San Enterprises	5435					0.3					1 0.3
ey West Foundation Co.	5436	•				3.4					1 3.4
Key Ambassador Co.	5437					0.3					1 0.3
Cey Ambassador Co.	5438					0.3					1 (0.3
John Spottswood	6471		0.1		0.4						1 0.5
.a Brisa East Condominium	6472	1.9	0.8		1.2	3.7					1 7.6
Cey Ambassador Co.	6475		0.0			0.1					0.1
Key Ambassador Co.	6476				0.4	1.4					1 1.8
Key Ambassador Co.	6477	0.3	0.9		0.2	1.1					2.5
ey Ambassador Co.	6478		0.0		0.4	0.4					1 0.8
lyatt-San Enterprises	6479				0.7						1 0.7
Anthony & Molly Musca	6480				0.7	3.4					4.2
lonroe County-KW Airport	6481	12.7	15.5	22.9	0.9	101.7	2.7				156.4
Ionroe County	6482		2.3		0.3						1 2.7
Tonroe County	6482	0.3	1.3		0.7						1 2.3
lonroe County	6482		0.2								0.2
ionroe County	6482		1.4		0.8						1 2.2
Monroe County-Martello Towers	6484					14.2					14.2
JSA	6485	11.9	7.7	8.1	8.5		7.2	1.1			44.5
lonroe County	6485-1	31.9	6.6	0.3	0.7		0.2				1 39.6
Robert Lopez	6509.1	2.0	1.4		0.8						1 4.2
Dioc of Miami Rom	6509	0.6	1.1		1.4						3.2
/incent Conley	6510	2.2	5.6		1.7						1 9.7
Marjorie Allen-Key Ambassador	6511	0.1	0.1				•				0.2
/incent Conley	6512	8.9	15.2	6.4	10.9		1.9				1 43.3
Wade W. Knowles	6513		0.1		2.1		2.1				1 4.3
Key West Gardens Inc-KW By Sea	- 6514			0.0	0.6	3.1					1 3,8
Key West Gardens Inc-KW By Sea	6515					5.0					5.0
Vincent Conley	6516	9.5	1.5	2.3	1.3		24				14.5
Central Bank & Trust Co.	6541								8.7		8.7
Nat. Bank of Leesburg F1.	6544	0.6	0.0								1 0.6
City of Key West-Proposed Road	6545	1.6	2.7	2.2	1.3		0.2	0.2			8.2
A.E. Golan	6589	2.7	1.6		0.2						4.4
Joan T. Knight	6590	1.0	1.7		1.2			0.8			4.7
Ed B. & Marie Knight	6591		0.4		1.0			0.2			1 1.6
Marks	6592		0.8	0.2	0.5		0.1				1.6
State of Florida-DNR	6593	22.8	10.5	3.3	3.1						1 37.8
JSA ,	6594	14.7	2.8	1.2	8.4		1.2			0.6	28.9
JSA	6595	0.0		0.8							1.3
A.E. Golan	6596	10.4	1.4	0.6	0.7		0.0				13.2
A.M. Adams	6597	2.3	0.9	0.3	0.2						1 3.7
Albert J. Brown	6598	1.2			0.3						1 2.3
Florence Barnes	6599	1.6	0.4	0.1	0.3						2.4
Florida Keys Land Trust, Inc.	6600	0.6	0.1		0.1				•		0.9
Florida Keys Land Trust, Inc.	6601	0.5		0.0	0.1						1 0.7
Raymond W. & Irene Mackay	6602	1.9		0.1	0.3						1 3.0
City of Key West	6618	9.2			0.3						10.0
Context-Marks Corp-Isle In Sun		1.3		19.B	5.1		1.0		19	0.3	37.5
Pan American Bank	6619	0.0		0.9	3.5		1.5	0.4			7.5
Ed B. & Marie Knight	6621		0.1	0.1	0.5		0.4				1.1
Nature Conservancy	6622		1.9	3.7	0.2		3.1			1.6	1 10.5
JSA	6623	1.9		1.4	1.8		0.2			1.4	9.0
Pan American Bank	6624	7.1		1.6	1.0		0.0				14.7
Poticha, Marorstein, Graditor	6625	10.5		0.7	1.3						14.3
Monroe County-Right of Way			0.3	0.1	0.1	_	1.0				1 1.5
Fl. Dept. of Public Safety					0.5	0.9					1 1.0
			110.5	77.2		139.7	22.7	2.7	8.7	3.8	606.5





high caprock extending into the original large tidal ponds. The hammock adjacent to Rivera Canal (approx. 3.5 acres) contains a dense, well-developed low hammock with typical hardwood hammock vegetation including several noteworthy species and disturbed areas where the hammock is being invaded by exotic vegetation (Casuarina and Schinus). By removal of exotics and debris and planting of native species, this last remaining area of hardwood hammock on Key West has great potential for restoration.

Other upland habitats include old fill areas scattered through the pond system, some vegetated by predominantly exotic vegetation, some remaining as barren, compacted fill and others

maintained as mowed open space.

Types	Acres
Tidal Pond: Mangrove wetlands: Transitional wetlands: Open Disturbed: Upland exotics: Impounded pond: Canal: Upland hammocks:	161.6 96.1 55.0 60.5 19.5 2.7 8.7 3.8
Total	407.9

### B. Plants and animals.

Due to the varied nature of the habitats which exist in the Salt Ponds, the plant and animal communities are diverse with a number of species of special interest. Species lists of plants, birds and fish are provided as Attachment A. Those species given special designation on State and Federal lists of threatened and endangered plants and wildlife are so noted. Of particular interest are the diverse natural hammock and wetland community plants and several plant species (rough strongbark, a native spurge and cinnecord) with very limited natural occurences. A total of eight plant species are given special treatment by the various State and Federal lists used for review.

The value of the remaining ponds, wetlands and hammocks in the Salt Ponds system to birds is well documented due to the relative ease of observation and history of birding in the area. Birds of prey, (including bald eagle and swallow tail kites), wading birds, shorebirds, waterfowl and many perching birds feed, nest and roost in the area with a distinct seasonal variation due to the fact that the Key West area is a major stopover for many migratory birds. Most wading and water birds noted are present year around as are osprey, doves and some shorebirds. Little blue herons, white ibis, great blue and white herons, reddish egrets and green herons can be observed on virtually any visit to the ponds. Waterfowl are common in winter, along with birds of prey. White-crowned pigeons are common in summer in both hammock

and mangrove habitats. Many white-crowned pigeons observed throughout the city roost and possibly nest in the Salt Ponds. Twelve species of birds are given special consideration by the lists used for review.

Diversity of fish populations in the ponds is typically a function of stable water quality and therefore of distance from the open water culverts and Riviera Canal. Extremes of temperature (particularly in the summer) may be more limiting than salinity variations. The extensive seagrass and mangrove habitats in the eastern half of the Salt Pond system are known to function as a nursery for at least two species of snapper (LutJanus), grunts (Haemulon), barracudas (Sphyraena), mojarras (Eucinostomus and Gerres), pinfish (Lagodon), needlefish (Strongylura), crabs (Callinectes) probably pink shrimp (Penaeus) and spiny lobster (Panulirus) and others. Several species of killifish, particularly Cyprinodon variegatus are abundant throughout the interior ponds year around and provide a common food source for many of the wading birds. The Key Silverside, (Menidia conchorum), listed as a threatened species by the Florida Fish and Game Commission, has been reported from the western salt pond (Metcalf and Eddy, 1981). Toadfish, (Opsanus), a common food of the great white heron occurs throughout most of Benthic and infaunal invertebrates such as jelly fish (Cassiopeia), gastropod and bivalve mollusks, small crustaceans and polychaete worms are common. Many additional species of fish and invertebrates are expected to occur in the ponds and mangroves adjacent to Riviera Canal and in the northeast portion of the ponds.

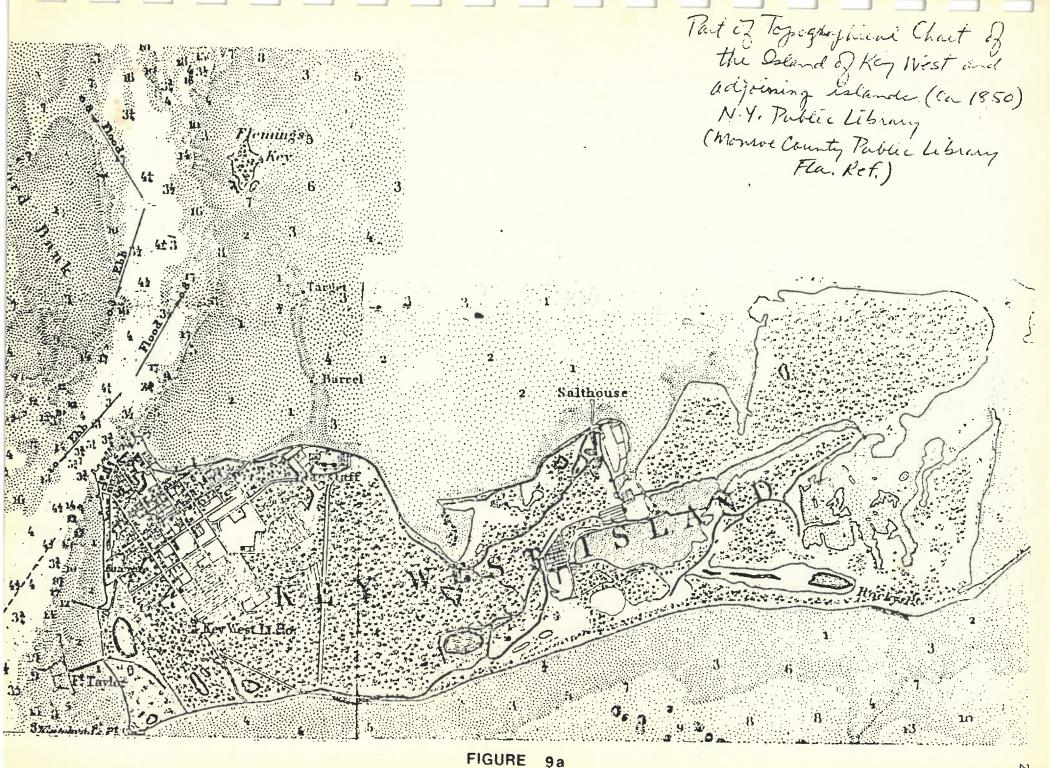
Attachment B includes photographs of various locations in the Salt Ponds with bird usage reflected.

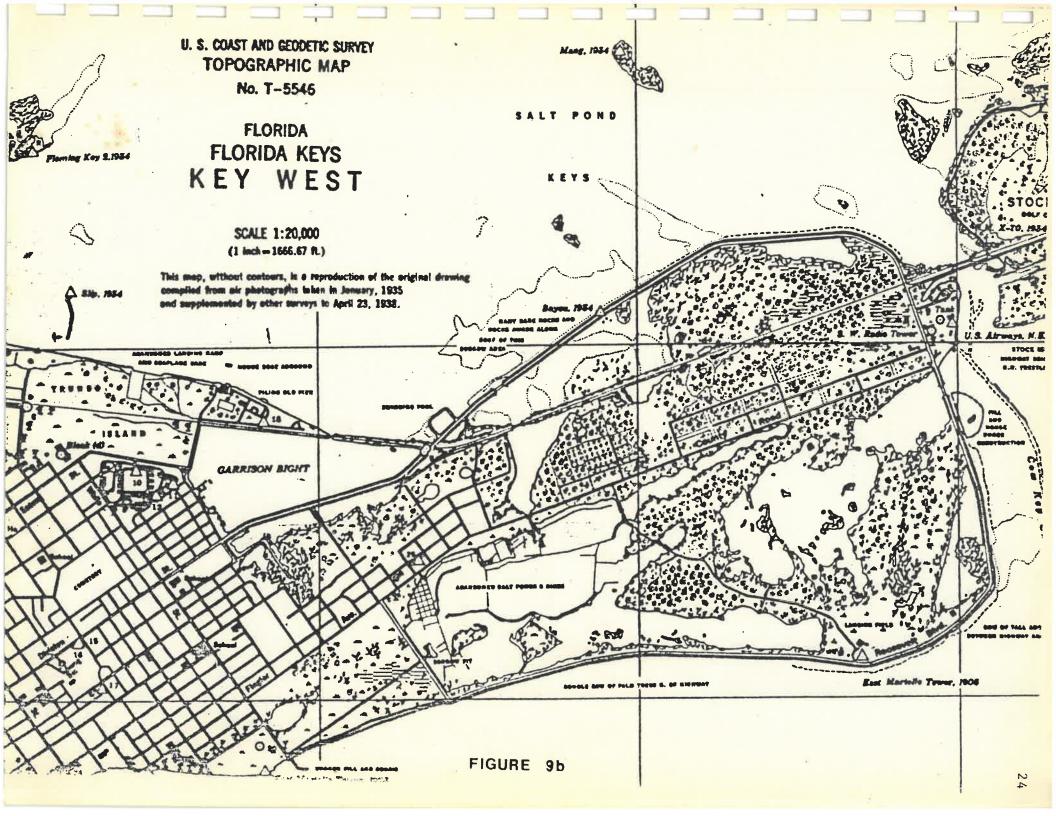
# C. Archeological and historical sites.

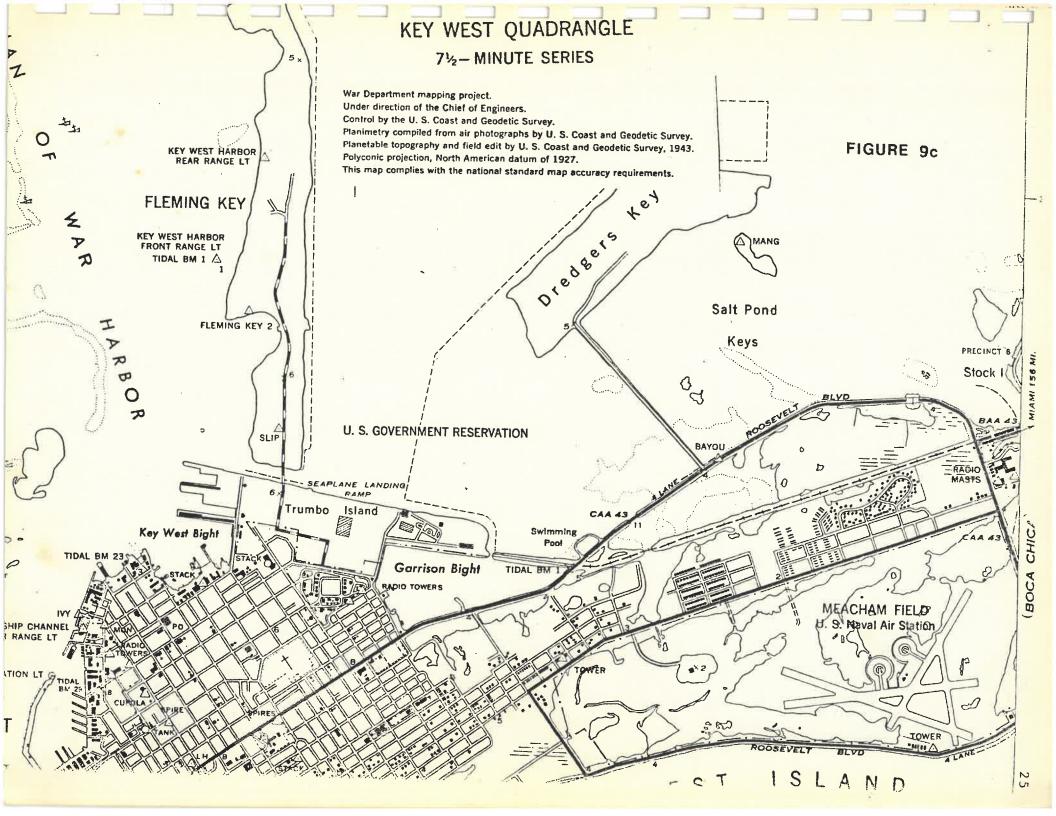
The name, Salt Ponds, is historical rather than an accurate description of the area today. The original salt pond located in the center of Key West's eastern end can be seen on the 1850 map, Figure 9a. Impounded except during extreme tides, the salt pond offered early settlers the island's most promising commercial industry, the manufacture of sea salt. From the 1830's until 1876 when the hurricane-plagued works were abandoned, the pond supplied salt to much of the nation. The remains of the evaporating pans and dike system can still be seen in the Westernmost pond where filling has not occured. Archaeologocal work in this area could shed new light on Florida's early history.

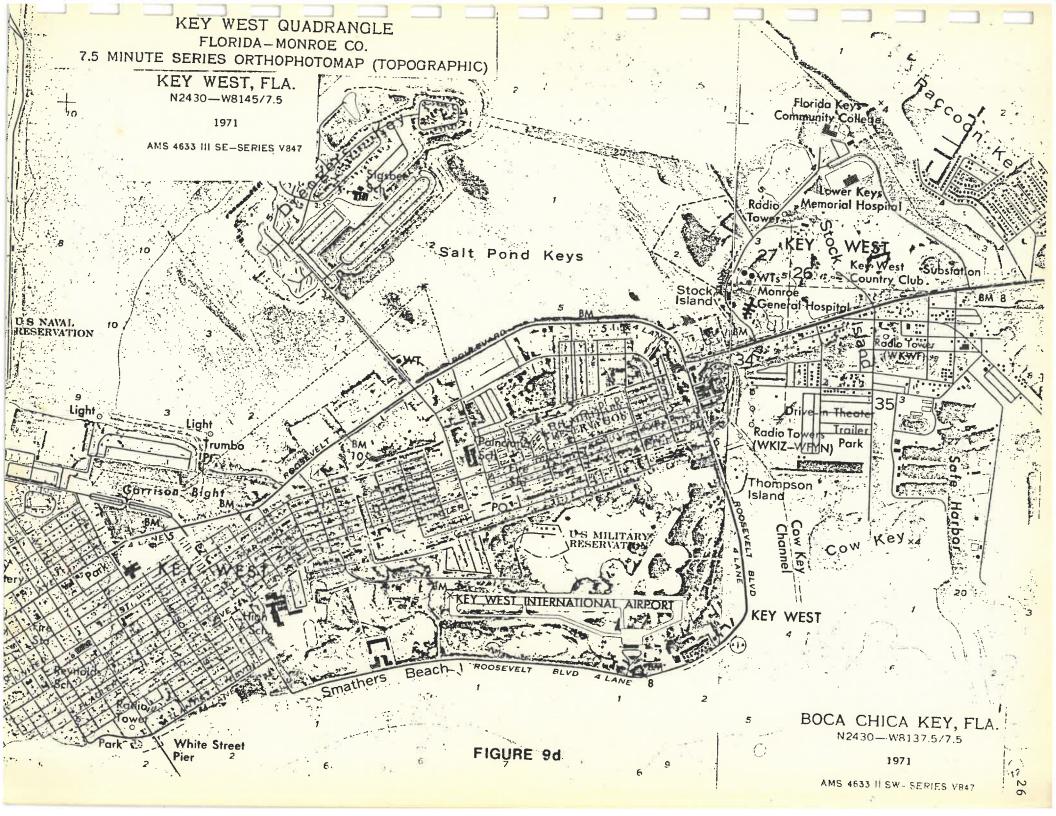
Long known for its birdlife, the area attracted the famous naturalist and painter John James Audubon, who explored it in 1832. "Flamingoes", he wrote, "are fond of resorting to the shallow ponds kept there as reservoirs of water for the purpose of making salt".

In the mid 19th century, a favorite picnic spot was the salt pond, where salt was being produced. It required several









hours to make the trip by wagon from the residential section of the island to the pond.

## D. Other Features.

The Salt Ponds comprise a productive wetland system, and Key West's last natural expanse. The value of the area's physical features which are typical of lower Keys wetland habitats is enhanced by the highly urban character of the rest of the island. The only remaining tropical hardwood hammock is located at the edge of the Salt Pond system. Scenic vistas of open water and wetlands provide much needed greenspace. Adjacent to a public beach, the Salt Ponds offer great recreational potential. This southeastern quarter of the island is also an important storm buffer. Limiting development may greatly reduce damage and loss of life in the event of a major hurricane.

The climate of Key West is sub-tropical buffered by the surrounding water masses. There is a distinct seasonality of rainfall which annually averages about 40 inches mostly from June through October. Average temperature is approximately 75° F., and extremes occur from about 50° to 90°F. The terrain of the Salt Ponds area is flat with maximum depths (outside the dredged areas) about -3.0'msl and maximum elevations of about +5.0 msl (except for mounds of the old missile base). Substrates include old compacted crushed rock fill, naturally occuring Miami oolite caprock, thin marl or organic sediments over caprock and a mixture of fines, shell hash and other biogenic sediments in the deeper ponds. Very little impervious surfaced presently exists in the area proposed for inclusion. Natural outcroppings of colitic caprock occur at scattered locations in the ponds and transitional wetlands. Daily average tidal range is about 1.3'in the Key West area and the maximum spring tide range about 3.0'.

### E. References.

See Attachment D for names and addresses of Ecologists with knowledge of the Salt Ponds area.

# 4. Influences on property.

The Salt Ponds have a long history of alteration by man. The major disturbance has been filling and the resultant disruption of tidal circulation. Filling has occured for a variety of public and private purposes. In 1927, South Roosevelt Boulevard was constructed, greatly reducing connections between the ponds and the sea. An airport soon followed in the middle of the Salt Ponds. Large areas were filled in for development of military facilities such as the now abandoned missile base north of the airport reached by paved Government Road from Flagler Ave. An unpaved service road crosses from Government Road to South Roosevelt Blvd. at the west end of the runway where Monroe County's Civil Defense station is located in an old underground

military bunker. A high school was built over much of the historic salt works. Commercial and residential developments have intruded into the area.

Figure 9 (a-d) is a series of topo maps dating from 1850 to 1971, that show how fill and road projects greatly reduced the tidal circulation and natural habitats within the original

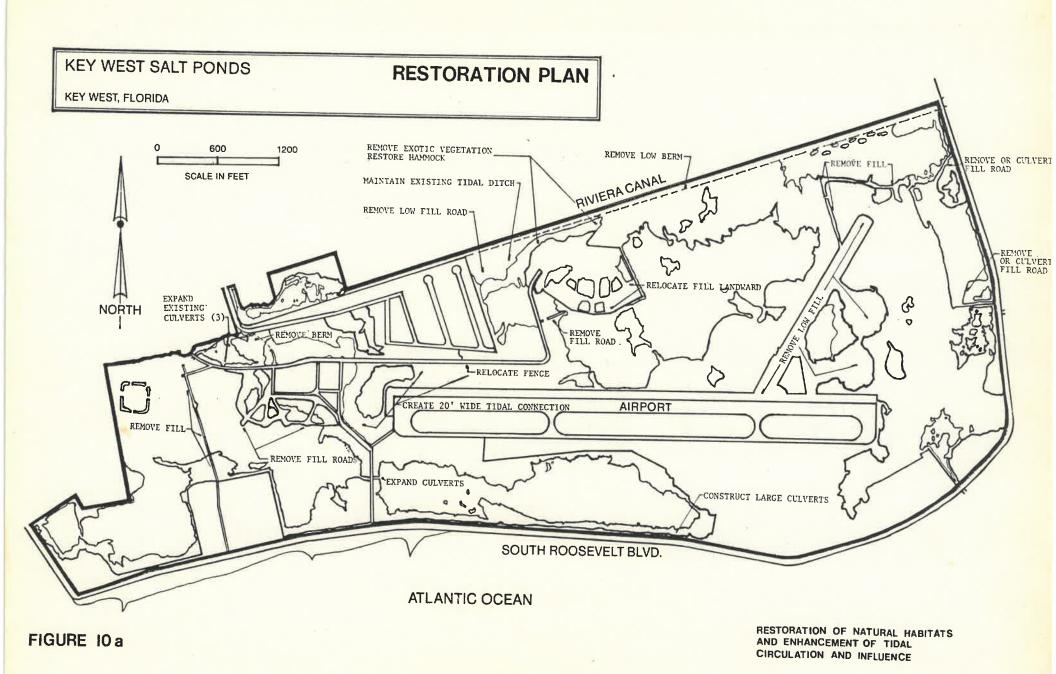
naturally occuring lagoon/wetland system.

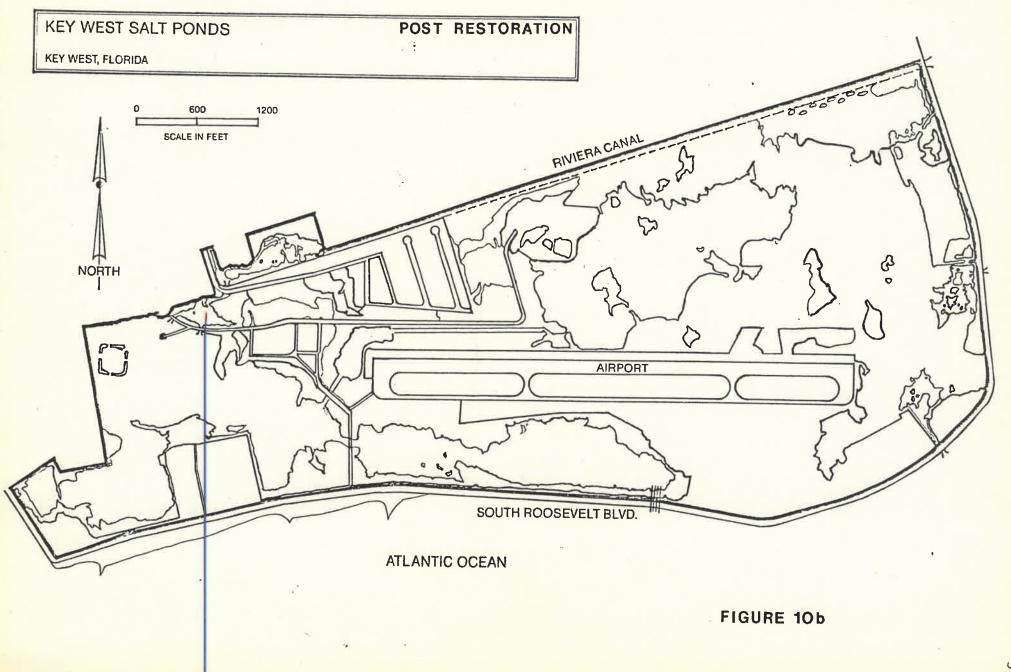
In recent years several restoration projects have begun to undo the damage. The replacement of culverts under the airport service road by the Florida Keys Mitigation Trust Fund, administered by Florida Audubon Society, restored tidal circulation to the pond south of the runway. The City of Key West recently has removed extensive berms along Riviera Canal, the ponds' main tidal source, and a fill road and pad behind its sewer lift station in the western pond. These projects have provided the City with thousands of dollars worth of fill needed for the Stock Island land fill. Plans for other restoration projects, including the removal of a sewer line which traverses the western pond, are in the works.

## B. Future Impacts.

Figure 10 is a proposed restoration plan for the Salt Ponds system which could lead to significant restoration of natural habitats, through control of exotic vegetation and enhancement of tidal circulation, through removal of fill and installation and expansion of culverts. If accomplished, water quality in the interior ponds would be stabilized. Flushing would be improved in all ponds leading to greater fishery production, more extensive seagrass habitat, increased food sources for the birds of the area and aesthetic improvement. Water circulation in subtropical, shallow water habitats is extremely important in determining health, productivity, diversity and abundance of plants and animals. Large tidal culverts connecting the Atlantic Ocean to the southeast corner of the southern pond (presently most severly semi-impounded) would likely change the bottom of this 30 acre lagoon from an essentially unvegetated condition to a productive seagrass habitat. A sound, basic hydrological survey should be conducted to determine optimum size and location of restorative culverts and tidal improvements proposed within the Sources of funding include city, county and state funds that can be committed for restoration efforts in the public interest, the Florida Keys Mitigation Trust Fund and civil fines and community service obtained from violators of environmental regulations.

Areas surrounding the Salt Ponds are already intensely developed for residential, commercial and public service uses. With little open space remaining on the island, pressure to develop uplands within the Salt Ponds area is great. Presently planned developments include a Hyatt Hotel and The Marks condiminium project of 1120 units. The airport would like to extend its runway 600 feet to the west, filling in a tidal pond





frequented by migrating waterfowl and wading birds. Probable impacts are degradation of the ponds and wetlands through gradual expansion and pollution from stormwater runoff and other sources. Continued lack of management of these urban wetlands will lead to ever increasing problems with dumping and vagrants.

C. Land use plan and zoning.

Zoning for most of the Salt Ponds, including submerged land, is R2H, multifamily high rise development. Zoning for the central portions north of the airport is single family. See Figure 11. The R2H zoning designation conflicts with the city land use plan, which calls for 1 unit per acre, 10% lot alteration in environmentally sensitive areas.

Zoning has not changed during the last ten years, but some local ordinances have limited the size of future developments. For example, submerged land can no longer be included in allowable lot coverage calculations.

## 5. Recognition.

See Florida Natural Areas Inventory listings, Figure 13.

#### 6. Management.

## A. Significant problems.

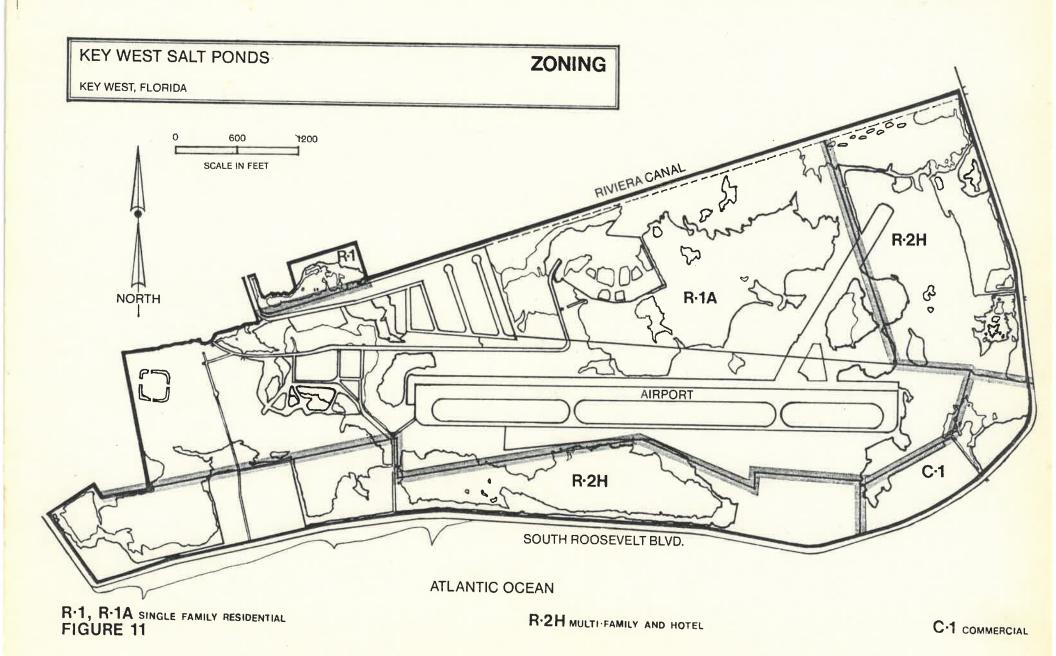
Lack of management has resulted in problems typical of open spaces near cities. These include off-road vehicles, illegal camping, littering, pollution, dumping and introduced species. Filling has resulted in dimished tidal circulation, siltation and the loss of historical sites. The Salt Ponds' natural systems are, nevertheless, intact.

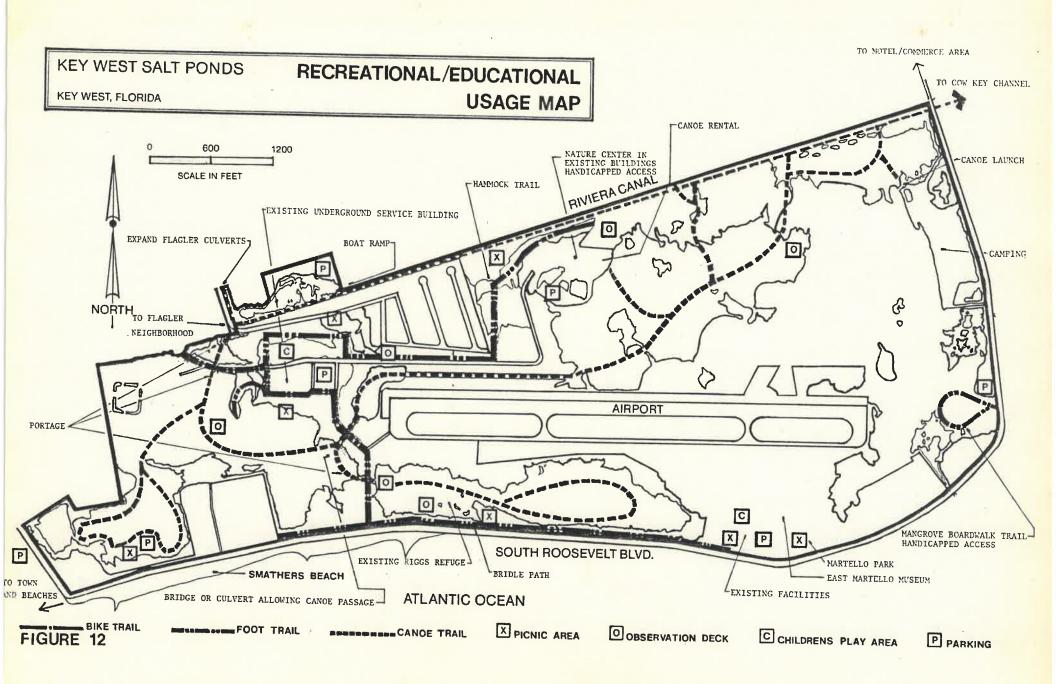
# B. Proposed use and plans for management.

These wetlands in an urban context offer great recreational and educational potential for the 25,000 residents of Key West, almost half the entire population of Monroe County, and for the hundreds of thousands of tourists drawn annually by the natural attractions of the Keys.

The area is of manageable size, and close to the State park at Ft. Taylor for administrative purposes. Existing facilities include buildings which could serve a variety of uses. Some work restoring natural shorelines and enhancing strategic tidal connections would, without too much difficulty and expense, provide Key West's only onshore recreational opportunities in a natural setting. Figure 12 recommends specific public facilities.

The establishment of a park in the Salt Ponds would be of benefit to the large Flagler Avenue neighborhoods which suffer from a dirth of such facilities. The Salt Ponds via Government Road could provide nearby playgrounds, picnic areas and quick access to Smathers Public Beach by a walking/biking path. Front-





# FLORIDA NATURAL AREAS INVENTORY

254 East Sixth Avenue • Tallahassee, Florida 32303 • (904) 224-8207

July 14, 1986

Joan Borel 1407 United Street Key West, Florida 33040

Dear Joan,

This is to follow up our phone conversation of 11 July. We have several elements in the Florida Natural Areas Inventory data base occurring in or immediately adjacent to the Key West Salt Ponds.

The Key Silverside (Menidia conchorum, FNAI rank G2QS2, State Listed Threatened) is known from the Salt Ponds. Our source for this information is the Ph.D. dissertation of C. D. Getter (1981, University of Miami). My information indicates that he collected the species at three stations within the salt pond system.

Recently, I had the opportunity to inventory a small Rockland Hammock on Nature Conservancy property just west of the radar station. I was able to confirm occurrences of several Special Plants in or near the hammock, including Chamaesvee porteriana var. scoparia (Porter's broom spurge, FNAI rank G2T2S2, Federal Candidate Category C1); Bourreria radula (FNAI rank G2G3S1, only recently confirmed U.S. occurrence and one of less than 5 even reported for U.S.); Acacia choriophylla, (FNAI rank G4S1, State listed Endangered), Sophora tomentosa (FNAI rank G3G5S3), Jacquinia kevensis (FNAI rank G3G5S3, State listed Threatened), and Suriana maritima (FNAI rank G3G5S3, State listed Endangered). Thrinax floridana (FNAI rank US2, State listed Commercially Exploited), Thrinax microcarpa (FNAI rank G3G4S3, State listed Commercially Exploited) and Coccothrinax argentata (FNAI rank G3G4S3, State listed Commercially Exploited) have been reported from the site, but I did not seem them during my brief visit. I have enclosed a brief explanation on the FNAI ranks.

There may be additional fragments of Rockland Hammock or Marl Prairie, the Natural Communities in which the above plants occur, around the perimeter of the Salt Ponds. The entire area in and around the Salt Ponds merits a thorough botanical inventory.

Although partially disturbed, the Key West Salt Pond area appears to be the only remaining portion of Key West (and perhaps the three lowest Keys), with natural vegetation. As such, the Salt Ponds are an important biological resource and are worth protecting. I hope you are successful in your efforts to protect and properly manage some portion of this site.

Joan Borel July 14, 1986 Page Two

If you need additional information, please contact our office.

Sincerely,

E. Dennis Hardin, Ph.D.

Research Botanist

EDH/jsl encl.

#### FLORIDA NATURAL AREAS INVENTORY

#### **Element Rank Explanations**

An element is any exemplary or rare component of the natural environment, such as a species, plant community, bird rookery, spring, sinkhole, cave or other ecological feature. An element occurrence (EO) is a single extant habitat which sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element. The major function of the Florida Natural Areas Inventory is to define the state's elements of natural diversity, then collect information about each element occurrence.

The Florida Natural Areas Inventory assigns 2 ranks for each element. The global element rank is based on an element's worldwide status; the state element rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of element occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

#### Global Element Rank (priority)

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some biological or man-made factor.
- G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction because of other factors.
- G4 = apparently secure globally (may be rare in parts of range)
- G5 = demonstrably secure globally
- GU = possibly in peril range-wide, more information needed
- GH = of historical occurrence throughout range, may be rediscovered (e.g., ivory-billed woodpecker)
- GX = believed to be extinct throughout range
- G#? = Tentative rank (e.g., G2?)
- G#G# = range of rank; insufficient data to assign specific global rank (e.g., G2G3)
- G#T# = rank of taxonomic subgroup such as subspecies or variety; numbers have same definition as above (e.g., G3T1)
- G#Q = rank of questionable species ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
- G#T#Q = same as above, but validity as subspecies or variety is questioned.
- U = unranked (temporary)
- State Element Rank (priority) definition parallels global element rank: substitute "S" for "G" in above global ranks, and "in state" for "globally" in above global rank definitions.

#### Additional state element ranks:

- SA = accidental in Florida, i.e., not part of the established biota
- SE = an exotic species established in state; may be native elsewhere in North America

#### FEDERAL/STATE LEGAL STATUS

#### FEDERAL

- LE = Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. An "Endangered Species" is defined as any species which is in danger of extinction throughout all or a significant portion of its range.
- PE = Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LT = Listed as Threatened Species. A "Threatened Species" is defined as any species which is likely to become an endangered species within the forseeable future throughout all or a significant portion of its range.
- PT = Proposed for listing as Threatened Species.
- C1 = Candidate Species for addition to the List of Endangered and Threatened Wildlife and Plants, Category 1. Taxa for which the U.S. Fish and Wildlife Service currently has substantial information on hand to support the biological appropriateness of proposing to list the species as endangered or threatened.
- C2 = Candidate Species, Category 2. Taxa for which information now in possession of the U.S. Fish and Wildlife Service indicates that proposing to list the species as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threat(s) are not currently available to support proposed rules at this time.
- 3A = Candidate Species. Category 3A. Taxa which are no longer being considered for listing as endangered or threatened because of persuasive evidence of extinction.
- 3B = Candidate Species, Category 3B. Taxa which are no longer being considered for listing as endangered or threatened because the names do not represent taxa meeting the Endangered Species Act's definition of "species".
- 3C = Candidate Species, Category 3C. Taxa that have proven to be more abundant or widespread than was previously believed and/or those that are not subject to any identifiable threat.
- AC = Agency Concern. Species which are not currently listed or candidates, but which are a matter of concern to the U.S. Fish and Wildlife Service.
- N = Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

#### STATE

#### Animals

- LE = Listed as Endangered Species by the Florida Game and Fresh Water Fish Commission. An endangered species is defined as a species, subspecies, or isolated population which is resident in Florida during a substantial portion of its life cycle and so few or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the State, or which may attain such a status within the immediate future unless it or its habitat are fully protected and managed in such a way as to enhance its survival potential; or migratory or occasional in Florida and included as endangered on the United States Endangered and Threatened Species List. This definition does not include species occurring peripherally in Florida while common or under no threat outside the State.
- LT = Listed as Threatened Species by the Florida Game and Fresh Water Fish Commission. A Threatened Species is defined as a species, subspecies, or isolated population which is resident in Florida during a substantial portion of its life cycle and which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is declining in area at a rapid rate due to any man-made or natural factors and as a consequence is destined or very likely to become an endangered species within the foreseeable and predictable future unless appropriate protective measures or management techniques are initiated or maintained; or migratory or occasional in Florida and included as threatened on the United States Endangered and Threatened Species List. This definition does not include species occurring peripherally in Florida while common or under no threat outside the State.
- LS = Listed as Species of Special Concern by the Florida Game and Fresh Water Fish Commission. A Species of Special Concern is defined as a species, subspecies, or isolated population which warrants special protection, recognition, or consideration because it occurs disjunctly or continuously in Florida and has a unique and significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable and predictable future, may result in its becoming a threatened species unless appropriate protective or management techniques are initiated or maintained; may already meet certain criteria for consideration as a threatened species but for which conclusive data are limited or lacking; may occupy such an unusually vital and essential ecological niche that should it decline significantly in numbers or distribution other species would be adversely affected to a significant degree; or has not sufficiently recovered from past population depletion.

N = Not currently listed, nor currently being considered for listing.

#### Plants

- LE = Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. "Endangered Plants" means species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
- PE = Proposed by the Florida Department of Agriculture as Endangered Plants.
- LT = Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. "Threatened plants" means species native to the state that are in rapid decline in the number of plants within the state. but which have not so decreased in such number as to cause them to be endangered.
- PT = Proposed by the Florida Department of Agriculture for listing as
  Threatened Plants.
- CE = Listed as a Commercially Exploited Plant in the Preservation of Native Flora of Florida Act. "Commercially exploited plants" means species native to the state which are subject to being removed in significant numbers from native habitats in the state and sold or transported for sale.
- PC = Proposed by the Florida Department of Agriculture for listing as Commercially Exploited Plants.
- N = Not currently listed, nor currently being considered for listing.

ing the ponds is the Bridle Path, a palm-lined promenade along the Atlantic connecting Smathers Beach with East Martello Museum. Acquisition would ensure the continued existance of the privately owned Bridle Path, already heavily used by the public for walking, overflow from Smathers Beach activities and parking.

In the Keys, State operated camp grounds are reserved far in advance in tourist season. There are no such facilities south of Bahia Honda Key at this time to appeal to the large market of families and others interested in outdoor activities. The Salt Ponds contain a wide variety of habitats and support quantities of fish and the birdlife that feeds upon them. The isolated mangrove creeks along Riviera Canal are inaccessible except by canoe. A canoe rental concession, marked routes and landings would make exploration of the shallow ponds a real attraction, especially in winter tourist season when weather often prevents enjoyment of less sheltered waters. A boat ramp and parking at the end of 11th Street off Flagler Avenue would give water access to Riviera Canal and Cow Key Channel.

The conversion of facilities at the abandoned missile base into a nature center and a trail through the adjacent hammock would serve to inform people about the plants and animals that inhabit this unique and endangered environment. Placement of elevated boardwalks and observation blinds would allow visitors a close look at the Keys' renowned wading birds.

Bringing large numbers of people into contact with their environment increases their appreciation of its systems and value, through first hand experience. The potential educational effects of such projects are far reaching and help increase interest in the conservation of natural resources.

C. Entity recommended to manage project.

Because of the large potential for usage and the nature of this project, it is recommended that the State of Florida, Department of Natural Resources manage the area as a park facility. Other entities who could manage or assist with management include the City of Key West, Monroe County, Florida Audubon Society and the Florida Keys Land Trust.

Road directions.

The project site is easily accessible via State road A1A or Flagler Avenue turning at Government Road. See Figure 1.

8. Ownership of property, names and addresses.

See Figure 14.

- 9. Valuation and acquisition.
  - A. Fair market value is unknown.

10117	Kn.		
(g)	OWNERSHIP O	F PROP	ERTY
64			s (from 1986 tax records)
64	13		
647	l Spottswood, John M. Jr.	K16580	Color Flores 1
	500 Fleming St.	10000	Golan, Florence et al. c/o Nancy Thornburgh
	Key West, FL 33040		P.O. Box 2404 5 29 ANZA ST,
			Key West Et 230/1
647		1	Key West, FL 33041 AN FRANCISCO
	1901 S. Roosevelt Blvd.	6590	Knight, Joan T. 4412
	Key West, FL 33040	4	P.O. Boy 07/
	4	1	Key West, FL 33041\$141,781
_ 6477	J Company	1	3304. 19141, 781
	c/o Leonard W. Golan Ltd.	6591	Knight, Edward B. & Marie J.
	2500 Prudential Plaza	7	(see above, RE # 6590)
	Chicago, IL 60601		\$38,019
( / 0 1		6592	Marks, Herman & Marks, Paul
6481	County of Monroe		Marks, Eugene & Marks, Stanley
6492	Country of W		Marks, Lawrence
0402	County of Monroe		8219 NW 74th Ave.
6485 1	County of Monroe		Miami, FL 33166
0,05.1	county of Monfoe	6.500	
6485	United States of America	6593	
	onitied brates of America		Imp. Trust Fund of the ST of FL
6509	Carroll Coleman		3900 Commonwealth Blvd.
	Dioc. of Miami		Tallahassee, FL 32302
	ROM Church- 6301 Biscayne Blvd.	6594	United States of America
	Miami, FL 33138	03,4	onited States of America
		6595	United States of America
6509.1	Lopez, Robert T.		- America
•	1512 Rooseyelt Blvd.	6596	Golan, Florence et al
1	Key West, FL 33040		c/o Nancy Thornburgh
1	TAYLOR Warren	W. Jr.	P.O. Box 2404
6510	conley, vrncent		Key West, FL 33041
	c/o J.C. Lilieblodh 419 Broad	St	
	Continental Bank	6597	Adams, A.M. et al
and the second	30 N LaSalle St, 6th Floor Va	10	c/o Joan Knight
1/1	Chicago, IL 60093	10	P.O. Box 974
6511	Allen, Marjorie		Key West, FL 33041
<b>V J</b> · · ·	813 Waddell St. \$25	6500	
1	Key West, FL 33040	6598	Brown, Albert J. et al
	1		2101 Seidenberg Ave.
6512	Conley, Vincent		Key West, FL 33040
	(see RE # 6510)	6599	Barnes, Florence
			109 West Moreland Ct.
6516	Conley, Vincent		Sarasota, FL 33040
	(see RE # 6510)		
		6600	FL Keys Land Trust
6541	Central Bank & Trust of Miami		P.O. Box 1432
7	FL Trustee- c/o JC Liliabladh		Key West, FL 33041
	30 N. LaSalle St., 6th Floor		
//	UU16900 II 60603	6601	77 77 77 77 77

6601

6602 Mackay, Raymond W. & Irene 2047 NW Pine Lake Dr. Stuart, FL 33494

FL Keys Land Trust

(see above, RE # 6600)

6544

Chicago, IL 60693

First Natl. Bank of Leesburg F1

Trustee- c/o JC Liliabladh (see above, RE # 6541)

6618 Marks, Larry et al (see RE # 6592)

6618.1 City of Key West

Pam American Bank National Association c/o 1313 NW 36th St. Miami, FD 33142

KNIGHT, ED. B. & MARIE J. P.O. Box 974

Knight, Edward B. & Marie J. P.O. box 974 Key West, FL 33041 \$147,005

6622 Nature Conservancy 1800 North Kent St. Arlington, VA 22209

6623 United States of America

6624 Pam American National Assoc. (see RE # 6619)

6625 Graditor, Sherry & Marmorstein Gail & Potica, Myrna S. 1607 Friar Tuck Highland Park, IL

County of Monroe (Right-of-way)

76541 Coval:

\$ 15T AM BANKS TRUST

(frust # 010597) 1926 10th Ave N.

Jake Worth, FL. \$100

Little Hamaca - 715,323

- B. For documentation of current assessed value by County Tax Assessor, see Figure 15.
  - C. Owners'willingness to sell.

Owners of submerged and wetland areas have been prevented from developing their lands by State and Federal regulations and currently pay taxes on property they cannot sell. The acquisition of their properties would provide an equitable solution. Acquisition of the few remaining upland and developable parcels is critical, although the asking prices may be high. Failure to protect these surrounding uplands may damage the long term viability of the whole Salt Ponds system.

10. Threat, endangerment or vulnerability.

Key West and the Florida Keys are under such great developmental pressure that the area has been declared of Critical State concern. The state has stepped in to help preserve and maintain the unique environment of the Keys.

Nowhere is the pressure to build greater than on Key West, where little remains undeveloped outside the Salt Ponds area. While the Salt Ponds are largely typical of lower Keys wetland habitats, their location on the otherwise heavily populated island makes them unique. The current situation facing these urban wetlands is critical. The cumulative effect of presently planned projects will seriously degrade these valuable marine nurseries which help support the commercial and sport fishing industries and provide habitat and feeding areas for large numbers of birds.

Immediate State acquisition appears to offer the only alternative to the large condominium development planned by the Marks Brothers near the eastern end of the runway. The Marks began work on the Island in the Sun development in 1972, but became involved in permit rewiew and legal challenges by the State and Federal governments which lasted about twelve years. The Marks have prevailed in court regarding their grandfathered rights to fill tidal wetlands for development and now plan to move forward with the construction of 1120 units in five story buildings, breaking the island's last natural expanse. The Marks' parcel is the keystone of the large eastern ponds area. Its development will endanger surrounding wetlands and open up possibilities for development of adjacent parcels with old filled areas. was issued in the last month for the construction of a Hyatt Hotel complex to be situated across from Smathers Beach.

Airport expansion also threatens the ponds. A pending proposal calls for extending the runway 600 feet to the west, filling in a tidal pond, diminishing the area's recreational potential and decreasing the safety zone between the runway and the nearby high school.

Now is the time that steps must be taken if the Salt Ponds are to continue to exist. Without a major acquisition program, the threatened development and its accompanying degradation of natural systems will become reality, and this valuable resource will be lost to the people of Key West.



### Monroe County Property Appraiser

COUNTY COURTHOUSE

P.O. BOX 1176 KEY WEST, FLORIDA 33040 PHONE (305) 294-6656

ERVIN A. HIGGS, C.F.A.-CRA

July 11, 1986

Ms. Joan Borel Audubon House 205 Whitehead St. Key West, FL 33040

Dear Ms. Borel:

Listed below are the 1985 appraised values for Monroe County tax roll per your request.

At this time we are unable to give market value on subject properties. The acreage sizes on the report vary from acreage sizes on city maps.

Sincerely,

ERVIN A. HIGGS, C.F.A. PROPERTY APPRAISER

Paul G. Watler, Deputy

Land Department

EAH/PGW/crc

NOTE: The following appraised values have been updated as to show values from the 1986 tax roll.

( July, 1987 )

FIGURE 15-A

Page 2
Joan Borel
July 11, 1986 (Revised July, 1987)

### 1986 ASSESSED VALUES ON THE FOLLOWING PARCELS:

	RE #	OWNER	ACREAG	F.	VALUE (\$)
	6470 14-4	KNIGHT , JOAN	HORLAG		
1)	6471	Spottswood	0 5 40	res .46	6 70 677
2)	6472 2	La Brisa Condominiums, East			
3)	6477 12	Key Ambassador	: (PO	rtion)	1.4 <del>e</del> (27)?
4)	6481	Monroe County	: (Po	rtion)	(171 (1,2)?
5)	6482			rtion)	?
6)	6485	Monroe County USA	7.4		80,675
7)	6485.1		43.12		330,000
8)		Monroe County	42.69		328,713
<del>-</del> 9)	6500 1	Coleman (Miami Dioceses)		rtion) 4	1.93 (1.7) ?
	6509.1	Lopez	4.2		195,000
10)	6510 10	Conley	9.33	8.74	128,488
11)	(511				
	6511 II	Allen	0.50	.25	2,275
12)	6512 D-B	Conley	46.55	46.55	333,897
13) 15/0	6516 10-A	Conley	14.19	14.26	168,000
14)	6541 5B	Central Bank & Trust (CANAL)	10.73		915
15)	6544 16	Natl. Bank of Leesburg, FL	0.57	.57	549
	6545	City of Key West	8.2		41,175
	6589 15	Golan - NANCYTHOEN BURGH	4.13	4,13	50,400
18)	6590 14	Knight John	4.13	4.13	98,194
19)	6591 13-4	Knight FA MARIE	1.45	1.45	76,450
20)		Marks	0.62	11.75	58,544
			0.02		50,544
21)	6593	Board of Trustees	38.83		147,335
22)		USA	29.73		312,165
23)		USA	1.38		18,941
24)	6596 4	Golan KENTSTHOPNBURGH	13.03	13.00	
	6597 3	Adams	3.82	3.82	110,600
	( = 0 0	Brown	2.58		32,424
		Barnes Northern TEUST FANK OF HE		2.54	44,520
		FL Keys Land Trust	2.57	2.62	44,520
		FL Keys Land trust	0.92		15,120
		Mackay .	0.94	_	15,120
		nackay	3.12	3.21	45,780
31)	6618	Marks	E 1 22		0 (70 (1)
			51.32 19:00 (Por		2,678,649
		City of Key West	POI		?
		Pan American Bank	8.85	9,90	600,333
_		Knight , Ed & March	1.03	1.03	87,026
		Nature Conservancy	10.23	10.73	214,036
		USA	12.66		_132,930
		Pan American Bank	18.18	14.96	133,600
	625	Graditor MARMORSTEIN, POTKHA	13.38	14.86	171,000
39	? 1	Monroe County, right-of-way	1.5		8
					1304.000
				173,69	

173.69

- 10.52

163, 17

### Literature Cited

Metcalf and Eddy, 1981 Environmental Assessment for Key West Airport Expansion Project.

ATTACHMENTS

PLANTS KNOWN TO OCCUR WITHIN THE SALT PONDS SYSTEM LISTED BY TYPICAL HABITAT

(List compiled from sources including A. Williams, L. Pierce, Metcalf and Eddy (1981) and personal observations of proposal preparers.)

### WETLAND HABITATS

AIZOACEAE - Amaranth Family

Alteranthera maritima Philoxerus vermicularis Sesuvium portulacastrum

CHAFF FLOWER BEACH CARPET SEA PURSLANE

ASTERACEAE - Aster Family

Baccharis halimifolia Borrichia arborescens Borrichia frutescens Flaveria linearis Iva sp. SALT BUSH SEA OXEYE SEA OXEYE YELLOWTOP ELDER

AVICENNIACEAE - Black Mangrove Family

Avicennia germinans

BLACK MANGROVE

BATACEAE - Saltwort Family

Batis maritima

SALTWORT /

CHENOPODIACEA - Goosefoot Family

Salicornia bigelovii Salicornia virginica Suaeda linearis Cakile fusiformis

ANNUAL GLASSWORT
PERENNIAL GLASSWORT 
SEA BLITE
SEA ROCKET

COMBRETACEAE - Combretum Family

Conocarpus erecta Conocarpus erecta sericea Laguncularia racemosa

GREEN BUTTONWOOD SILVER BUTTONWOOD WHITE MANGROVE

ATTACHMENT A-1

1084 TMHWL

CYPERACEAE - Sedge Family

Cladium jamaicensis Cyperus sp.

Fimbrystylis castanea

SAWGRASS FLAT SEDGE

RED LEAVED SEDGE

GENTIANCEAE - Gentian Family

Eustoma exaltatum

SEASIDE GENTIAN

POACEAE - Grass Family

Andropogon glomeratus
Chloris glauca
Distichlis spicata
Monanthochloe littoralis
Panicum virgatum
Paspalum vaginatum
Spartina spartinae
Spartina patens
Sporobolus virginicus

BROOM SEDGE GRASS SALTMARSH CHLORIS SALT GRASS KEY GRASS SWITCH GRASS SALT JOINT GRASS CORD GRASS CORD GRASS CORD GRASS

RHIZOPHORACEAE - Mangrove Family

Rhizophora mangle

RED MANGROVE

SCROPHULARIACEA - Figwort Family

Agalinus maritima

FALSE FOXGLOVE

SOLANACEA - Nightshade Family

Solanum eleagnifolium Lycium carolinianum

WHITE HORSE NETTLE CHRISTMAS BERRY

SURIANACEAE - Bay Cedar Family

Suriana maritima (FDA/E, FNAI)

BAY CEDAR

THEOPHRASTACEAE - Theophrasta Family

Jaquinia keyensis (FDA/T, FNAI)

JOEWOOD

### UPLAND HABITATS

ACANTHACEAE - Acanthus Family

Dicliptera assurgens

FALSE MINT

ANACARDIACEAE - Cashew Family

Metopium toxiferum
Schinus terebinthifolius

POISONWOOD BRAZILIAN PEPPER

APOPCYANCEAE - Oleander Family

<u>Urechites lutea</u> <u>Echites umbellata</u>

WILD ALMANDA VINE RUBBER VINE

ARECAECEAE - Palm Family

✓ Coccothrinax argentata (FNAI, FDA/CE)

Thrinax morrissii T
Thrinax radiata
Phoenix sp

SILVER PALM
KEYS BRITTLE THATCH PALM
JAMAICA THATCH PALM
DATE PALM

ASCLEPIADACEAE - Butterfly Weed Family

Sarcostemma clausa Cynanchum northropiae Cynanchum scoparium

WHITE TUBER VINE FRAGRANT VINE LEAFLESS CYNANCHUM

<u>ASTERACEAE</u> - Aster Family

Bidens pilosa
Bidens alba
Eupatorium incarnatum
Ambrosia hispida
Aster tenuifolius
Gaillardia pulchella
Melanthera parvifolia
Pluchea odorata
Ageratum littorale
Wedelia trilobata

BURMARIGOLD
SPANISH NEEDLE
BLUE MIST FLOWER
COASTAL RAGWEED
ASTER
BLANKET FLOWER
ASTER
BUSHY FLEABANE
ASTER
WEDELIA

BORAGINACEAE - Borge Family

Cordia globosa v. humilis
Heliotropium curassavicum
Bourreria ovata
Bourreria succulenta v. revoluta (FNAI)

BUSH GEIGER
SEASIDE HELIOTROPE
STRONGBARK
ROUGH STRONGBARK ——

BROMELIACEAE - Pineapple Family

Tillandsia circinata (FDA/T)

Tillandsia usneoides

TWISTED AIRPLANT SPANISH MOSS

BURSERACEAE - Torchwood Family

Bursera simarouba

GUMBO LIMBO

BYTTNERIACEAE - Byttneria Family

Waltheria indica

WALTHERIA

CACTACEAE - Cactus Family

Opuntia cubensis

Opuntia stricta v dillenii Opuntia stricta v stricta

Cereus pentagonus (FDA/T)

PRICKLY PEAR

DILLENS PRICKLY PEAR

PRICKLY PEAR DILDOE CACTUS

CANCELLACEAE

Canella alba

CINNAMON BARK

CASUARINACEAE - Beefwood Family

Casuarina equisetifolia

AUSTRALIAN PINE

CELASTRACEAE - Bittersweet Family

Crossopetalum rhacoma

Gyminda latifolia

Maytenus phallanthoides

RHACOMA

FALSE BOXWOOD

MOONFLOWER VINE

MAYTEN

CONVOLULACEAE - Morning Glory Family

Ipomea alba

Ipomea indica

Ipomea pes-caprae

Ipomea purpurea

Evolvulus alsinoides

Jacquemontia pentantha

BEACH MORNING GLORY MORNING GLORY VINE

CREEPING MORNING GLORY BLUE MORNING GLORY

MORNING GLORY VINE

EUPHORBIACEAE - Spurge Family

Chamaesyce mesembryanthifolia

Chamaesyce porteriania v. scoparia

(FNAI, USFWS/UR)

Chamaesyce hyssopifolia

Poinsettia heterophylla

SPURGE

SPURGE

SPURGE

WILD POINSETTIA

Att. A-4

FABACEAE - Pea Family

Acacia choriophylla (FNAI, FDA/E)

Galactia sp.

Leucaena leucocephala

Neptunia pubescens

Piscidia piscipula

Pithecellobium keyensis

Sophora tomentosa (FNAI)

Stylosanthes hamata

<u>Sesbania exaltata</u> <u>Rhynchosia parvifolia</u>

Cassia aspera

FLACOURTIACEAE

Flacouritia indica

MALPIGAHACEAE

Byrsonima lucida

MALVACEAE - Mallow Family

<u>Herrisanta crispa</u>

Thespesia populnea

MELIACEAE - Mahogany Family

Swietenia mahagoni

MYRTACEAE - Myrtle Family

Eugenia foetida

Melaleuca quinquenervia

MORACEAE

Ficus aurea

Ficus citrifolia

NYCTAGINACEAE - Four O'clock Family

Guapira discolor

OLEACEAE - Oleander Family

Ximenia americana

CINNECORD/TAMARANDILLO

MILK PEA

LEAD TREE

SENSITIVE PLANT

JAMAICA DOGWOOD

BLACKBEAD

NECKLACE POD

PENCIL FLOWER

BLADDER POD

RYNCHOSIA

ROUGH CASSIA

GOVERNOR'S PLUM

LOCUST BERRY

BLADDER MALLOW

CORK TREE

MAHOGANY

SPANISH STOPPER CAJEPUT/PUNK TREE

STRANGLER FIG SHORT LEAF FIG

BLOLLY

TALLOW-WOOD/HOG PLUM

Att. A-5

PASSIFLORACEAE - Passion Flower Family

Passiflora suberosa

CORKY STEM PASSION FLOWER

POACEAE - Grass Family

Cenchrus spp.
Stenotaphrum secundatum
Lasiacis divaricata
Dactyloctenium aegyptium
Setaria sp.
Chloris sp.
Andropogon sp.

SANDBUR ST. AUGUSTINE GRASS WILD BAMBOO CROWFOOT GRASS FOXTAIL GRASS FINGER GRASS GRASS

POLYGONACEAE - Buckwheat Family

Coccoloba diversifolia Coccoloba uvifera

PIGEON PLUM SEA GRAPE

PORTULACCAECEAE - Purslane Family

Portulacca oleraceae

**PURSLANE** 

RHAMNACEAE - Buckthorn Family

Krugiodendron ferreum Reynosia septentrionalis

BLACK IRONWOOD DARLING PLUM

RUBIACEAE - Madder Family

Chiococca alba
Chiococca pinetorum
Erithalis fruticosa
Morinda royoc
Randia aculeata

SNOWBERRY
PINELAND SNOWBERRY
BLACK TORCH
LIMBURGER VINE
INDIGO-BERRY

RUTACEAE - Rue Family

Amyris elemifera

TORCHWOOD

SAPOTACEAE - Sapodilla Family

<u>Bumelia celastrina</u> <u>Manilkara bahamensis</u>

SAFFRON PLUM WILD DILLY SCROPHULARIACEAE - Figwort Family

Capraria biflora Buchnera floridana

GOATWEED BLUEHEART

SOLANACEAE - Nightshade Family

Solanum donianum Solanum erianthum

BLODGETTS POTATOE POTATOE TREE

<u>VERBENACEAE</u> - Verbena Family

Lantana involverata Stachytarpheta jamaicensis Phyla nodiflora

WILD SAGE BLUE PORTERWEED CREEPING CHARLIE

FNAI - Florida Natural Areas Inventory (March, 1986, Special Plants List)

FDA - Florida Department of Agricultural and Consumer Services (List published in Preservation of Native Flora of Florida Act, Section 581.185-187 Florida Statutes, 1985 Revised, E = endangered, T = threatened, CE = commercially exploited.)

USFWS - United States Fish and Wildlife Service, UR = under review for addition to the list of endangered and threatened wildlife and plants.

### BIRDS KNOWN TO OCCUR WITHIN THE SALT PONDS SYSTEM

(List compiled from sources including M. Brown, T. Weed, Metcalf and Eddy (1981) and personal observations of proposal preparers.)

### DUCKS AND SWIMMING BIRDS

Podilymbus podicers
Phalacrocorax pelagicus
Dendrocygna bicolor
Anas crecca
Anas discors
Mareca americana
Spatula clypeata
Aythya collaris
Aythya affinis
Mergus serrator
Porphyrula martinica
Gallinula chloropus \*
Fulica americana
Anas acuta
Anhinga anhinga

PIED BILL GREBE
DOUBLE-CRESTED COMORANT
FULVOUS WHISTLING DUCK
GREEN-WINGED TEAL
BLUE-WINGED TEAL
AMERICAN WIDGEON
NORTHERN SHOVELLER
RING-NECKED DUCK
LESSER SCAUP
RED-BREASTED MERGANSER
PURPLE GALLINULE
COMMON GALLINULE
AMERICAN COOT
PINTAIL
ANHINGA

### SEABIRDS AND GULLS

Fregata magnificens Pelecanus occidentalis (FGFC/SSC) Larus atricilla Larus philadelphia Larus delawarensis Larus argentatus Sterna maxima Sterna caspia Sterna sandvicensis Sterna dougalli \* (FGFC/T, FWS/UR) Sterna hirundo Sterna forsteri Sterna anaethetus Sterna albifrons \* (FGFC/T) Rynchops niger Goleochelidon nilotica Chilidonias niger

MAGNIFICENT FRIGATEBIRD BROWN PELICAN LAUGHING GULL BONAPARTES GULL RING-BILLED GULL HERRING GULL ROYAL TERM CASPIAN TERN SANDWICH TERN ROSEATE TERN COMMON TERN FORESTERS TERN BRIDLED TERN LEAST TERN BLACK SKIMMER GULL-BILLED TERN BLACK TERN

Att. A-8

### WADING BIRDS

Recurvirostra americana Ardea herodias \* Ardea herodias v. occidentalis \* Casmerodius albus \* Florida caerulea \* (FGFC/SSC) Egretta thula \* (FGFC/SSC) Hydronassa tricolor \* (FGFC/SSC) Dichromanassa rufescens \* (FGFC/SSC, FWS/UR) Bubulcus ibis Butorides striatus \* Nyctanassa violacea \* Eudocimus albus \* Plegadis falcinellus Ajaia ajaja (FGFC/SCC) Rallus longirostris \* Porzana carolina Himantopus mexicanus \* Pluvialis squatarola Charadrius wilsonia \* Charadrius semipalmatus Charadrius vociferus Himantopus mexicanus Tringa melanoleuca Tringa flavipes Tringa solitaria Catoptrophorus semipalmatus Actitis macularia Arenaria interpres Calidris canutus Calidris alba Calidris mauri Calidris minutilla Calidris alpina Calidris fuscicollis Limnodromus scolopaceus Limnodromus griseus Capella gallinago

AMERICAN AVOCET
GREAT BLUE HERON
GREAT WHITE HERON
GREAT EGRET
LITTLE BLUE HERON
SNOWY EGRET
LOUISANA HERON
REDDISH EGRET

CATTLE EGRET GREEN HERON YELLOW-CROWNED NIGHT HERON WHITE IBIS GLOSSY IBIS ROSEATE SPOONBILL CLAPPER RAIL SORA RAIL BLACK NECK STILT BLACK-BELLIED PLOVER WILSONS PLOVER SEMIPALMATED PLOVER KILLDEER BLACK-NECKED STILT GREATER YELLOWLEGS LESSER YELLOWLEGS SOLITARY SANDPIPER WILLET SPOTTED SANDPIPER RUDDY TURNSTONE RED KNOT SANDERLING WESTERN SANDPIPER LEAST SANDPIPER DUNLIN WHITE-RUMPED SANDPIPER DOWITCHER SHORT-BILLED DOWITCHER

#### BIRDS OF PREY

Cathartes aura

Pandion haliaetus \*
Accipiter striatus
Buteo lineatus \*
Buteo platypterus
Falco sparverius v. paulus (FGFC/T, FWS/UR)
Elanoides forficatus (FWS/UR)
Haliaeetus leucocephalus (FGFC/T, FWS/E)

TURKEY VULTURE
OSPREY
SHARP-SHINNED HAWK
RED-SHOULDERED HAWK
BROAD-WINGED HAWK
SOUTHEASTERN KESTREL
SWALLOW-TAIL KITE
BALD EAGLE

COMMON SNIPE

### LAND BIRDS

Columba livia
Columbia leucocephala \* (FGFC/T)
Zenaida macroura \*
Columbina passerina \*
Megaceryle alcyon
Chordeiles minor \*
Chordeiles gundlachii \*
Caprimulgus carolinensis
Melanerpes carolinus \*
Sphyrapicus varius
Crotophaga ani \*

ROCK DOVE

WHITE-CROWNED PIGEON
MOURNING DOVE
COMMON GROUND DOVE
BELTED KINGFISHER
COMMON NIGHTHAWK
ANTILLEAN NIGHTHAWK
CHUCK-WILLS WIDOW
RED-BELLIED WOODPECKER
YELLOW-BELLIED SAPSUCKER
SMOOTH-BILLED ANI

### PERCHING BIRDS

Chaetura pelagica Myiarchus crinitus \* Tyrannus verticalis Tyrannus tyrannus Tyrannus dominicensis \* Muscivora forficata Progne subis Iridoprocne bicolor Stelgidopteryx ruficollis Hirundo rustica Polioptila caerulea Dumetella carolinensis Mimus polyglottos \* Sturnus vulgaris Vireo griseus \* Vireo olivaceus Vireo altiloquus \* Piranga rubra Piranga olivacea Pheucticus ludovicianus Guiraca caerulea Passerina cyanea Spizella pallida Passerculus sandwichensis Ammodramus savannarum Agelaius phoeniceus \* Quiscalus quiscula \* Icterus galbula Dolichonyx oryzivorus Melospiza georgiana Anthus spinoletta Turdus migratorius

CHIMNEY SWIFT GREAT-CRESTED FLYCATCHER WESTERN KINGBIRD EASTERN KINGBIRD GRAY KINGBIRD SCISSOR-TAILED FLYCATCHER PURPLE MARTIN TREE SWALLOW ROUGH-WINGED SWALLOW BARN SWALLOW BLUE-GRAY GNATCATCHER GRAY CATBIRD NORTHERN MOCKINGBIRD EUROPEAN STARLING WHITE-EYED VIREO RED-EYED VIREO BLACK-WHISKERED VIREO SUMMER TANAGER SCARLET TANAGER ROSE-BREASTED GROSBEAK BLUE GROSBEAK INDIGO BUNTING CLAY-COLORED SPARROW SAVANNAH SPARROW GRASSHOPPER SPARROW RED-WINGED BLACKBIRD COMMON GRACKLE NORTHERN ORIOLE BOBOLINK SWAMP SPARROW WATER PIPIT

ROBIN

Vermivora peregrina Parula americana Dendroica petechia \* Dendroica magnolia Dendroica tigrina Dendroica coronata Dendroica virens Dendroica palmarum Dendroica dominica Dendroica discolor \* Dendroica striata Mniotilta varia Setophaga ruticilla Protonotaria citrea Seiurus aurocapillus Wilsonia pusilla Wilsonia citrina

WARBLERS TENNESSEE NORTHERN PARULA YELLOW MAGNOLIA CAPE MAY YELLOW-RUMPED BLACK-THROATED GREEN PALM YELLOW-THROATED PRAIRIE BLACKPOLL BLACK & WHITE AMERICAN REDSTART PROTHONOTARY OVENBIRD WILSONS HOODED

Birds which may breed within salt ponds system.

FGFC Florida Game and Freshwater Fish Commission,
T = threatened, SSC = species of special concern.
(Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida, December, 1985.)

United States Fish and Wildlife Service, UR = under review for addition to the list of endangered and

threatened wildlife and plants, E = endangered on list.

FWS

### FISHES KNOWN TO OCCUR WITHIN THE SALT PONDS SYSTEM

(List compiled from sources including Metcalf and Eddy (1981) and personal observations of proposal preparers.)

Adinia xenica Cyprinodon variegatus Elops saurus Eucinostomus gula Floridichthys carpio Fundulus grandis Fundulus similis Gambusia affinis Gerres cinereus Haemulon sciurus Lagodon rhomboides Lucania parva Lutjanus apodus Lutjanus griseus Megalops atlantica Menidia conchorum (FGFC/T) Mugil curema Opsanus tau Poecilia latipinna 554 Spyraena barracuda Strongylura marina

DIAMOND KILLIFISH SHEEPSHEAD MINNOW LADYFISH SILVER JENNY GOLDSPOTTED KILLIFISH GULF KILLIFISH LONGNOSE KILLIFISH MOSQUITO FISH YELLOWFIN MOJARRA BLUE-STRIPED GRUNT PINFISH RAINWATER KILLIFISH SCHOOLMASTER SNAPPER MANGROVE SNAPPER TARPON KEY SILVERSIDE WHITE MULLET TOADFISH SAILFIN MOLLY GREAT BARRACUDA ATLANTIC NEEDLEFISH



Reddish Egret in pond south of Venetian Dr.



Waterfowl east of culvert at Airport Rd.



Great White Heron sunning in Riggs Refuge



Canoe trail from Riviera Canal



Seasonally flooded salt marsh south of Riviera Canal



. Waterfowl & wading birds in pond north of Government Road

5/29/87 K.W. CHIZEN

# State Park funds will be used for Salt Ponds purchase

By KATHA SHEEHAN Citizen Reporter

Ex-County Commissioner and businessman Ed Swift expressed dismay when he learned that \$30,000 which could have been used toward housing humans was instead already committed by the City Commission toward the purchase of wetlands for the wildlife.

"It's a shame... The birds get ore consideration. There's real van suffering out there," Swift i at the Affordable Housing hearing Wednesday.

At stake was the extra 50 cents per person charged at Fort Zachary Taylor, a local State park, which was made available to the City to offset the impact caused by "area of critical state concern" designation.

critical state concern" designation.
Swift had begged City Commissioner Jimmy Weekley and County Commissioner Gene Lytton to set aside the first check they were about to receive, with proceeds of approximately \$30,000, in a special account for affordable housing.

Weekley responded: "I'm sorry to give you the bad news, but we've spent it already. Several weeks ago we signed a resolution for the joint purchase of Salt Ponds property with Jimmy Buffet's Friends for Florida."

Swift expressed frustration, saying he could have shown them "how to do the Salt Ponds for free. I can tell you, because we did a study already." He also said they could have used the money for better leverage in buying land from the

County for affordable housing.

"We are the only county in Florida with that funding source," said Swift. He added that Florida Department of Natural Resources Executive Director Elton Gissendanner "squealed like a stuck pig" when Swift lobbied for the funding, but the County got it despite Gissendanner's protests. He said the income, although small, could be used by the city to do "any type of funding it wants toward building affordable housing."

Swift claimed affordable housing was the "number one" problem that concerned him as a businessman in the Keys today. He said some of his employees had to live in a tent on Stock Island because nothing else was available.

He said the Salt Ponds purchase could wait, noting that current State laws make it virtually impossible to build in wetlands now. "I don't want to see the Salt Ponds built... but you can't build in the Salt Ponds now under state regulations anyway.

They're going to stay there," he said

Assistant City Planner Tom Wilson said the state park surcharge was estimated to bring in about \$90,000 to the City.

"That's not much" for solving the housing problem, he said, but voters had defeated last year at the polls "another mechanism which can create much more money for affordable housing- the tourist impact tax. It might be revived," Wilson said

# Grains of Salt Hand

Work, the Florida Conservation and Recreational Lands (CARL) committee recently added a 97-acre tract of Key West's salt ponds to its purchase list. The committee's unusual action occurred after pressure from two sources: a developer seemingly eager to build and an entertainer equally eager to preserve.

After years of court battles, developer Larry Marks last month received approval to build a condominium complex on his property, part of 400 marshy acres being considered for state purchase to preserve vital wetlands. Mr. Marks's publicized plans galvanized Key West conservationists led by singer-songwriter Jimmy Buffet, who has a home

overlooking the salt ponds.

Citizens lobbjed city commissioners to buy the land. Mr. Buffet went to a higher authority, the CARL committee, with the same request. Mr. Marks, after averring he'd rather sell the land for a preserve than build on it, sat back waiting for an offer that would take advantage of tax rules that will change come Jan. 1, 1987. Well, the CARL committee cooperated by agreeing that the 97 acres was worth eventual purchase. That's all that the private,

### On Key West Ponds

nonprofit Trust for Public Lands (TPL) needed to make that offer.

Elton Gissendanner, chief of the Department of Natural Resources and a CARL member, said that the committee was swayed to circumvent process by the threat of immediate development as well as Mr. Buffet's promise to raise \$1 million toward the land's purchase. If Mr. Marks and the other investors come to terms with the TPL, the state in turn is expected to buy the 97 acres from the private group — eventually.

The fate of the other 310 acres awaits completion of the usual CARL acquisition process of studies and recommendations. Further action isn't expected until

next spring.

It's in the public interest to have the salt ponds preserved — for biological, not cosmetic, reasons. And it's enlightening, not to say disturbing, that the orchestrations of a developer interested in getting the most out of a property whose development benefits have turned chancy and a well-known entertainer's entreaty can accomplish what scientific data cannot. Mr. Buffet, let us tell you about North Key Largo...

# Salt ponds sale pushed

By SUSAN ORNSTEIN Herald Staff Writer

Key West commissioners will meet tonight to push for state purchase of developer Larry Marks' salt ponds property, even though Marks vowed Monday night never again to consider a sale to the city or the state.

"We're going to urge the state to give a direct appropriation to buy this property," Commissioner George Halloran said. "It's in danger of being lost forever."

Marks had set an ultimatum at the commission's Oct. 28 meeting: The commission could condemn the property or watch him start to build the massive Islands in the Sun development there. Already permitted for 1,120 units, it would be three times

larger than any development now on the island.

The commissioners initially favored the condemnation idea, but changed their minds by Monday night's meeting. The city just doesn't have the money to take so bold a step, Mayor Tom Sawyer and other commissioners said. Marks reacted angrily.

"This was the last chance," he said. "I've been jerked around for 14 years [on this project]. That's

long enough."

Nature lovers, including singer Jimmy Buffett, turned out in force for the Oct. 28 meeting to plead with commissioners to save the environmentally sensitive salt ponds, which are home to many species of wading birds.

Marks, who won a prolonged

court battle to validate permits he obtained in 1972 for the project, originally had come before the commission to propose a change in the site plans. As an alternative, he proposed condemnation.

Marks argued with commissioners that voting to proceed with condemnation did not obligate the city financially. Those obligations would not begin until the city filed suit to condemn the property.

property.

And if Marks sold the property in the interim to the state or one of the private conservation groups that have expressed interest in it, he could reap tax benefits because the land would be under threat of condemnation, his lawyer said.

1 havi Herald 11/5/80

# **NEWSMAKERS**

BEHIND THE SCENES WITH PEOPLE IN THE HEADLINES

# Jimmy Buffett tries to save 'Margaritaville'

Jimmy Buffett, who immortalized Key West, Fla., in his 1976 hit song, Margaritaville, is singing a new tune these days.

It's a hymn of civic pride aimed at stopping development of Salt Ponds, 407 acres of mangrove, mahogany and marshlands on Key West.

Thirty-five of those acres were slated for private development until Tuesday, when the city commission agreed to buy back the land and turn it into nature trails.

Buffett's new crusade is to raise \$1 million to help in the purchase from the developer.

The matter is shrouded in legalese, says Buffett, who's known more for his songwriting than his jurisprudence. So he's not sure of the next step.

But he's busy hatching money-raising schemes: holding concerts and packaging books by Key West authors, including Ernest Hemingway and Hunter Thompson.

Buffett, who turns 40 Christmas Day, said this week's city commission meeting — his first ever — "was one of the

greatest exercises in democracy since seventh-grade civics."

Buffett's new group, the Friends of Florida Fund, has raised about \$4,000, said spokeswoman Donna Smith.

Donations are being taken in care of the singer's combination mail-order catalog/environmental and fan club newsletter, the Coconut Telegraph, Box 1938, Key West, Fla. 33041.

Box 1938, Key West, Fla. 33041. "To me," said Buffett, "it is an absolute victory."

— Steve Marshall and Jonathan Saltzman



SINGING SAVIOR: Jimmy Buffett's aim: 'Go up against a big developer in a small community and make them see your way.'

THE PROPERTY OF THE PROPERTY O

# KEY WEST CRUSADER: Singer Jimmy Buffett, left, calls first success in stopping development of 407 acres of marshland "an absolute victory"; raising money for its purchase. 2A.



BUFFETT: Send donations to save land. EI EOTIONO

## Developer must stop road work

### Army Corps says project is illegal

By SUSAN ORNSTEIN Herald Stoff Writer

The Army Corps of Engineers has asked the developer of one of the largest parcels in Key West to stop construction of a 60-foot wide road, which Corps officials sny illegally cuts through wet-

An attorney for developer Lawrence Marks said the road is perfectly legal, though Marks has agreed to negotiate the matter with the Corps.

"[The dispute] is based on a

misunderstanding by the Corps]," attorney James Hen-drick said. "The federal court has permitted this road."

has permitted this road."
Marks, who also developed 1800 Atlantic condominiums, first proposed in the mid-1970s building 1,120 condominiums on the 60-acre South Roosevelt Boulevard property that includes wetlands and salt ponds. But the Corps of Engineers blocked his plans for environmental reasons. Marks went to court. Marks went to court.

In 1982, a federal court ruled Marks had vested rights to develop the land. Marks is now proceeding with the first phase of development on the strength of that order, Hendrick said. Corps officials say the court

Corps officials say the court order does not cover the area where the road is being constructed. Marks needs to get permits for the work, a Corps representative said.

City officials also question Marks' claim that he doesn't need to comply with various city laws enacted since the mid-1970s, including building height limits and the payment of impact fees to the city. fees to the city.

"That's the \$64,000 question," City Manager Joel Koford said.

City Manager Joel Koford said.
The matter may have to be decided in court, Koford said.
Marks is in the process of selling the 60 acres to another developer, Real Equity Developments Inc. of St. Petersburg, Hendrick said. The St. Petersburg development group once included Monroe County Commissioner Ed Swift, but Swift could not be reached for comment Wednesday on whether he is still involved. is still involved.

The land is bordered by Key West International Airport on the south, Riviera Canal on the north and is about 500 feet west of Roosevelt Boulevard. Much of the land, located across from Houseboat Row, is wetlands. Marks donated the northern-

most 10 acres in 1984 to the city of West, after a federal judge ruled that he must restore lifegally filled wetlands there. The city is clearing the fill and using it at the city dump. The city may be seen to be seen as the city dump.

### Setting the record straight

The headline on a June 12 story
about developer Lawrence Marks'
condominium project on South
Roosevelt Boulevard incorrectly
stated that he must stop building a
road. The U.S. Army Corps of
Engineers has not ordered work
on the road stopped. on the road stopped.

# City to explore rights on tract

By SUSAN ORNSTEIN

MIAMI HERALD 6/21/86

While some residents urged the Key West City Commission to plunge ahead in a legal challenge to the Islands in the Sun condominium project, others asked the commission and developer to

unite to sell the environmentally sensitive parcel to the state.

During the debate, which lasted into early Friday morning, the developer's attorney warned that a legal challenge would be costly and futile.

Developer Larry Marks won permits from the city in the early 1970s to build the 1,120-unit condominium project on 60 acres, including wetlands and salt ponds, near the Key West Airport.

Before he could start construc-tion, the Corps of Engineers stopped the project for environ-mental reasons. Marks sued, and in 1982 and again in 1985, federal and circuit courts upheld his rights to develop the land. Construction began in the last month.

"The project is real," Marks' attorney Jinmy Hendrick said. "There's no sense pretending it doesn't exist... You could take a willful, obstructionist view land try! to subvert this project.! promise you if that huppens, the people who have hundreds of thousands of dollars invested in this project are not going to be this project are not going to be amused. They will sue the city."

City officials have objected to the project on environmental the project on environmental grounds. They also question the wisdom of patting a large condo-minium project so close to the Key West airport.

Finally, they question Marks' claim that he doesn't need to comply with various city laws enacted since the mid-1970s, including building height limits and the city's required impact fees.

the city's required impact fees.

Directing staff members to explore the city's legal rights on those matters. Commissioner George Halloran said the city also should try to cooperate with the developer. Together they may persuade the state to buy the parcel, Halloran said. The city and the Audubon Society already have asked the state Conservation and Recreational Lands (CARL) committee to buythe sait pond area that surrounds Mark's property.

Audubon Society representative

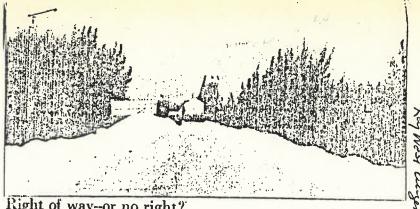
Audubon Society representative Joan Burel suggested the city extend the deadlines on Marks' permits so he can delay construction until after the CARL committee decides whether it wants the

"I would say to [Marks], there is and less reason to fight to tess and tess reason to tight to build these condos at the end of a runway where jets now tand," Burel said, "By November, we will know whether or not the salt ponds will be added to a list for state acquisition. It would be too bad to see these buildings in the middle of our last great expanse."

middle of our last great expanse."

Commissioner Emma Cates suggested Burel and city officials contact Marks and a group of developers who are buying out his rights to the property. A compromise might be worked out to get the sides to work together for state acquisition, she said.

Hendrick said the developers would follow up on the suggestion.



Right of way--or no right?

A City Commissioner, the local Army Corps of Engineers agent, and numerous residents of mearby

Mouseboat Row want to stop the filling of these lowlands off South hoosevelt Boulevard, where developer Lerry

Marks has begun work on a project called "Island in the Sun." (KWC/Den

### Houseboat Row residents protest 'Island in the Sun'

By KATHA SHEEHAN

Citizen Reporter
Trucks continued to deposit fill
Tuesday morning off South Roosevelt Roulevard despite vehement protests from the Housebast Row neighbors of Larry Marks, "Island in the Sun" project, and the project foreman said work would continue on the right-of-, way unless someone could show him a

stop-work order from the assumption of Engineers.

City Commissioner George Halloran said the Army Corps of Engineers had asked the developers to stop work Friday, and they had not, "To my knowledge the city has not issued any

permits to fill this right-of-way," Halloran said. "It has been questioned and nobody seems to know the answer just now."

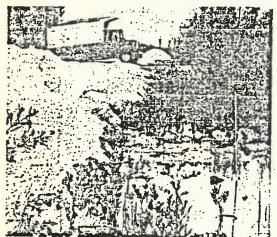
"It has taken us an unprecedented 13 years of steeral and state litigation to get a final judgment on this project so we can so-called 'make a quick 'hjuck," said Attorney for the developer Jim Hendrick. "The only city official who wouldn't be gware of this would be one who is sleeping." According to Hendrick and Project Foreman Fred Hanstone, the attempt to stop work on the filling of the right-

of-way from South Rousevelt Boulevard to the construction site near the eastern end of the airport runway appears to be the effort of a single agent of the Army Corps of Engineers (ACE), local representative Curtis Krutr.

"There is no cease-and-de-sist order that I know of," said Hendrick. "All this seems to be the informal effort by the local ACE agent to slop with the local ACE agent to slop with there by extra-legal means. We have the word has issued orders to our supplier, Tarmac, to stop supplying (See HOW, Page b)

Key West Citizen

Tuesday, June 10, 1986



A stake marks the edge of the rightof way in the shellow wetlands being filled to provide access to the future site of Larry Marks' "Island in the Sun" project. Project foreinan Fred Hoastine said they are working well

within their legal rights and boun-duries and said they would continue work on the site until and unless they saw o "conse and desist" order. As of Tuesday noon, none had been presen-ted. (KWC/Dan Pieder)

### Row-

(Continued from Page 1)

us with fill. We heard that the Top-pino Company was also contacted by him."

him."

Hansline said he considered it
"unheard of" to try to stop work on a
project by threatening a third party,
the suppliers.

Houseboal Row residents said they

Houseboal Row realdents said they wanted the work stopped, and they were calling all the City Commissioners to let their feelings be known. Twig Branchi, owner of a local restaurant and a new resident of Houseboat Row, said "If they were going to make a park here it would be okay. But what they want to do is put up a four-story building. I think something should be done to stop

this." She said she was calling the commissioners to ask them to put a hait to the project.

Another Houseboat Row resident was taking pictures. He declined to speak for the record, but said he had called all the commissioners and had just spoken with Kruer by telephone. He too wanted the project stopped, saying it would kill the fish and ruin the natural habitat of the wettands.

"What fish?" asked a Hispanic trucker who had come to dump a load of fill. "Do you see any fish in there?" he asked, pointing im the leolated two-inch-deep puddies by the side of right-of-way. "These people just want to stop progress. If somebody should call the commissioners they should call them about Astroworld." What

was the matter with Astroworld, the children's part opposite Higgs Beach? "It's full of trash. It's flithy. Somebody needs to do something about that," the trucker said. "let them take care of what they've already got first. I pay taxes but I don't see anything for my tax money."

According to Oblef Building Official.

don't see anything for my tax money."

According to Chief Building Official Paul Cates, the "Island in the Sun' project was permitted and approved on Februrary 20, 1973 for the construction of 1,120 units total. Permits were issued for dredge and fill on November 1, 1972, and according to Hendrick federal and state courts had upheld the current validity of the permits.

"Federal District Judge Aronovitz issued the final Judgment which ACE unsuccessfully appearled, that says the corps has no jurisdiction over the property being filled," said Hendrick Locally, Judge M. Ignatius Lester had ruled the permits were valld. "The city did not appeal Judge Lester's decision." Hendrick asid.

ACE agent Curtis Kruer would not

ACE agent Curtis Kruer would not say whether a cease-and-desist order had been issued or not. "All I can tell you at this point is that the matter has been discussed with the District Office in Jacksonville and they're tooking into it," Kruer said late Tuesday morning. Whether there was such an order was a question for the district office to answer, be said. Halloran said, "To my knowledge they have no new permits that would allow them to build. All they have is a sile preparation plan." He questioned whether anyone would even want to live "at the end of the rinway." Hendrick noted that at one point after the development plan had already been approved, the developers sought to have the plan modified for development of a number of low-income units, but they were dissuaded by City Commissioners who told them that if they modified the original plan, "we would have to start over from scratch," said thendrick, "so now the project will be built in its original prepased form." Hendrick, "so now the project will be built in its original proposed form."

# zapu mest Oitize

Monroe County's Only Daily Newspaper

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30 pages

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### horsetrading averts reconsidered on Jan. 7. The City's insurers had threatened

Citizen Reporter
A lot of potential headaches for the A lot of potential headaches for the City were averted, at least mamentarily, when the City Commission resolved unanimously not to appeal Judge Ignatius Lester's ruting on the Hitton lawsuit at the Special Meeting of the City Commission Friday night, after a lengthy session of "horsetrading" between Hitton developers' attractive James Hendrick und Commissioner George Halloran resulted in a series of verbal agreements to be put in writing and

to drop its liability policy, and Hen-drick had vowed to "pursue vigorously" another lawsuit against the City, if the Commissioners decided the City, it the Commissioners because to appeal the judgement. They still have until Jan. 11, however, to change their minds and this could happen if they don't like the look of their compromise with Hendrick when it comes before them in written form at the next Commission meeting, on the

dation from Assistant City Attorney Steve Stift who reminded the Commissioners that before they lost their legal right to appeal Judge Lester's decision, they still had time to "trade" that right of appeal for "individual stipulations the Com-Com-

missioners might be interested in."
"Is 'horsetrading' legal, then?"
asked Halloron. City Attorney Joe
Allen sold it was. "This Special Allen said it was. "This Special Meeting was called to help 'iron out' problems in this issue. The City Attorfirst Tuesday in January.

"Horsetrading" began with a this motter will be pursued," he said,

after noting that Stitt was handling. the courtroom work on the matter. This meeting was to be Ailen's last before his resignation on Jon. 3, at which time Stitt will be taking over his duties on an interim basis.

Hot words were exchanged between Halloran and Hendrick before the serious horsetrading began. Halloran wanted to know why Hendrick named wanted to know why remarks named him first in the suit against the Ciry Commissioners. "I shouldn't be the first alphabetically," he soid. "I put it first, and I'll tell you why," said Hendrick. "I put your

name first because you were the author of that infamous memorandum (to deny site plan approval)."
Halloran wanted to know if it could be Motioran wanted to know it it could be changed. "The suit could be dropped, if you're willing to settle," replied Hendrick. He called the proposed tilton Hotel development on South Roosevell Boulevard "a good project which met all current equipations and which met all current regulations, has required no variances." He fur-thermore expressed willingness to assure the public occess to the socolled "bridle path" which fronts the property on South Rucsevelt Boulevard.

(See BRIDLE, Page 16)

Sanday December 2

Hilton site plan in a your. The Commissioners insisted to the contract of the garden at the contract of the contract it at the minimum setbock be measured from the edge of the bridle

puth, cother than from the road the billion developers replied and changing the setback would make it impossible for them to build the groposed hotel, which had by then met oll other requirements, and they brought suit against the City for withholding its approval of the site plon and community impact statement itegally. Judge Lester concurred, and in his judgement stated that the Hilto opers had legal right to proceed with their construction.

However the bridle path issue con-tinued to haunt both the Commission and the developers friday evening. A speaker from the public, Fred Fritz, brought forth photocopies of a 1935 plat showing the bride path and soit
"I think the bride path has beer
ruped, and I think it's time to put an

Hendrick immediately responded,

saying that the 1939 plat had never been adopted as legal because it ked the property owners' notures on the dedication of the osement. 'Our site plan does not propose any construction to take place on that portion, only access" to parking and to the hotel, he said. "The bridle parh will not be built upon, and access will be blocked to no one, whether pedestrian or equestrian," he said.

Attorney Stitt introduced Halloran's concerns about the proposed development. "These are the concer-ns of one Commissioner," he undefined. "As I recall, they are these that the City receive impact fees without litigation, that the bridle path be open to the public, that the driveway size he reduced, that solid waste be carried to Cudjoe Key for disposal perhaps." disposal perhaps, and...are you going to have your own sewage plant on-site?" Halloran added, "I'd also like to see you do some work on the beach (Smathers) and you had agreed at one time to help us with the oversizing of the sewage line which runs through the sait ponds. That was in excess of the import fees-it wasn't supposed to be a part of the import fee. I'd also like to see parking space. The parking

on the site plan wipes out the (bridle path) area now used as winter "over-flow" parking for visitors to the beach. I don't remember any more suggestions...I could dream a few more aim."

more up." Hendrick said, "I would like to respond to the concerns of all Com-missioners, not just one Com-missioner. First of all, the beach: I think we are overstepping our ground to improve the beach. I will assure you and put in writing that we will cooperate with the City to beautify the beach in front of the property but

the beach in front of the property but without any assumption of ownership (responsibilities)." He expressed willingness to help with the oversizing of the pipe, saying "I'd be glad to see the sewer line taken out of the wetlands and put into the Boulevard." This brought him to a point of negotiation. "The site plan calls for an on-site sewer treatment plant which will take up space and only be in use for a couple of years, until the City line goes in. Rather than have to build that, we would prefer to give the money to the City for the sewer improvement project. It would help the City along instead of going into a plant which would be useless when the new lines are installed." lines are installed."

About the parking, he said, "Most of the people living in the area don't want a bunch of people parking Winnebogos and comping and defecating out there. They would like to see it

Cteaned up.

"As for impact fees, we are willing to put in writing that we will pay sewage, solid waste and traffic impact fees. The developers consider these

bonafide concessions.

"What about the lawsuit for punitive damages?" asked Commissioner Earma Cates, referring to the second suit brought by the Hitch developers against the Commissioners for their denial of the site plan ap-

"It would be dismissed upon settlement," answered Hendrick

"If this is a horsetrading session, I "If this is a horsetrading session, i feel we need more guorentees that what is said here will be accom-plished," said Halloron, expressing a desire to see these conditions in written form before dismissing the right to appeal. "How about public parking for ten cars?"

"You've got it," soid Hendrick, who then pushed for a City agreement to tie in to the City sewer line and give the City the money which would otherwise be used by the developers to build a sewage plant. Pressed for a dollar figure, he gave an estimate of \$50,000 to \$70,000 that the City stood to gain, if it dropped the sewer plant requirement in favor of tying the Hilton into city lines, since the Hilton would soon be required to tie in

would soon be required to tie in anyway.

"As for being required to maintain the beach, I think it's inappropriate. We overstepped our ground by becoming too specific before. That's paid by developers in another way. It's called taxes."

Halloran wanted to know if the Commission would precedent" by horsetrading its way to on agreement with the Hilton

developers.
"By going forward with the appeal and losing it, yes," said Allen. "By

naking concessions and dropping it,

Stitt added: "I think we could win Still added: "I think we could win the appeal, but it would be a limited win...! don't think the Commission could legally expect more than is being offered here tonight." Molloran asked for an pmendment

to Cates' motion denying the appeal. He wanted the Cify Attorney to drow up in writing the agreements made at the meeting so they could be reconsidered and a decision made an ihem at the next meeting. Both the amen-dment and the main motion were passed 5-0.

Att. C-6

KEY WEST CITIZEN VOLCIVINO 295

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Thursday, November 7, 1985

USPS Publication No. 294240

Single copy 25 cents

## ules commissioners erred of the Hilton site plan

By FRANK BROWNELL Citizen Reporter

Citizen Reporter

A Monroe County Circuit Court
judge Wednesday morning ruled
that Key West city commissioners
erred when they voted 5-6 to dray
approval of a Community Imnocet
statement and site plan filed for a
proposed 166-from Key West Beach
fulton Hotel on South Rousevelt
Boulevard.

Loster, in his ruling, said the developers of the project could not be denied the site plan approval for the two reasons stated by the city's governing body during an August Z meeting At the! time, city Commissioners

had failed to approve the site plan because they claimed the developers should pay a \$70,000 traffic impact fee to help mitigate Circuit Court Judge M. Ignatius the effects of an increased traffic

flow in the area.

Also, city officials said the hotel's minimum setback for construction should be determined from the edge of the so-called "bride path" just to the north of South Rosevell Boulevard, and not from the boulevard itself as the developers showed on their site. Row in the area.

Also, city officials said the hotel's minimum setback for construction should be determined from the edge of the so-called borders being should be determined from the edge of the so-called borders being setback for the hotel should from the edge of the so-called borders being setback from the days after being femily setback only requires up the developers showed on their site plan based on those two breas of usagreement.

According to the lawsuit, the continuation of distance from the sage of South Roosevell Boulevard, and not from the boulevard itself as the developers showed on their site plan based on those two breas of usagreement.

According to the lawsuit, the collect an impact for the hotel should be determined from the sage of South Roosevell Boulevard being denied the site plan based on those two breas of usagreement.

According to the lawsuit, the collect an impact for the lawsuit, the sage of South Roosevell Boulevard being denied the site plan passed on those two breas of usagreement.

According to the lawsuit, the collect an impact for the lawsuit, the sage of South Roosevell Boulevard being denied the site plan paproval, Key in the solution of distance from an impact for the hotel should be etermined from the sage of South Roosevell Boulevard being denied the site plan paproval, Key in the solution of distance from an improved of distance from the sage of South Roosevell Boulevard being denied the set plan approval, Key in the solution of distance from the sage of South Roosevell Boulevard being denied the set plan approval, Key in the solution of distance from the sage of South Roosevell Boulevard being ethack only requires up to a 80-foot distance from an improved public street, and meaning the city of our sagreement.

According to the lawsuit, the city's own ordinance governing the building setback only requires up to a 60-foot distance from an improved public street, and makes

or paths.
But even though Assistant Key
West City Attorney Steve Stitt

Continued from Page 1) agreed that the "bridle path" was, in fifth, an improved public street, Judge Lester apparently felt otherwise, as he ruled the developers could not be denied approved of the site plan based on the street of the site plan based on the site plan based o their projected setback from South

Herseven Boulevard.

Judge Lester also turned thumbs Sugge Lester also turned intumes depression the city's contention the destaters owed a \$70,000 traffic inffect fee, because such an orditated did not exist on August 20.—Space that time, the complications have approach a traffic 20. Since that time, the com-missioners have approved a traffic imposet fee ordinance, causing Stift to feel the city may get the 378,000 in the end, if all the safte time, realizing the city may nol. John approval of the site plan based on a failure to pay the fee. It still think the city can collect the free time of the plan of the city can collect the free time of the city can collect "I still think the city can collect the traffic impact fee, but not until the time the project is ready to the issued a Certificate of fichanney (CO)." Still said. "Althought he developers cannot be down their site plan approval he do un an impact fee that was more yet, law the traffic impact fee. interpretation impact fee that was since been approved, and I think the city can collect the student at the time of a CO," he added

"As for the serback requirement, accerding to present ordinances, the horel will have to be setback the stored will have to be setback at itees; 425 feet from South Rochanelt Boulevard, based or a planned maximum height of 45 feet for the structure. Still said City, low requires for every two first a building is above 40 feet in height, that building must be set been at additional one foot past for a minimal of feet high the committee of feet high, the " leet over 40 feet high, the buttong must be set an additional 25 het best the 40 foot minimum setback requirement behaving the ruling by Judge

Lester Wednesday, Hendrick said although both reasons given by city commissioners, when they denied the sale plan approval had been found "improper" by the judge, the people for represent in the lawsuit," never had that much problem with the traffic impact fee."

impact fee."

'The city's position on the setback requirement from the bridle path was the real obstacle to any agreement (on the site plan). Hendrick asid. "If you use South Roosevelt Boulevard as the hasis for descenting our artists." sour moseven somewro as the basis for determining our setback, then our site plan compiles with the calculations as defined in the

the calculations as defined in the city's own ordinances," he added. In a motion for summary judgment filed recently by attorneys for the Hilton hotel developers, if was claimed, "...Defendant's (city commissioners'), denial of the Commissioners', denial of the Commissi path'

It was this motion for summary judgment in favor of the plaintiffs that Judge Lester granted in the Wednesday morning hearing in his chambers.

Plaintiffs in the Iswaut included Wade W. Knowles, Kurt A. Anowies, John F. Rice, Josephine Rice, Edwin E. Phew, Catherine Rhew, and Gary A. Korn, as trustee.

Named as defendants in the case where the Key West City Com-missioners George Helloran, Jpe Balbontin, Jimmy Mira, and Balbontin, Jimmy Mira and Emma Cetes, and Mayor Richard Heyman, as individuals, and the City of Key West as a govern mental body.

KEY WEST CITIZEN

Key West, Florida Tuesday, October 22, 1985

USPS Publication No. 294240

Single copy 25 cents

Units would rent for \$350 a month

# 'Affordable' housing proposed for South Roosevelt Boulevard

By LARRY THOMPSON. Citizen Reporter

A full-scale effort is being made by a Tamps-based investor, with support from local funding, to build affordable bousing in Key West to full one of the most serious housing deficiencies existing

serious nousing the control of the constructing 275 family units which would rent for \$350 a month, according to Ed Swift, a Key West businessman and Monroe County

Commissioner,

Commissioner, who powers five percent of the project. Swift and Tampa developer Bob Butler, along with a group of other backers, are currently involved in explaining their housing hopes to the vorious governmental agencies in the City of Key West and at state level which must pass on the project.

Swift presented a letter to the

Swift presented at letter to the Florida Keys Aqueduct Authority

owns five last week in which he is asking the FKAA to "participate in cost developer Bob saving measures" which would cut the construction costs and bring

the construction costs and bring about lower rental fees.

Other agencies such as the City Electric System will be approached on the matter also, Swift said.

"Without the cooperation of all agencies, state and local, this will never come about," Swift said. He noted that many businessmen in Key West have been faced with anded that many businessmen in Key West have been faced with the problem of not having a jupply of suitable personnel from which to draw upon for employees. The reason the city's available

workforce has been dwindling over the past few years is due to the fact that working people are finding affordable housing in Key West is all but non-existent. Since they can't find housing they can afford, they have to leave.

According to Swift, the proposed housing program will fill the need for families with incomes below \$40,000 and will also address the needs of families with lesser incomes. Swift said 20 percent of the proposed project's first phase will include low-cost housing. The remainder will be medium income housing. Families will be able to housing. Families will be able to choose from a selection of units ranging from one-bedroom, one-bath to three-bedroom, two-baths, each with air-conditioning and

carpeting.
In addition, residents of the complex, to be built on a site off South Roosevelt Boulevard across the street from Houseboat Row, will have access to a swimming pool and tennis courts. The site will even have a view of the water, Swift pointed out, either out

(See HOUSING, Page 10)

Page 16

Key West Citizen

Tuesday, Oct. 22, 1865

### Housing

77

(Continued from Page 1) to sea or of the salt ponds near key West International Airport. If the project survives the gamut of local and state approvals it must face, Swift is looking at

February start for construction.

He pointed out that the proposed housing is to be completely surrounded by existing growth in the area and will be 2,000 feet south of the Riviers Canal to the costh The edge has the start of the second that the second the second that t north. The city has title to some

eight acres of land along the south side of Riviera Canal between the Riviera residential area and the

The area once served as a bilimp pad for U.S. Navy submarine chasers during World War

Two. It is now vacant and tmused except for a part of it fronting on South Roosevelt Boulevard which

so from the reality of trying to keep our employees in decent housing in Key West," Swift said in his letter to the FKAA.

The Key West businessman said the key west businessman and it has been three years or more since he started working to put together a affordable housing package in concert with local developers, landowners and investors but the high cost of materials, land and services has always are suched to the start of always worked to thwart his efforts.

To bring about a workable af-fordable housing program in Key West, Swift said if will require that all of the public agencies involved agree to streamline the permit process, faster processing of studies and inspections, ad-dusting imprecessary or notjusting unnecessary or not-applicable standards, dispensing with unnecessary restrictions and regulations and waiving of impact

Death for Stano/2D Deaths/4D Comics/10D



Tuesday, June 14, 1983

The Miami Herald

Section D

# Buy marsh land for \$8 million or I build, developer tells state

by REIL BROWN flends Stag Weiler

The owner of one of the largest undeveloped parcels of land in Key West said Monday he's willing to sell the "ecologically valuable" 53 acres to the state for use as a park.

But developer Lawrence Marks warned that unless Florida officials act quickly to buy the land for his \$8 million asking jatee, he'll start construction of there than 1,100 condominium tors on the land.

"I could walk into the buildto a department today and get a is out," Marks boasted about the project that he first conand in 1572 when he bought to land "I am legally zoned in ... West I'm legal under the it or plan and the courts have and I have vested rights to develop it. My plans still



Plummer

Marks' land is bordered by Key West International Airport on the south, Riviera Canal on the north and is about 500 feet west of Roosevelt Boulevard. Much of the land, located across from Houseboat Row, is wetlands, including salt ponds.

Boulevard condominiums, first proposed building the 1,100 condominiums in the mid-1970s. But the U.S. Army Corps of Engineers blocked his plans for environmental reasons.

Marks went to court. Last year a federal court ruled he had "vested rights" to develop the lond. He claims his victory exempts him from obtaining state or federal permits required for massive develop-

Corps officials couldn't be reached Monday and a state planner said he will investigate Marks' interpretation of the ruling.

City officials also question Marks' claim that he doesn't need to comply with a 1976-enacted city law requiring a community impact study for large consideration this summer.

"There's a lot of things to consider," said city Building Department chief Purie Howanitz, "He may have vested rights, to build, but that may not necessarily mean he can build whatever he wants."

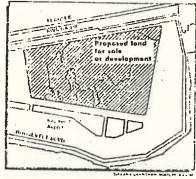
Last week a Marks associate suggested that he Marks, the contractor building the 1800 Atlantic sell the land to the state. Marks talked with state Sen. Larry Plummer (D., Miami) who enthusiastically supported state purchase.

"It is untouched, pristine - it is a beautiful piece of property," said Plummer who personally toured the area Sunday.

"If it were my decision," Plummer said, "I'd put in nature trails and do little of anything with it. It's phenomenal land."

Plummer met with Department of Natural Resources Director Elton Gissendanner last week to discuss possible state purchase.

Gissendanner said the land fits in with Gov. Bob Graham's "Save Our Coasts" program to buy \$200 million in beaches and parks, but it is too late for



Shaded area approximates Marks' holdings.

Graham and the Florida Cabinet have the final say on what lands will be bought, he said.

Gissendanner said the state must appraise the land and added that a deal couldn't be made until the end of 1983 or as late as July 1984.

"I didn't realize there was that much undeveloped land in Key West," Gissendanner said. "This is precisely the kind of thing this program is designed

"It's a price far below what the property is worth," Marks said. "I want this resolved quickly. A long, protracted negotiation with the state is very unappetizing to me."

### REFERENCES

Names and addresses of ecologists with knowledge of Property:

Dr. Renate Skinner
Naturalist
Florida Dept of Natural Resources
P. O. Box 487
Key Largo, Fl. 33037

Curtis Kruer
Biologist, U. S. Army Corp of Engineers
P. O. Box 633
Big Pine Key, Fl. 33043

Roger Wilburn
Florida Dept. of Community Affairs
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Key West, Fl. 33040

Terri Kranzer
Biologist
Florida Dept, of Environmental Regulation
11400 Overseas Highway
Marathon, Fl. 33050

Ann Williams
Rt. 5, Box 718
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Marge Brown Calle Bogata Summerland Key, Fl. 33042

Frances Hames 606 Truman Ave. Key West, Fl. 33040 CITY OF KEY WEST

COMPREHENSIVE PLAN

(exerpts from)

1981

PREPARED BY: KEY WEST PLANNING STAFF
REGIONAL RESEARCH ASSOCIATES

PREPARED BY THE CITY OF YEY WEST UNDER CONTRACT WITH THE DEPARTMENT OF COMMUNITY AFFAIRS. THE PREPARATION OF THIS COMPREHENSIVE PLAN WAS FINANCIALLY AIDED THROUGH A GRANT FROM THE STATE OF FLORIDA UNDER THE LOCAL GOVERNMENT COMPREHENSIVE PLANNING ACT ASSISTANCE FUND AUTHORIZED BY LAWS OF FLORIDA.

TABLE 3.12 lists the severity of deficits in facilities by expressing such deficits as a percentage of demand. In addition, the second column of TABLE 3.12 lists the corresponding percentage of Lower Keys residents that display interest in that particular activity according to the Monroe County School Administration Survey.

TABLE 3.12
DEFICITS & RANKING FOR RECREATIONAL FACILITIES

FACILITIES	DEMAND	SUPPLY	% DEFICIT	INTEREST
Picnic Tables	100	47.	53	50
Boat Ramps	4	3 14 3	25	30
Basketball Courts	, 5	4	20	23
Baseball Fields	12	8	33	34
Swimming	3	1	66	49
Shuffleboard Courts	25	12	52	14
Handball Courts	4	0	100	25
Tennis Courts	17	8	53	35

Source: Regional Research Associates

The following are comments on individual facility deficits.

It appears that picnic tables are in high demand but have a relatively high deficit. Compared to the cost of installing other types of recreation facilities, it appears that providing additional picnic facilities would be a relatively inexpensive method of providing for recreational needs.

Boat ramp demand is relatively high as is the relative level of supply.

# CONSERVATION/CGASTAL ZONE PROTECTION ELEMENT

This Element of the Key West Comprehensive Plan contains Goals, Objectives and Implementation strategies for guiding the use of the City's natural and Coastal Zone resources. Because the entire City is in the Coastal Zone, a combined Coastal Zone Protection and Conservation Element has been prepared. In addition, the Element addresses the management of the City's historic and cultural resources.

The desire to protect the City's natural assets and resources has a twofold motivation. Key West benefits directly from a beautiful and safe environment, and this constitutes one reason for conservation. In addition, the major economic base of the City involves the exploitation of these resources. Hence, damage to these resources will have an adverse impact on the economic well being of City residents.

The City of Key West is one part of the Island archipelago known as the Florida Keys. Over the years, residents of this area, of the State, and of the Nation as a whole, have recognized the importance of conserving the natural resources of the Keys. Thus, the preservation of the area resources requires a cooperative effort by the local governments in the Region, and also cooperation with the various State and Federal Agencies that have responsibilities for the different segments of the archipelago's resources.

In preparing this Element we have drawn upon the Monroe County Coastal Zone Protection and Conservation Element, the State Department of Administration Report on the Florida Keys Area of Critical Concern and the Florida Keys Coastal Management Study prepared by the State Department of Natural Resources.

#### SECTION I: INVENTORY & ANALYSIS

#### NATURAL RESOURCES

#### IDENTIFICATION OF RESOURCES

Inventories of the natural resources in the Florida Keys have been compiled by the Florida Coastal Coordinating Council<sup>1</sup>, the Florida Department of Administration, Division of State Planning<sup>2</sup>, the Florida Department of Natural Resources and the Monroe County Planning Department<sup>3</sup>. The City of Key West has a vital interest in the protection of natural resources throughout the Keys inasmuch as these resources are a vital link to the tourist industry. Most areas identified in the various studies and reports as being of environmental concern are outside the jurisdiction of Key West. In addition, given the developmental status of Key West and its growth rate over the past decade, unlike other areas of the Florida Keys, Key West has not had severe developmental pressure placed on its natural resources in recent years.

However, as identified in the <u>Florida Keys Coastal Zone Management Study</u>, the City does contain areas that require preservation. In addition, Key West contains other unique features, such as certain salt ponds and marshes. Following is a description of the natural resources of vital concern to Key West.

## Coastal Wetlands and Intertidal Zone

The coastal wetlands and intertidal zone consists of narrow beach areas, shallow mud and sandbanks, salt ponds and mangrove areas which are exposed or partially exposed at low tide. Tidal ranges are low in Key West, but the typical lack of appreciable slope to the shorelines results in a large expanse

Florida Department of Natural Resources. Coastal Coordinating Council. Florida Keys Coastal Zone Management Study, 1974.

Florida Department of Administration. Division of State Planning. <u>Final Report and Recommendation for the Proposed Florida Keys Area of Critical Concern</u>, 1974.

Monroe County Planning Department. <u>Coastal Zone Protection and Conservation Element.</u>

of such areas fringing the shores, with mangroves, salt ponds and mud flats being the most extensive components.

## Mangrove Communities

The mangrove communities are the most vital piplogical resource of the Keys. Together with seagrass beds they produce leaf detritus which is the basis of the detritus marine food chain. This chain supports many species that are nutritionally and economically important to man. In addition, mangroves serve as nursery areas to provide a safe and nutritious environment for juvenile fish and other organisms. These young fish in turn attract predatory adult sport fish. Almost 75 percent of the valuable commencial and sport fishing species spend a portion of their life cycle in estuarine areas where the plant associations flourish.

Mangrove communities play an important roll in conserving existing land, and building new land at the water's edge. The root structures buffer the shore from the sea's waves, and this is important in the Keys where 90 percent of the land is less than five feet above sea level. In addition, by trapping organic and inorganic materials the mangroves help in the build up of new land.

Finally, the mangrove communities filter urban surface runoff and thus help? maintain water quality. Further, by absorbing wave action energy, instead of reflecting it like man-made seawalls, the mangroves help to reduce water turbidity.

The mangrove communities do not merely protect the marine resources of the Keys. Many other wildlife species also use the mangrove communities as a habitat. The Division of State Planning noted that such rare and endangered species as the Roseate Spoonbill, Great White Heron, American Osprey, Southern

Bald Eagle, Eastern Brown Pelican and American Crocodile concentrate much of their activities in the mangrove areas.

# Tropical Hardwood Hammocks

At a higher level of elevation, tropical hardwood hammocks are found. They are characterized by very thin soil layers over rocky, porous limestone substrata. Dense vegetation holds high humidity in the more developed hammocks which leads to warmer winters and cooler summers than in the surrounding area. The hammocks provide examples of unusual vegetation and support numerous species of wildlife. If undisturbed, the hammocks will pass through a series of stages to emerge as a climax community. During these stages different vegetation and wildlife will flourish in the hammock.

## Salt Ponds

Shallow enclosed basins with very restricted tidal influence and generally extremely variable salinity and temperature are called salt ponds. They are an important breeding and feeding ground for many bird species, but because of the extreme fluctuations in their salinity and temperature they do not appear to be as productive as salt marshes in general. Precise estimates in their ecological importance are not currently available; however, taution in their management to avoid irreversible loss or damage is indicated. Some of the wetlands surrounding Key West International Airport appear to possess the characteristics of salt marshes rather than salt ponds.

# Marine Grass Beds

Marine Grass Beds are found throughout the Keys and are vital to the maintenance of a high quality marine environment. These submerged grasses and the numerous forms of marine algae, which are attached to the blades and sediments, are the major producers of organic detritus in the Florida Keys. (See Mangrove Communities.)

## Shallow Mud and Sand Banks

The shallow mud and sand banks adjacent to the mangrove fringe seemingly devoid of life to the untrained eye, actually are teaming with small to microscopic life forms that represent a major part of the food chain leading up to species of interest to man. Filling of such areas can have various serious repercussions on sport and commercial fisheries in the Keys! Since these habitats occur where land and water meet, they are in an area that traditionally has been in great demand by man. However, because of the natural values of these areas to man, and because they require major modification before development can occur, these and other intertidal areas should not be sacrificed for development except under conditions of overriding public need or in cases of anticipated damage shown to be short term and minor.

# Wildlife

As outlined in the above descriptions, wildlife, vegetative and marine communities are closely linked. The species of wildlife associated with the vegetative and marine communities provide aesthetic value to Key West as well as a link to the ecological chain of the Keys. Of overriding importance to Key West is fish life, which contributes to two major industries in the Keys, Tourism and Commercial Fishing.

## Beaches and Shoreline

In addition to containing biotic communities, such as seagrass, which contribute to the food chain, beaches and shorelines also contribute to the City's recreational, aesthetic and economic well being.

## LOCATION OF SENSITIVE AREAS

The area in and around Key West International Airport (K.W.I.A.) contains most of the remaining mangrove, hammock, and salt pond areas in Key West. As identified in the Florida Keys Coastal Zone Management Study, Northern Stock Island also contains some mangrove areas. FIGURE 5-I identifies areas requiring preservation as contained in the Coastal Zone Study. These areas are included as Environmental Preservation on the City of Key West FUTURE LAND USE MAP, (FIGURE 9-II).

The area running along the southern shoreline of the Island contains marine seagrass. Smathers Beach, which provides public access to beach users in Key West, is located within this area. (See FIGURE 3-I, Open Space and Recreation Element for specific beach location.) TABLE 5.1 illustrates the amount of acreage containing the three broad categories of environmentally sensitive areas.

TABLE 5.1
ENVIRONMENTALLY SENSITIVE
ACREAGE IN KEY WEST<sup>a</sup>

AREA	ACRES						
Mangrove	90						
(Disturbed) Hammock	25						
Salt Pond Habitat	110						

Source: Based on data from the Environmental Impact Assessment for Extended Runway Safety Areas at K.W.I.A., 1980.

There are no acreage figures available for marine

The sum of the acreage figures do not necessarily sum to total acreage inasmuch as some of the mangrove acreage is included within Salt Pond Habitat.

## UNIQUE & SPECIAL RESOURCES

## WATER RECREATION

In addition to the marine biotic communities illustrated on previous pages, Key West enjoys the benefits of being surrounded by waters of the Atlantic Ocean and Gulf of Mexico. As reflected in recreation participation rates in the Open Space/Recreation Element of this Plan, tourists and residents in Key West take advantage of this natural recreation facility more so than any other form of recreation. While beach activities such as swimming, picnicking and sunning are typically associated with "beach" communities, more diverse, off-shore activities are associated with Key West. These include snorkeling, scuba diving, fishing, sailing, wind-surfing and yacht racing. In addition, watching the sun rise and set along the waterfront is a favorite activity in Key West.

Of course, all of these activities require beach access in one form or another. The Open Space and Recreation Element of this Plan also identifies public beaches and access points to the shoreline by location, type and size.

Briefly, the major public facilities in association with water are Smathers Beach, White Street Pier, County Beach, South Beach and Mallory Square. In addition, there are three boat ramp facilities in the City and a fourth at nearby Stock Island. As development of the Truman Annex occurs in accordance with the Conceptual Plan developed for such, scenic and functional waterfront facilities will be further enhanced in the City.

## HISTORICAL RESOURCES

Key West has not experienced in modern times a catastrophe which destroyed large numbers of buildings. Coupled with the high cost of new construction

SECTION II: GOAL, OBJECTIVES & POLICIES

GOAL:

MAINTENANCE, ENHANCEMENT AND RESTORATION OF THE CITY'S NATURAL AND HISTORIC RESOURCES.

Objective 1: Continued existence of optimum populations of all species.

### Management Policies:

- 1.A. In an effort to protect and conserve marine wildlife, emphasis will be placed on working with Monroe County to protect the entire marine eco-system throughout the Keys.
- 1.B. Encourage maintenance and protection of areas that provide refuge and sanctuary for birds.
- 1.C. Encourage a unified effort by Federal, State and Regional agencies to inventory fish populations and catches to determine if substantial losses are expected to occur in fish populations, and, if remedial actions are necessary to prevent such.
- 1.D. In cooperation with State and Federal agencies, ensure that approved dredging and filling activities are conducted in a manner to minimize adverse impacts on wildlife.
- 1.E. Assure that the planning, design and siting of Capital Improvement projects in Key West undertaken by all levels of government are done so in a manner to minimize adverse affects on wildlife, expecially Florida's threatened species?

- 6.F. The deliberate planting of particularly undesirable exotic species will be discouraged.
- 6.G. The use of native plants which tend to minimize use of water, pesticides, and fertilizer will be encouraged in the land-scaping of future developments.

Objective 7: Develop a program to ensure protection of the environmentally sensitive lands in and around Key West International Airport

#### Management Policies:

- 7.A. Encourage that development occur on upland areas leaving submerged areas in a natural state.
- 7.B. Encourage on-site transfer of development on parcels containing substantial upland and submerged areas. In addition, utilize the management policies as expressed herein for this and other areas containing coastal zone and other natural resources.

Objective 8: Maintain the historical character of Key West.

## Management Policies:

- 8.A. Continually support programs that provide special loans and grants for rehabilitation and renovation of buildings that contribute to the historical character of Key West.
- 8.B. Ensure that public improvements in the Historic District are designed in a manner to enhance the (historical) character of the district.

- 13. Page 5.24, Policy 6.F

  Delete "particularly" and replace "discouraged" with "prohibited."
- 14. Page 5.24, Policy 7.A.

  Replace "encourage that" with

  "regulate" and delete "occur."
- 15. Page 5.24, add:

"7.C. Environmentally sensitive areas including but not limited to wetland communities, mangroves, slat ponds, and tropical hardwood hammock, shall not be allocated a density in excess of one unit per acre. To the extent site alteration is permitted, in no event shall site alteration exceed 10% of the total site size."

## SECTION III: IMPLEMENTATION PROGRAM

#### LAND ACQUISITION

The main categories of tools essential for natural resources conservation and protection are embodied in five major governmental powers: Police power, Eminent domain power, Spending power, Proprietary power, and Taxation power. Primarily, these tools fall into three major categories: public acquisition, land development regulations, and taxation. Each has its advantages and disadvantages, therefore, in order to assure wise and efficient management of resources, an imaginative application of a mixture of the tools is necessary.

The most direct method of implementing the resource conservation and protection objectives is for the City to become the owner of land by acquiring a full fee title through condemnation, donation, or purchase. But there are two major problems associated with this approach. First, the City's financial resources cannot be stretched far enough to assume the ownership of land on a massive scale; and second, the more land the City acquires, the less private land there will be on the tax roll, thus reducing the size of revenue from property taxes. For these obvious reasons, acquisition is not a practical method to ensure conservation of resources by Key West.

Purchase is most suitable when certain specific, unique features are to be protected or where significant public access is desired as in the case of beaches or parklands. Public ownership should also be considered in urbanized areas where development pressures are so great that public regulations per se cannot be relied upon to retain adequate open space or to protect environmentally or historically significant areas. In these instances, the City will encourage that County or State funds be used for acquisition. In other cases,

for the

KEY WEST COMPREHENSIVE PLAN

FINAL COMMENTS AND RECOMMENDATIONS

adopted by the

PLANNING AND RESTORATION COMMISSION

February, 1986

Element). The City should develop an expertise in lease management, but should not attempt to develop or manage housing projects itself.

# OPEN SPACE AND RECREATION

- (1) Develop a General Plan for the Salt Ponds to promote conservation and recreation. Use the General Plan as a basis to pre-apply to the Conservation and Recreation Lands (CARL) Program. The General Plan should include the following: (a) a complete Environmental and Land Use acreage inventory, (b) a map corresponding to the inventoried areas, (c) a map at the same scale showing ownership, (d) a map showing areas to be obtained or set aside for conservation and recreation, (e) a future land use map of projected commercial and public recreational development, (f) a list of properties to be purchased through the CARL Frogram or by the City or County.
- (2) Approach the Navy to negotiate a long-term plan for Perry Court with the aim of securing public access for recreation and also extending Fleming Street through to Palm Avenue. The Navy is currently formulating plans to use Perry Court for housing, and the City should work with the Navy to identify optional sites for such housing.
- (3) Re-initiate communication with the County Commission concerning development plans for the Rest Beach/Higgs Beach recreation area. At the same time, resolve management issues surrounding White Street Pier, especially with regard to circulation under the pier.
- (4) While Key West is well served by large community parks, smaller neighborhood parks are lacking. The City should undertake an inventory of public property and draw up a plan for the development of more neighborhood parks throughout the City.
- (5) Braft an "Art, History, and Recreation in Public Places Ordinance" to require major developments to commit one percent of their construction costs for the provisions of public access to an artistic creation, historical re-creation, or recreational amenity.

# INTERGOVERNMENTAL COORDINATION

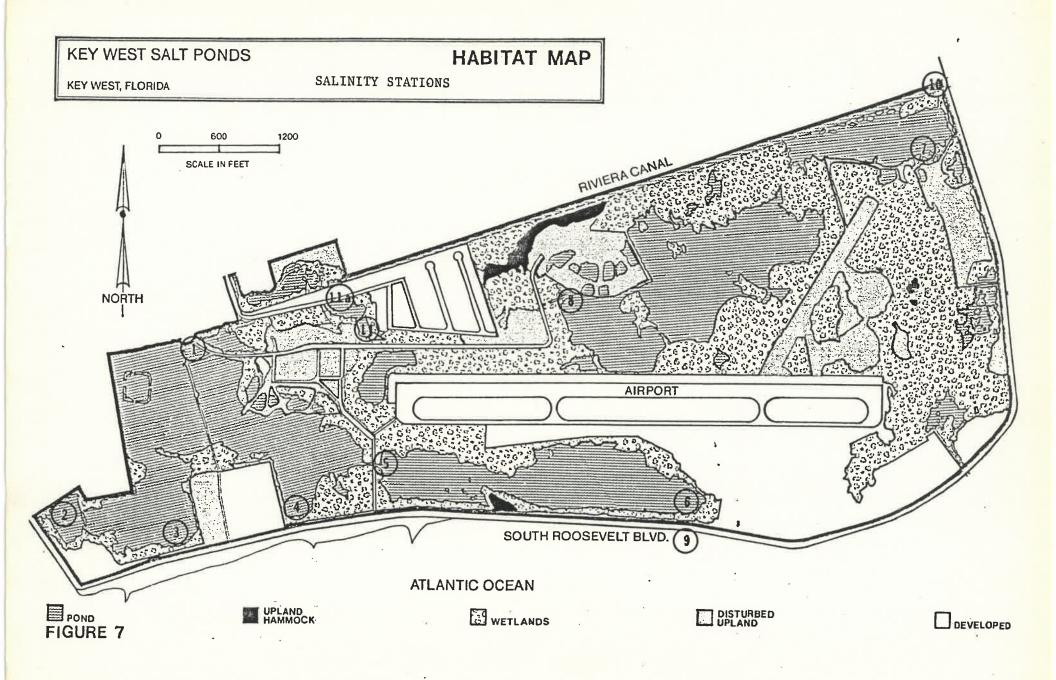
(1) Examine the feasibility of establishing an intergovernmental planning agency for the Lower Keys to address such issues as growth, transportation, and housing, and to ensure a coordinated approach in planning service and infrastructure improvements. Agencies which should be involved include: City of Key West, Monroe County, City Electric, Florida Keys Aqueduct Authority,

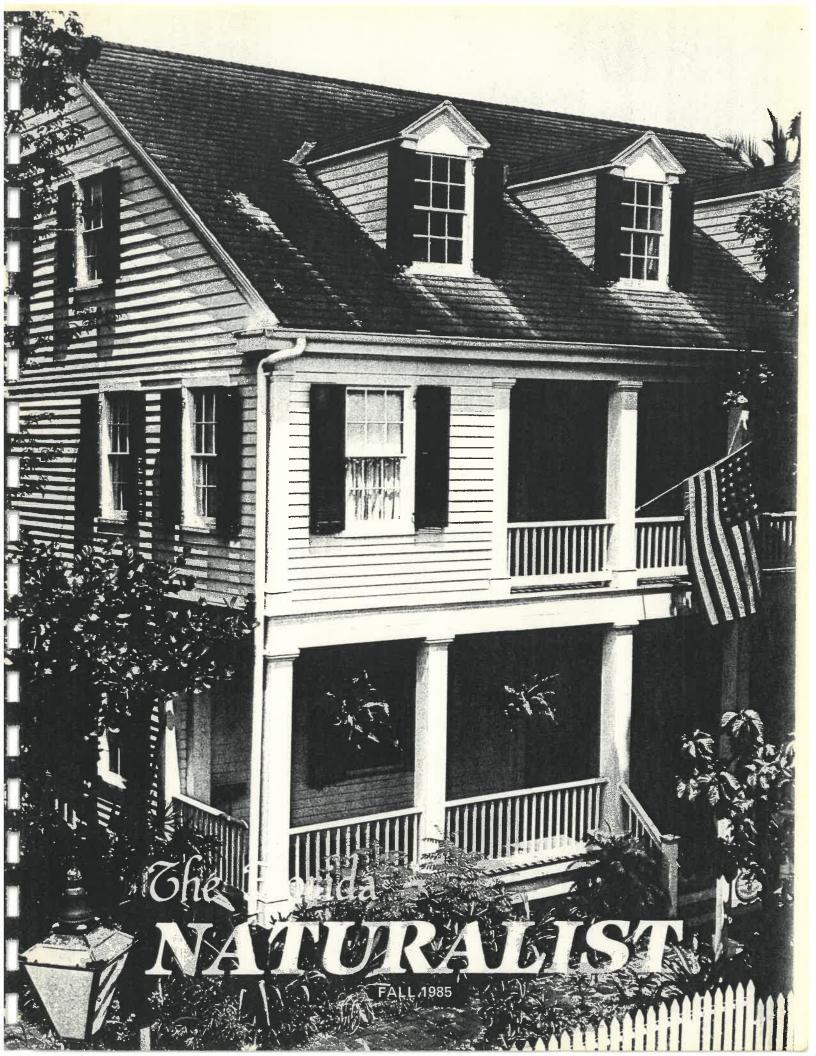
## 3 1986 SALINITY SURVEY OF THE KEY WEST "SALT PONDS"

- 1. The attached information is intended to supplement the July, 1986 Florida Conservation and Recreational Lands Acquisition Proposal entitled the "Key West Salt Ponds" submitted by the Florida Audubon Society and the City of Key West.
- 2. The data could be useful in prioritizing and designing future restoration projects intended to enhance tidal circulation.
- 3. Measurements were made with an AO Automatic Temperature Compensated Hand Refractometer Model #10419. The instrument was calibrated regularly with distilled water and accuracy is about + 1.0 ppt.
- 4. Station locations are given on the attached C.A.R.L. proposal Habitat Map (revised 11/15/86).
- 5. Tide, rainfall and average wind velocity data are included in the attached Table to help explain salinity fluctuations. The controlling factor is the seasonal wet/dry cycle.
- 6. Rainfall and wind velocity data were obtained from the National Weather Service Key West Station.
- 7. The greatest seasonal range measured was at Sta. #6 where the range was 17-78 ppt.
- 8. Sta. #9 was used as the Atlantic Ocean control.
- 9. Stas. #11 and 11a are in a semi-impounded area which receives tidal influence only during spring high tides. There may be some brackish groundwater influence to this pond.
- 10. Although limited temperature data was obtained it is believed that the seasonal fluctuation of T (particularly the high range) may be the physical factor most limiting to seagrasses and fish. The low range of T is likely tied to air T during cold, windy winter cold fronts. A high T of about 110-120 F was observed at Sta. #6 during a sunny, calm period in August.
- 11. Field measurements were made and information organized by Curtis Kruer of the Army Corps of Engineers Big Pine Key Field Office.

Col 1/20/87

		-		AVE. WIND	SALINITIES (PPT) AT STATIONS WITHIN THE KEY WEST 'SALT PONDS'											
		CLOSEST (KEY	RAINFALL	SPEED (MPH)	H)											
		TIDE WEST)	SINCE LAST	SINCE LAST												
1986	APPROX.	HOUR-ELEV.	MEASUREMENT	MEASUREMENT		:				STA	TION					
DATE	HOUR	(FT./MLW)	(INCHES)						-	· _						
					1	2	3	4	5	6	7	8	9	T 10	, 11	11:
18 JAN	1700	15/0 /						0 4	J. 30	-	-		<del>                                     </del>	+	-	
-		1549 · +1.4		-	38	38	40	-	35	33	<del>  -</del>	40_	36	-	-	-
31 JAN	1800	2004 0.0	0.19	9.8	40	43	44	41	38	39 ,	40	44	38	38	-	-
12 FEB	1800	1808 -0.1	0.44	9.5	38	-	-	-	-	-	-	-	-		-	-
28 FEB	1600	1848 -0.3	1.58	8.2	40	-	-	-		-					_=	-
6 MAR	1730	1837 +1.7	0.10 (	8.0	43	46	48	44	42	45	-		37	-	22	_
16 MAR	1200	1248 +1.5	0.75	9.6	41	50	49			49		43	38	-	21	
23 MAR	1730	2010 +1.7	0.03	14.3	40	-	-	-	_	-				-	25	-
7 APR	1500	1454 -0.1	0.11	12.7	42	62	62	56	56	68	_	50	40	40	36	_
1 MAY	1600	1635 +1.6	0.93	n <b>9</b> 08	47	55	52	50	56	63	_	46	38	40	30	44
11 MAY	1230	1130 +1.8	0.66	11.2	41	56	54	49	61	67	_	44	38	39	29	41
MAY	1330	1108 +2.3	0.20	12.0	43	55	55	55	66	67	_	45	38	39	34	48
JUN	1430	1555 -0.5	1.53	11.9	42	55	-	-	55	78	_	42	40		43	45
5 JUN	1800	2003 -0.2	1.27	8.5	40	-	50	50	59	65	-	40	39	_	39	42
12 JUL	1100	1349 +1.6	6.79	9.7	36	38	39	31	30	30	34	24	37	36	18	18
1 AUG	1630	1453 +0.2	0.32	8.8	34	_	-	-	_	43	_	30	36	-	22	
12 AUG	1900	2042 +0.7	4.08	10.8	37	36	40	35	30	22	_	27	35	34	17	18
29 AUG -	0930	1339 +0.5	1.16	10.1	38	43	43	40	40	40		38	36	38	22	22
7 SEPT	1700	1824 +0.6	1.81 .	9.4	34	34	35	34	33	34	_	36	35	-	16	14
27 SEPT	1300	1248 +0.6	3.13	10.8	35	38	36	35	36	34	-	35	36	36	22	22
26 OCT	1100	1053 +0.6	2.15	11.6	39	40	41	· 40	41	41	· -	40	36	38	32	30
11 NOV	1400	1219 +0.6	0.76	12.4	40	44	42	43	44	44	_	44	38	38	36	35
22 NOV	1100	0754 +0.4	0.05	10.4	42	46	46	42	48	50	40				2.5	0.55
9 DEC	1100	1027 +0.5	7.56	13.0	16	13	18	17	10	35	30	45	38	39	40	38_
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# The Information Connection

Today we take pride in the amount of information available on natural resources. Scientists, technicians and regulatory agencies maintain large libraries that describe the hydrology, the chemistry and the biology of particular wetland ecosystems statewide. Extensive information may be available, but too often, particularly at the local level, when wetlands are threatened the data may not be a part of the decision.

It is widely acknowledged that our wetlands are important for a variety of reasons. They are responsible for the natural cleansing and recharge of water stored in underground reserves, for the maintenance of productive habitats that support a myriad of wildlife that are vital to both recreation and commerce, and finally they provide aesthetic beauty and environmental excitement characteristic of natural Florida. In terms of natural assets. the wetlands of Florida have been likened to the Rocky Mountains of

Colorado. Historically, Florida wetlands were regarded as wastelands. Between 1850 and 1955 Florida's original 20 million acres of wetland were reduced by approximately 8.6 million. Between 1955 and 1973 an additional 3.4 million acres were lost, representing a total of 12 million acres since 1855, or 60% of the original resource. Even in the enlightened '80s and despite our fund of knowledge and concerns, permits for the conversion of 10,000 acres of wetlands were issued in one 18-month period. It seems clear that simply having information is not enough if it fails to be effectively used.

The problem is apparently twofold. First, like it or not, many of the final decisions on the management of our natural resources are made by elected officials representing city or county governments. Clearly, it is their job to make such decisions, and equally clearly, it is the job of the scientists and technical individuals to present the information to both the public and the decision-maker so that it can be understood and evaluated in view of the short and long term needs of the community.

Second, there is no clear yardstick available in most ecological reports to aid the decision-maker in making a comparison between the value of a marsh and the value of a shopping center. The elected official may find himself judging an increase in local tax revenues and increased employment against dissolved oxygen and water retention.

In reality, the marsh and the estuary to which it is intimately interconnected may have far greater short and long term economic to the community. benefits Benefits take the form of surface water processing and cleansing, recharge of commercial and potable aquifers, and nursery and feeding areas for gamefish and water birds (all of which enhance tourism and considerations). business other The scientific documents seldom mention such benefits, let alone present a comparative economic analysis.

Today's decision-makers are usually strongly grounded -- by

training or experience – in business. In the absence of a clear understanding of how the system functions and of the natural and economic benefits that annually accrue to society from sustaining such resources, the decision is usually in favor of development, with the elected official confident he has made the right choice for the community. Too often the powerful, well understood economic arguments control the decision, creating an information gap between the ecological data and the final stages of a decision.

The irony of the situation is that we are frequently awash in good information, paid for with public money (to solve specific public problems), that does not effectively get into the decisionmaking process. Scientists too often write for their peers, when it is tax-paying laymen who have contracted for their expertise. Specialized environmental information has only academic value unless it can make a useful, effective connection with the decision-maker. In the last analysis it is our elected officials - not the scientist and technician - who will determine the environmental future of Florida.

One of the major objectives of the Florida Audubon Society is to bridge this gap and give the environment a voice in these decissions. In close cooperation with our 46 local chapters we stand with one foot in the wetlands and the other in the commission chambers to make the information connection.

Bernard Yokel

beautiful of the woodland cooers! I never felt, nor did my companion, that our faces and hands were covered with mosquitoes; and although the perspiration made my eyes smart, I was as much delighted as I had been on such an occasion... I have taken upon myself to name this species the Key West Pigeon, and offer it as a tribute to the generous inhabitants of the island. who favoured me with their friendship." (Plate CLXVII).

The most celebrated discovery that Audubon made in the Florida Keys was the Great White Heron (Plate CCLXXXI). On his departure from Florida in late May of 1832, Audubon carried fifteen skins of the Great White Heron with him. One of them was mounted by Henry Ward for the Museum of Charleston, one was presented to the Academy of Natural Sciences at Philadelphia, several were given to Audubon colleagues along the way, one to the Zoological Society of London, and "I presented a pair," Audubon stated, "to His Royal Highness the Duke of Sussex, who gave them to the British Museum, where I have since seen them mounted." More than fifty birds are attributed to Audubon's expedition to Florida which became a part of his Birds of Amer-

"The difficulties which are to be encountered in studying the habits of our Water Birds are great," wrote Audubon. "...but the scarcer the fruit, the more prized it is; and seldom have I experienced greater pleasures than when on the Florida Keys, under a burnning sun, after pushing my bark for miles over a soapy flat, I have striven all day long, tormented by myriads of insects, to procure a heron new to me, and have at length succeeded in my efforts. And then how ample are the labours of the naturalist compensated, when, after observing the wildest and most distrustful birds, in their remote and almost inaccessible breeding places, he returns from his journeys, and relates his adventures to an interested and friendly audience."

Kathryn Proby is the author of Audubon in Florida, and lives in Key West. Her book is available at the Florida Audubon Gift Shop for \$15.95 plus \$1.50 tax and postage.

# The Key West Salt Ponds

by Joan Borel

Vhen John James Audubon explored the Key West Salt Ponds back in 1832 in search of new specimens to draw for Birds of America, he found a series of expansive tidal lagoons, separated from the sea by a long sandbar, surrounded by an almost impenetrable tangle of mangroves and mosquitoes. already altered by human use.

"Flamingoes," he noted, "are fond of resorting to the shallow ponds formerly kept there as reservoirs of water for the purpose

of making salt."

Historically and environmentally important, the area is increasingly threatened by development. Today the Salt Ponds are the last remaining natural area on Key These almost completely landlocked wetlands form a unique, highly saline environment found nowhere else in the Keys, supporting many rare and endangered species. The efforts of Florida Audubon Society toward the conservation of this important marine and avian resource are an appropriate tribute to its namesake.

The long and colorful history of the Salt Ponds has left some scars. An airport was built in the middle of the original pond, and further filling over the years has divided it into eight smaller ponds, restricting tidal circulation. Pollution has occurred in some areas because of seepage through old underwater sewer lines. The mangrove fringes have been trashed by dumping and the hammocks have been used as camps by vagrants. Brazilian peppers and other exotic plants are crowding out rare native The miracle is that the ponds still exist at all on a tightly restricted urban island such as Key West.

Yet in spite of all abuses, the Salt Ponds are a unique and flourishing ecosystem, a rich marine nursery, and a feeding area for large numbers of migratory and indigenous birds. The early morning visitor to the Salt Ponds might see the white crowned pigeon, found

only as far north as the Keys, or the rare Antillean Nighthawk. shallow ponds provide good foraging for the Great Blue Heron, Snowy Egret, Reddish Egret, Green Heron, and Louisiana Heron. Sea birds as well stop by. Flocks of mergansers, mallards, teal, and coots winter in the area.

The fish present include the Sheepshead Minnow, Rainwater Killifish, Sailfin Molly, and the rare Key Silverside which occurs only in three areas of the Keys. unusual fish species are of special scientific interest. Their geographical isolation has resulted in morphological differences which contribute to an understanding of evolutionary phenomena.

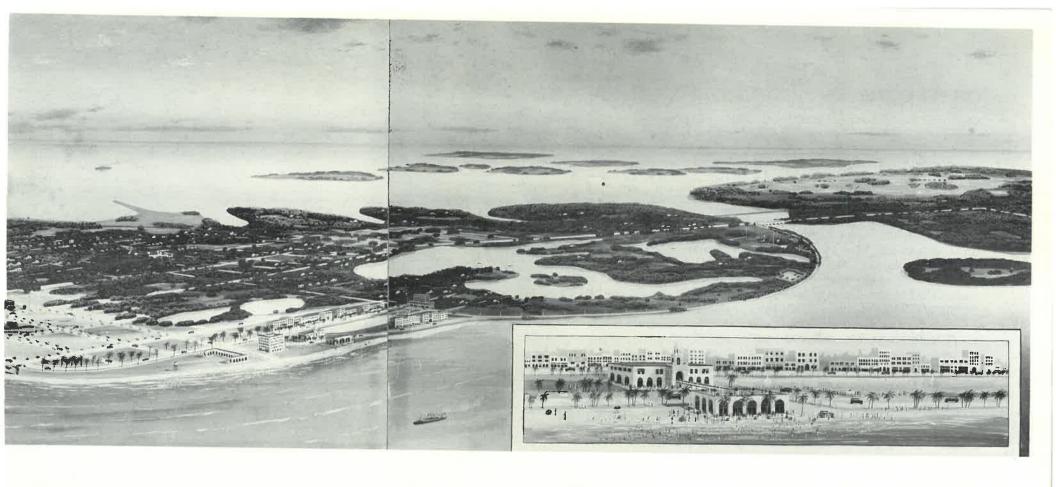
Many unusual native trees are found in the remaining hammocks.

In all, about 26 species of flora and fauna found in the Salt Pond area are classified as endangered. threatened, or species of special concern.

Florida Audubon Society has been a leader in the effort to preserve this historic, rarely visited quarter of Key West which offers a last refuge from the island's rapid growth. Last year the Society replaced a culvert which restored tidal circulation into a crucial pond through the use of the Florida Kevs Mitigation Fund, and similar projects are planned for the future. Florida Audubon is the sponsor of the proposal to acquire all of the remaining undeveloped acreage of the Salt Ponds for use as a state park under the CARL program.

Key West's historic Audubon House, which has recently come under the management of the Society, will soon be extending its educational program into the field through the stewardship of 38 acres of mostly submerged, state-owned land in the Salt Ponds. This relatively inaccessible area will be opened up to canoe trips in order to increase public appreciation of the recreational potential of this wild, little known, and fragile area of Key West.

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# THE SALT PONDS OF KEY WEST

A Report by The Florida Keys Land Trust, Inc. P.O. Box 1432 Key West, FL 33041



# INTRODUCTION

In 1982, the Florida Keys Land Trust, Inc. opened to the public the Thomas F. and Grace Downey Riggs Wildlife Refuge in the Key West Salt Ponds on South Roosevelt Boulevard. The refuge was the result of the generosity of Mr. and Mrs. Riggs and the good offices of Aldis Browne, Clay McDaniel and Edward B. Knight who suggested that the Riggs might wish to donate their largely submerged land to the Trust.

In the process of building the observation platform in the refuge and discussing with other landowners the possible donation of additional submerged land, the Board of Directors of the Trust perceived the need for a report on the history and ecology of the Salt Ponds. We are indebted to Joan Borel for the original research, to Ross McKee for the writing of the final report, and to Betty Bruce, Director of the Department of Local and State History of the Monroe County Library.

It is our hope that this study will be found useful in many areas: Monroe County Schools, the County and City Governments, the various State and Federal Agencies concerned with the structure of the ponds and the wildlife they support, and finally the interested citizen who simply wishes to enjoy this unique historical feature of Key West.

For The Board of Directors,

Diana Curtis
Diana Curtis, President

# THE BEGINNINGS OF KEY WEST

If we were able to turn back the pages of time to the beginnings of Key West we would find two familiar things: public controversy and unusual occupations. Among the latter were "wrecking" and the manufacture of salt from sea water in Key West's unique Salt Pond. The earliest controversy, of course, was over the ownership of the island. John W. Simonton, a citizen of New Jersey, had purchased Key West from a colonial Spanish field artillery officer, Juan P. Salas, for \$2,000. His claim was contested by one George Murray, but a U.S. land claims board ruled in Simonton's favor on December 14, 1825 and a year later Murray signed quitclaim deeds over to Simonton's partners, William Whitehead and Pardon C. Greene. Thus, one wonders at the outset what would have happened, and how different might have been the history of the Salt Pond, if Simonton's claim had not been sustained and another proprietory group had taken over the island.

However, as things turned out, John Simonton had taken physical possession of the island on January 19, 1822. It was his good fortune that Salas wanted money more than real estate. As was often the case with kings, the King of Spain was short of cash during the colonial wars that ended with the cession of the territory of Florida and its adjacent islands to the U.S. by Spain on February 22, 1819. So on August 26, 1815, the Spanish king discharged his debt to Salas not only for back pay as an officer but also for unpaid services as secretary to the colonial governor at St. Augustine.

A second controversy arose early in the settlement's history when Commodore Porter, of pirate suppression fame, tried to impose his own version of city planning on the fledgling town. His idea was to copy the Parisian plan of L'Enfant which employed starlike patterns of streets radiating from central plazas which could be controlled by artillery in the event of civil unrest. Fortunately, this warlike sort of municipal plan failed, and Key West ended up with a typical grid plot by the island's first surveyor, H.L. Barnum. His survey was rendered into a map by William Adee Whitehead in February of 1829 as part of Whitehead's duties as a "disinterested person" chosen to divide the island up among the original proprietors: Simonton, Greene, William Whitehead and John William Charles Fleeming (Fleming). It is with this first map of Key West that the history of the Salt Pond begins.

In fact the first small opening wedge in private ownership of the Salt Ponds came just a few years ago with the Riggs family's donation to the Florida Keys Land Trust of the acreage on South Roosevelt Boulevard that now comprises the Riggs Wildlife Refuge. This first gift was followed by a much larger donation in 1983 of 38-plus acres of Salt Pond land on the north side of the airport adjacent to the Riviera Canal. This new gift, because of its strategic location, may conceivably start the chain reaction that will result in permanent protection of the Salt Ponds in its wild state.

The donation was the result of the generosity of the heirs of Maurice Spilky, a Chicagoan who purchased the tract from the Charles Helburg Estate. Receiver of the gift was the Nature Conservancy which conveyed the land to the Division of State Lands of the Florida Department of Natural Resources. The department has asked the Florida Audubon Society to manage the property. So, given the miracles that have saved the Salt Ponds since the beginning of Key West, who is to say that one will not happen again. Meanwhile the creatures of nature enjoy life in the pond as always, oblivious to the human controversy that swirls around them. The second part of this report is devoted to that natural life.

## ECOLOGY OF THE KEY WEST SALT PONDS

A winter visitor to the Riggs Wildlife Refuge in the early morning has a treat in store. As he or she parks the car and walks through the gate onto the simple wooden platform, the mangroves close around and it is like walking into a different world. The sounds of cars on South Roosevelt Boulevard are muted and the visitor comes face to face with the peaceful life of the centuries-old Salt Pond. There are blue heron and white heron and a score or more of smaller wading birds; there are blue teal and mallards and merganzers and coots. There are fish a foot long jumping in the deeper reaches of the pond, and minnows of a dozen species swimming among the roots of the mangroves.

Watching the migratory waterfowl is an experience. Because most of the pond is only six inches to a foot deep, the ducks do not "duck." Instead, they form up in squads of six or eight and literally "vacuum" the bottom. Putting their heads down and paddling furiously with their feet while their bodies remain on the surface, they chase the small fry hither and yon, all the time remaining in tight formation and throwing wakes like miniature power boat racers.

Ocean birds such as terns, gulls, cormorants and pelicans also frequent the pond, but they know their place in the aviary pecking order and maintain a respectful distance from the ducks and herons. They do not feed in the pond but use it just for a rest stop before resuming their daily hunt for schools of mackerel.

Around the pond are mangrove fringes and buttonwood transition growth. Some stands are badly infiltrated by Brazilian pepper and Australian pine but others are pristine. Here and there are small hardwood hammock areas. The southerly pond on which the Riggs Wildlife Refuge is located is only one of eight ponds that once were part of the original Salt Pond and the original bight that existed before the filling and development, which are described in the preceding section, occurred. Each of these ponds has differences in marine life which depend upon the amount of tidal flow, propinquity to the Riviera Canal or to one of the ocean culverts, and the degree to which their banks or other adjacent land has been disturbed. However, the flora of the ponds can be divided into the usual three categories: mangrove, transitional, zone and hardwood hammock. Because of the airport development, including the World War II dispersal areas, and the former Hawk missile battery site, and because of filling of the eastern portion of the bight, there is a good deal of disturbed open dry land, occupying former submerged areas, which has become quite sterile and barren. Yet, there remains a large acreage in the wild state in which the indigenous fauna and flora continue to flourish.

At the eastern end of the airport there are substantial stands of hardwood trees and red, white and black mangroves. The forest canopy there rises to a height of 50 feet in spots. Dominant plant species in the mangrove area are sea daisy, beach elder, saltwort, mayten and perennial glasswort. The eastern hammock areas, which have been disturbed by earth-moving machinery, motorcyclists and campers, still contain a large number of hardwood trees up to 25 feet in height including buttonwood, gumbo limbo, Spanish stopper, wild dilly, poisonwood and black bead. There are also joewood, bay cedar and seaside mahoe, cinnamon bark, sea grape, strangler fig and wild banyan. Other species identified include the saffron plum, hog plum and Darling plum.

Plants and shrubs of the hammock areas adjacent to the Salt Ponds include: alligator weed, burmarigold, sandspur, dildo cactus, spurge, crowfoot grass, rubber vine, erithalis, false boxwood, moon vine, railroad vine, sky blue morning glory, bush lantana, bamboo grass, Christmas berry, yellow root, white indigo berry, white tuber vine, sea purslane, necklace pod and wedelia.

## CONCLUSION

In the first section of this study, which reviewed the history of the Key West Salt Ponds, the reader will have noted that time after time the ponds were threatened with extinction and yet somehow survived. Human fate and economics had a lot to do with this: if the early salt makers had been consistently successful and their markets had endured, things might be different today. If the land boom speculators of the 1920's had been successful, the ponds might have disappeared entirely under residential housing, commercial plazas, hotels and apartments. If the post-World War II speculators had been bolder and possessed of more capital, they too might have been able to develop the Salt Ponds before federal, state and local environmental controls were imposed. If the two attempts to operate jet aircraft out of Key West had proved profitable for National Airlines and Air Florida, respectively, the airport might have been further enlarged and much of the remaining pond area destroyed.

As it is, none of these things has happened. Substantial pond areas remain. But the future is unclear. Most of the pond acreage is still privately owned, and the owners continue to pay taxes year after year, hoping that present laws and regulations may change and permit them to develop their property in accordance with the city's zoning map and ordinances. Various conservation groups, on the other hand, hope that a way will be found to save the ponds permanently now that they have survived more than a century and a half of human development in Key West. The ghost of John James Audubon, presumably, would approve.

Just in the past three years, the balance appears to be swinging, ever so slightly in favor of conservation. The recent 38-acre acquisition by the Nature Conservancy, referred to in Part 1 of this report, may be just an aberration in the long-term trend toward development, or it may be a first important indicator in favor of preservation. Certainly it demonstrates that Florida's Department of Natural Resources is aware of the importance of Key West's historic Salt Ponds. But, as with most human endeavors, money enters into the equation, and acquisition of the remaining privately-owned parcels in the ponds promises to be a long and costly task.

However, the Nature Conservancy, a national organization, and its relatively tiny neighbor, the Florida Keys Land Trust, are now visible factors in the monetary equation. Donations or bargain sales to these organizations may provide sufficient financial incentive, through tax deductions, for many landowners to offer their properties for public use as a forever wild preserve. The next few years will tell the story.

Meanwhile, the Key West Salt Ponds endure as a natural domain ruled over by the birds and animals that inhabit it. It is a domain which human beings may also enjoy as observers and through which they can explore by skiff and canoe. The ponds constitute a natural studio for the photographer and a natural laboratory for the biology classes of Key West schools and of the Florida Keys Community College. It is in large part to these young people who will inherit the Key West of the future that we dedicate this brief and informal study.

The Key West Salt Ponds, amazingly, still remain as in Audubon's day a head-quarters for native aquatic birds and migratory waterfowl. On any given day, as many has 20 great white heron can be seen in a flock on the banks of the pond that is sandwiched between Key West Airport and Roosevelt Boulevard. They appear oblivious to the scream of engines and the roar of traffic. Nearby are flocks of mallards, teal and coot and in the trees are rare night heron.

