CPA2005-00041
MANATEE PROTECTION PLAN
BoCC SPONSORED
AMENDMENT
TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

BoCC Adoption Document

Lee County Planning Division
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P.O. Box 398
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May 16, 2007

LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
CPA2005-00041

☑ **Text Amendment** ☐ **Map Amendment**

✓	This Document Contains the Following Reviews:
✓	Staff Review
✓	Local Planning Agency Review and Recommendation
✓	Board of County Commissioners Hearing for Transmittal
✓	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
✓	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: November 15, 2006

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. **APPLICANT/REPRESENTATIVE:**
   LEE COUNTY BOARD OF COUNTY COMMISSIONERS
   REPRESENTED BY LEE COUNTY DIVISION OF PLANNING AND THE DIVISION OF NATURAL RESOURCES

2. **REQUEST:** Amend the Conservation and Coastal Management Element and/or the Future Land Use Element to incorporate the "boating facility siting element" of the Manatee Protection Plan as required by F.S. 370.12.(2)(t)(3).

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY:

1. **RECOMMENDATION:** Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment. The existing policy language is shown below, with modifications proposed by staff shown in strike through, underline format. The proposed revisions are as follows:

OBJECTIVE 8.2: All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marin~~a~~e Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.

OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA. The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.

- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee ~~p~~Protection ~~p~~Plans approved by Lee County on June 29, 2004.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- Florida Statutes (F.S. 370.12(2)(t)) require Lee County to prepare a Manatee Protection Plan (MPP).

- On June 29, 2004, the Lee County Board of County Commissioners unanimously approved the MPP. The MPP has been used for permitting guidance since that time.

- The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee.

- The recent Evaluation and Appraisal Report identified the need to incorporate the "boating facility siting element" of the MPP into the Lee Plan to be consistent with State Statutes.

- Proposed Policy 128.5.6 ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3 requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan.

PART II - STAFF ANALYSIS

A. LEE COUNTY MANATEE PROTECTION PLAN

Description of a Manatee Protection Plan (MPP)
The Manatee Protection Plan (MPP) is a planning document designed to provide countywide, comprehensive protection of the West Indian Manatee. The specific purposes are to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment in Lee County. The MPP is intended to satisfy the requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

The MPP provides guidance and recommendations used by local, state and federal entities. The Lee County Board of County Commissioners (BOCC), the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS) will implement the provisions of the MPP as appropriate. For instance, all three entities will use the boat facility siting portion of the plan to review permit applications for docking facilities, providing for a predictable and consistent approach to permitting.

Requirements for MPP Development
The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. The Florida Manatee Recovery Plan identifies development of site-specific manatee protection plans at the local level as a priority task important to the recovery of the species.

In 1989, the Governor and Cabinet recommended the development of MPPs in 13 "key" counties. This recommendation was not binding on local governments, but lead to development of guidance on MPP content. In August 2000, the Trustees of the Internal Improvement Trust Fund adopted a policy that prohibited new or expanded submerged land lease in key counties that were not making significant progress toward MPP adoption.

More recently, the 2002 Legislature amended Chapter 370.12(2) Florida Statutes, the Florida Manatee Sanctuary Act, to incorporate the 1989 directive for the development of county MPPs. This statute provided deadlines for MPP development and required adoption of the boat facility element into county comprehensive plans. F.S. 370.12(2)(t)1. Is reproduced below:

> *In order to protect manatees and manatee habitat, the counties identified in the Governor and Cabinet's October 1989 Policy Directive shall develop manatee protection plans consistent with*

commission criteria based upon "Schedule K" [attached] of the directive, and shall submit such protection plans for review and approval by the commission. Any manatee protection plans not submitted by July 1, 2004, and any plans not subsequently approved by the commission shall be addressed pursuant to subparagraph 2.

Additionally, there was an amendment made to the DRI statute that allows for certain exemptions from DRI requirements in a county with an approved MPP that has been incorporated in to the comprehensive plan. This is an allowance; not a requirement. The question of DRI exemption has never been pursued in the case of Lee County. F.S. 380.06(24)(k)1. is reproduced below:

Any waterport or marina development is exempt from the provisions of this section if the relevant county or municipality has adopted a boating facility siting plan or policy which includes applicable criteria, considering such factors as natural resources, manatee protection needs and recreation and economic demands as generally outlined in the Bureau of Protected Species Management Boat Facility Siting Guide, dated August 2000, into the coastal management or land use element of its comprehensive plan. The adoption of boating facility siting plans or policies into the comprehensive plan is exempt from the provisions of s. 163.3187(1). Any waterport or marina development within the municipalities or counties with boating facility siting plans or policies that meet the above criteria, adopted prior to April 1, 2002, are exempt from the provisions of this section, when their boating facility siting plan or policy is adopted as part of the relevant local government's comprehensive plan.

The plan states that it will be revisited and possibly revised on a five-year basis. More frequent revisions may occur under circumstances discussed in the MPP.

Specifics of the Lee County MPP
The MPP is posted on the Lee County website at the following location:
http://www.lee-county.com/naturalresources/MPP_final.pdf

Plan Development
As defined by the Florida Fish and Wildlife Conservation Commission (FWC), a comprehensive manatee protection plan typically includes speed zones, sign posting, enforcement, education, habitat protection, and a boat-facility siting plan. County staff actively worked with the Florida Fish and Wildlife Conservation Commission (FWC) for over a year to edit and complete a MPP consistent with the requirements of Florida Statutes. On January 20, 2004, the BOCC directed staff to submit the revised MPP to FWC for approval (Walk-on #1). On April 12, 2004, a letter from FWC transmitted comments, not only from FWC, but also from US Fish and Wildlife Service and the Department of Community Affairs.

On Tuesday, June 29, 2004, the Lee County Board of County Commissioners unanimously approved the final plan which included many modifications based on the April 2004 letter and a subsequent meeting with FWC and USFWS. This version of the MPP was approved by FWC on August 24, 2004 and given concurrence from USFWS on August 26, 2004. It has been used for permitting guidance since that time.

Plan Implementation
Even before final approval of the MPP, Lee County had implemented most plan components. The County continues efforts related to speed zones, including posting and enforcement, as well as habitat protection and education efforts.

The largest significant change has been the use of a new screening process to determine on a site specific basis the number of vessels to be accommodated by new or expanded boat access facilities. The MPP only applies (per statute) to facilities with 5 or more slips, unless the slips are repetitive use slips such as cruise ships, water taxis, etc. It does not apply retroactively to any facility that has already received state and federal permits. The MPP does not apply to reconfiguration or reduction of slips as long as a project does not adversely impact any more than 1000 square feet of submerged aquatic vegetation, such as seagrass.

Projects that require a review are evaluated individually and given a score based on factors including water depth, submerged aquatic vegetation impacts, manatee abundance, manatee mortality, manatee aggregation areas, proximity to open water, presence or absence of speed zones, and whether a project is a new or expanding facility. The total "score" is then used to categorize the site as preferred, conditional or non-preferred. Depending on the category and whether the project is located in an area of special concern, the maximum number of slips allowable is recommended. This is a slip to shoreline ratio and typically ranges from unlimited to 1 slip per 100 linear feet of shoreline.

Facilities that are subject to MPP review and score as conditional or non-preferred, are required to pay fees for additional marine law enforcement. A discussion of this fee can be found in the MPP on page 57.

The plan allows for a transfer of slip credits, discussed in detail in the MPP on page 51.

B. STAFF DISCUSSION

Staff is proposing to amend Objective 128.5, Marina Siting Criteria, and call the objective Marine Facilities Siting Criteria and add dry slip facilities with launches. Staff is also recommending that the citation to Objective 128.5 located in Objective 8.2 be changed to also refer to the "Marine Facilities Siting Criteria." The specific recommended language modifications for these 2 objectives are as follows:

> **OBJECTIVE 8.2:** All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marin~~a~~e Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.
>
> **OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA.** The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

Staff is also proposing to change the reference to Marinas in many policies of the plan and replace this term with a new term: "boat access facilities." This term is broader in nature. The MPP defines a Boat Facility as "a public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps." A dry storage facility is considered

part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. The MPP definition also provides that facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access or single-family docks with less than five (5) wet slips are not considered boat facilities. The specific recommended modifications are as follows:

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

Staff is proposing to modify Policy 128.5.6 to refer to the adopted MPP and that Section 8 of the MPP, the Marine Facility Siting Requirements, will be used to determine the appropriate number of slips in new or expanded facilities. This proposed Policy essentially ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3. requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan. The specific recommended language modifications are as follows:

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

The Lee Plan contains an objective that is specific to West Indian Manatees, Objective 107.7. The current objective is to "minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County." The objective also provides that "by 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees." Staff notes that the purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. Given this fact, Objective 107.7 and subsequent policies should be revised to acknowledge the existence of the MPP. Staff believes that the concept of management alternatives should be incorporated into Policy 107.7.1. Staff also believes that Policies 107.7.5 and 107.7.6 should be modified to recognize the existence of the MPP and the need to update the MPP in the future. Staff recommends the following specific modifications to Objective 107.7 and subsequent Policies:

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee ~~p~~Protection ~~p~~Plans approved by Lee County on June 29, 2004.

C. CONCLUSIONS

State law requires Lee County to prepare a Manatee Protection Plan. The County has prepared and adopted a Manatee Protection Plan. The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. The proposed revisions ensure that Lee County is consistent with State Statutes, specifically Chapter 370.12(2)(t)3.

D. RECOMMENDATION

Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment as contained in Part I.B. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: November 27, 2006

A. LOCAL PLANNING AGENCY REVIEW

Staff provided a brief overview of the proposed amendment. One member of the Local Planning Agency asked why the threshold of five vessels was established in the proposed modifications to Policy 107.7.5. Natural Resources staff responded that this figure was consistent with state statutes.

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. **RECOMMENDATION:** The Local Planning Agency recommends that the Board of County Commissioners transmit the proposed amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Local Planning Agency accepted the findings of fact as advanced by the staff.

C. VOTE:

NOEL ANDRESS	**AYE**
DEREK BURR	**AYE**
RONALD INGE	**AYE**
CARLETON RYFFEL	**ABSENT**
RAYMOND SCHUMANN, ESQ.	**AYE**
RAE ANN WESSEL	**AYE**
VACANT	

PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT

DATE OF TRANSMITTAL HEARING: December 13, 2006

A. BOARD REVIEW: The Board of County Commissioners provided no discussion concerning the proposed plan amendment. This item was approved on the consent agenda.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. **BOARD ACTION:** The Board of County Commissioners voted to transmit the proposed plan amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Board accepted the findings of fact advanced by staff and the LPA.

C. VOTE:

A. BRIAN BIGELOW	**AYE**
TAMMARA HALL	**AYE**
BOB JANES	**AYE**
RAY JUDAH	**AYE**
FRANKLIN B. MANN	**AYE**

PART V - DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT

DATE OF ORC REPORT: March 2, 2007

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

The Department of Community Affairs provided no objections, recommendations, or comments concerning the proposed amendment.

B. STAFF RESPONSE

Adopt the proposed amendment as transmitted.

PART VI - BOARD OF COUNTY COMMISSIONERS HEARING FOR ADOPTION OF PROPOSED AMENDMENT

DATE OF ADOPTION HEARING: May 16, 2007

A. BOARD REVIEW:

The Board of County Commissioners provided no discussion concerning the proposed plan amendment. This item was approved on the consent agenda.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

The Board of County Commissioners adopted the proposed plan amendment.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

The Board accepted the findings of fact advanced by staff and the LPA.

C. VOTE:

A. BRIAN BIGELOW	**AYE**
TAMMARA HALL	**AYE**
BOB JANES	**AYE**
RAY JUDAH	**AYE**
FRANKLIN B. MANN	**AYE**

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April 11th Adoption Hearing

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March 2, 2007

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POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.

- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.

- Marinas should be located as close as possible to boating demand.

- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- Florida Statutes (F.S. 370.12(2)(t)) require Lee County to prepare a Manatee Protection Plan (MPP).

- On June 29, 2004, the Lee County Board of County Commissioners unanimously approved the MPP. The MPP has been used for permitting guidance since that time.

- The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee.

- The recent Evaluation and Appraisal Report identified the need to incorporate the "boating facility siting element" of the MPP into the Lee Plan to be consistent with State Statutes.

- Proposed Policy 128.5.6 ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3 requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan.

PART II - STAFF ANALYSIS

A. LEE COUNTY MANATEE PROTECTION PLAN

Description of a Manatee Protection Plan (MPP)
The Manatee Protection Plan (MPP) is a planning document designed to provide countywide, comprehensive protection of the West Indian Manatee. The specific purposes are to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment in Lee County. The MPP is intended to satisfy the requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

The MPP provides guidance and recommendations used by local, state and federal entities. The Lee County Board of County Commissioners (BOCC), the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS) will implement the provisions of the MPP as appropriate. For instance, all three entities will use the boat facility siting portion of the plan to review permit applications for docking facilities, providing for a predictable and consistent approach to permitting.

Requirements for MPP Development
The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. The Florida Manatee Recovery Plan identifies development of site-specific manatee protection plans at the local level as a priority task important to the recovery of the species.

In 1989, the Governor and Cabinet recommended the development of MPPs in 13 "key" counties. This recommendation was not binding on local governments, but lead to development of guidance on MPP content. In August 2000, the Trustees of the Internal Improvement Trust Fund adopted a policy that prohibited new or expanded submerged land lease in key counties that were not making significant progress toward MPP adoption.

More recently, the 2002 Legislature amended Chapter 370.12(2) Florida Statutes, the Florida Manatee Sanctuary Act, to incorporate the 1989 directive for the development of county MPPs. This statute provided deadlines for MPP development and required adoption of the boat facility element into county comprehensive plans. F.S. 370.12(2)(t)1. Is reproduced below:

> *In order to protect manatees and manatee habitat, the counties identified in the Governor and Cabinet's October 1989 Policy Directive shall develop manatee protection plans consistent with*

commission criteria based upon "Schedule K" [attached] of the directive, and shall submit such protection plans for review and approval by the commission. Any manatee protection plans not submitted by July 1, 2004, and any plans not subsequently approved by the commission shall be addressed pursuant to subparagraph 2.

Additionally, there was an amendment made to the DRI statute that allows for certain exemptions from DRI requirements in a county with an approved MPP that has been incorporated in to the comprehensive plan. This is an allowance; not a requirement. The question of DRI exemption has never been pursued in the case of Lee County. F.S. 380.06(24)(k)1. is reproduced below:

Any waterport or marina development is exempt from the provisions of this section if the relevant county or municipality has adopted a boating facility siting plan or policy which includes applicable criteria, considering such factors as natural resources, manatee protection needs and recreation and economic demands as generally outlined in the Bureau of Protected Species Management Boat Facility Siting Guide, dated August 2000, into the coastal management or land use element of its comprehensive plan. The adoption of boating facility siting plans or policies into the comprehensive plan is exempt from the provisions of s. 163.3187(1). Any waterport or marina development within the municipalities or counties with boating facility siting plans or policies that meet the above criteria, adopted prior to April 1, 2002, are exempt from the provisions of this section, when their boating facility siting plan or policy is adopted as part of the relevant local government's comprehensive plan.

The plan states that it will be revisited and possibly revised on a five-year basis. More frequent revisions may occur under circumstances discussed in the MPP.

Specifics of the Lee County MPP
The MPP is posted on the Lee County website at the following location:
http://www.lee-county.com/naturalresources/MPP_final.pdf

Plan Development
As defined by the Florida Fish and Wildlife Conservation Commission (FWC), a comprehensive manatee protection plan typically includes speed zones, sign posting, enforcement, education, habitat protection, and a boat-facility siting plan. County staff actively worked with the Florida Fish and Wildlife Conservation Commission (FWC) for over a year to edit and complete a MPP consistent with the requirements of Florida Statutes. On January 20, 2004, the BOCC directed staff to submit the revised MPP to FWC for approval (Walk-on #1). On April 12, 2004, a letter from FWC transmitted comments, not only from FWC, but also from US Fish and Wildlife Service and the Department of Community Affairs.

On Tuesday, June 29, 2004, the Lee County Board of County Commissioners unanimously approved the final plan which included many modifications based on the April 2004 letter and a subsequent meeting with FWC and USFWS. This version of the MPP was approved by FWC on August 24, 2004 and given concurrence from USFWS on August 26, 2004. It has been used for permitting guidance since that time.

Plan Implementation
Even before final approval of the MPP, Lee County had implemented most plan components. The County continues efforts related to speed zones, including posting and enforcement, as well as habitat protection and education efforts.

The largest significant change has been the use of a new screening process to determine on a site specific basis the number of vessels to be accommodated by new or expanded boat access facilities. The MPP only applies (per statute) to facilities with 5 or more slips, unless the slips are repetitive use slips such as cruise ships, water taxis, etc. It does not apply retroactively to any facility that has already received state and federal permits. The MPP does not apply to reconfiguration or reduction of slips as long as a project does not adversely impact any more than 1000 square feet of submerged aquatic vegetation, such as seagrass.

Projects that require a review are evaluated individually and given a score based on factors including water depth, submerged aquatic vegetation impacts, manatee abundance, manatee mortality, manatee aggregation areas, proximity to open water, presence or absence of speed zones, and whether a project is a new or expanding facility. The total "score" is then used to categorize the site as preferred, conditional or non-preferred. Depending on the category and whether the project is located in an area of special concern, the maximum number of slips allowable is recommended. This is a slip to shoreline ratio and typically ranges from unlimited to 1 slip per 100 linear feet of shoreline.

Facilities that are subject to MPP review and score as conditional or non-preferred, are required to pay fees for additional marine law enforcement. A discussion of this fee can be found in the MPP on page 57.

The plan allows for a transfer of slip credits, discussed in detail in the MPP on page 51.

B. STAFF DISCUSSION

Staff is proposing to amend Objective 128.5, Marina Siting Criteria, and call the objective Marine Facilities Siting Criteria and add dry slip facilities with launches. Staff is also recommending that the citation to Objective 128.5 located in Objective 8.2 be changed to also refer to the "Marine Facilities Siting Criteria." The specific recommended language modifications for these 2 objectives are as follows:

> **OBJECTIVE 8.2:** All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marin~~a~~e Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.
>
> **OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA.** The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

Staff is also proposing to change the reference to Marinas in many policies of the plan and replace this term with a new term: "boat access facilities." This term is broader in nature. The MPP defines a Boat Facility as "a public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps." A dry storage facility is considered

part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. The MPP definition also provides that facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access or single-family docks with less than five (5) wet slips are not considered boat facilities. The specific recommended modifications are as follows:

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

Staff is proposing to modify Policy 128.5.6 to refer to the adopted MPP and that Section 8 of the MPP, the Marine Facility Siting Requirements, will be used to determine the appropriate number of slips in new or expanded facilities. This proposed Policy essentially ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3. requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan. The specific recommended language modifications are as follows:

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

The Lee Plan contains an objective that is specific to West Indian Manatees, Objective 107.7. The current objective is to "minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County." The objective also provides that "by 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees." Staff notes that the purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. Given this fact, Objective 107.7 and subsequent policies should be revised to acknowledge the existence of the MPP. Staff believes that the concept of management alternatives should be incorporated into Policy 107.7.1. Staff also believes that Policies 107.7.5 and 107.7.6 should be modified to recognize the existence of the MPP and the need to update the MPP in the future. Staff recommends the following specific modifications to Objective 107.7 and subsequent Policies:

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

C. CONCLUSIONS

State law requires Lee County to prepare a Manatee Protection Plan. The County has prepared and adopted a Manatee Protection Plan. The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. The proposed revisions ensure that Lee County is consistent with State Statutes, specifically Chapter 370.12(2)(t)3.

D. RECOMMENDATION

Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment as contained in Part I.B. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: November 27, 2006

A. LOCAL PLANNING AGENCY REVIEW

Staff provided a brief overview of the proposed amendment. One member of the Local Planning Agency asked why the threshold of five vessels was established in the proposed modifications to Policy 107.7.5. Natural Resources staff responded that this figure was consistent with state statutes.

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. **RECOMMENDATION:** The Local Planning Agency recommends that the Board of County Commissioners transmit the proposed amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Local Planning Agency accepted the findings of fact as advanced by the staff.

C. VOTE:

NOEL ANDRESS	**AYE**
DEREK BURR	**AYE**
RONALD INGE	**AYE**
CARLETON RYFFEL	**ABSENT**
RAYMOND SCHUMANN, ESQ.	**AYE**
RAE ANN WESSEL	**AYE**
VACANT	

PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT

DATE OF TRANSMITTAL HEARING: December 13, 2006

A. BOARD REVIEW: The Board of County Commissioners provided no discussion concerning the proposed plan amendment. This item was approved on the consent agenda.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. **BOARD ACTION:** The Board of County Commissioners voted to transmit the proposed plan amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Board accepted the findings of fact advanced by staff and the LPA.

C. VOTE:

A. BRIAN BIGELOW	**AYE**
TAMMARA HALL	**AYE**
BOB JANES	**AYE**
RAY JUDAH	**AYE**
FRANKLIN B. MANN	**AYE**

PART V - DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT

DATE OF ORC REPORT: March 2, 2007

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

The Department of Community Affairs provided no objections, recommendations, or comments concerning the proposed amendment.

B. STAFF RESPONSE

Adopt the proposed amendment as transmitted.

PART VI - BOARD OF COUNTY COMMISSIONERS
HEARING FOR ADOPTION OF PROPOSED AMENDMENT

DATE OF ADOPTION HEARING: April 11, 2007

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

	_____
A. BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANKLIN B. MANN	_____

CPA2005-00041
MANATEE PROTECTION PLAN
BoCC SPONSORED
AMENDMENT
TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

DCA Transmittal Document

Lee County Planning Division
1500 Monroe Street
P.O. Box 398
Fort Myers, FL 33902-0398
(239) 479-8585

December 21, 2006

LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
CPA2005-00041

☑ **Text Amendment** ☐ **Map Amendment**

✓	This Document Contains the Following Reviews:
✓	Staff Review
✓	Local Planning Agency Review and Recommendation
✓	Board of County Commissioners Hearing for Transmittal
	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: November 15, 2006

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. **APPLICANT/REPRESENTATIVE:**
LEE COUNTY BOARD OF COUNTY COMMISSIONERS
REPRESENTED BY LEE COUNTY DIVISION OF PLANNING AND THE DIVISION OF NATURAL RESOURCES

2. **REQUEST:** Amend the Conservation and Coastal Management Element and/or the Future Land Use Element to incorporate the "boating facility siting element" of the Manatee Protection Plan as required by F.S. 370.12.(2)(t)(3).

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY:

1. **RECOMMENDATION:** Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment. The existing policy language is shown below, with modifications proposed by staff shown in strike through, underline format. The proposed revisions are as follows:

OBJECTIVE 8.2: All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marinae Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.

OBJECTIVE 128.5: MARINAE FACILITIES SITING CRITERIA. The County will consider the following marina siting criteria in evaluating requests for new and substantially expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

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Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities marinas and/or boat ramps in a small area will be considered in the review of proposed marina projects.

POLICY 128.5.3: Boat access facilities Marina and/or boat ramp siting must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities Marinas and boat ramp siting must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
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- Marinas should be located as close as possible to boating demand.

- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

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POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- Florida Statutes (F.S. 370.12(2)(t)) require Lee County to prepare a Manatee Protection Plan (MPP).
- On June 29, 2004, the Lee County Board of County Commissioners unanimously approved the MPP. The MPP has been used for permitting guidance since that time.
- The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee.

- The recent Evaluation and Appraisal Report identified the need to incorporate the "boating facility siting element" of the MPP into the Lee Plan to be consistent with State Statutes.

- Proposed Policy 128.5.6 ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3 requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan.

PART II - STAFF ANALYSIS

A. LEE COUNTY MANATEE PROTECTION PLAN

Description of a Manatee Protection Plan (MPP)
The Manatee Protection Plan (MPP) is a planning document designed to provide countywide, comprehensive protection of the West Indian Manatee. The specific purposes are to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment in Lee County. The MPP is intended to satisfy the requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

The MPP provides guidance and recommendations used by local, state and federal entities. The Lee County Board of County Commissioners (BOCC), the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS) will implement the provisions of the MPP as appropriate. For instance, all three entities will use the boat facility siting portion of the plan to review permit applications for docking facilities, providing for a predictable and consistent approach to permitting.

Requirements for MPP Development
The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. The Florida Manatee Recovery Plan identifies development of site-specific manatee protection plans at the local level as a priority task important to the recovery of the species.

In 1989, the Governor and Cabinet recommended the development of MPPs in 13 "key" counties. This recommendation was not binding on local governments, but lead to development of guidance on MPP content. In August 2000, the Trustees of the Internal Improvement Trust Fund adopted a policy that prohibited new or expanded submerged land lease in key counties that were not making significant progress toward MPP adoption.

More recently, the 2002 Legislature amended Chapter 370.12(2) Florida Statutes, the Florida Manatee Sanctuary Act, to incorporate the 1989 directive for the development of county MPPs. This statute provided deadlines for MPP development and required adoption of the boat facility element into county comprehensive plans. F.S. 370.12(2)(t)1. Is reproduced below:

> *In order to protect manatees and manatee habitat, the counties identified in the Governor and Cabinet's October 1989 Policy Directive shall develop manatee protection plans consistent with*

commission criteria based upon "Schedule K" [attached] of the directive, and shall submit such protection plans for review and approval by the commission. Any manatee protection plans not submitted by July 1, 2004, and any plans not subsequently approved by the commission shall be addressed pursuant to subparagraph 2.

Additionally, there was an amendment made to the DRI statute that allows for certain exemptions from DRI requirements in a county with an approved MPP that has been incorporated in to the comprehensive plan. This is an allowance; not a requirement. The question of DRI exemption has never been pursued in the case of Lee County. F.S. 380.06(24)(k)1. is reproduced below:

Any waterport or marina development is exempt from the provisions of this section if the relevant county or municipality has adopted a boating facility siting plan or policy which includes applicable criteria, considering such factors as natural resources, manatee protection needs and recreation and economic demands as generally outlined in the Bureau of Protected Species Management Boat Facility Siting Guide, dated August 2000, into the coastal management or land use element of its comprehensive plan. The adoption of boating facility siting plans or policies into the comprehensive plan is exempt from the provisions of s. 163.3187(1). Any waterport or marina development within the municipalities or counties with boating facility siting plans or policies that meet the above criteria, adopted prior to April 1, 2002, are exempt from the provisions of this section, when their boating facility siting plan or policy is adopted as part of the relevant local government's comprehensive plan.

The plan states that it will be revisited and possibly revised on a five-year basis. More frequent revisions may occur under circumstances discussed in the MPP.

Specifics of the Lee County MPP

The MPP is posted on the Lee County website at the following location:
http://www.lee-county.com/naturalresources/MPP_final.pdf

Plan Development

As defined by the Florida Fish and Wildlife Conservation Commission (FWC), a comprehensive manatee protection plan typically includes speed zones, sign posting, enforcement, education, habitat protection, and a boat-facility siting plan. County staff actively worked with the Florida Fish and Wildlife Conservation Commission (FWC) for over a year to edit and complete a MPP consistent with the requirements of Florida Statutes. On January 20, 2004, the BOCC directed staff to submit the revised MPP to FWC for approval (Walk-on #1). On April 12, 2004, a letter from FWC transmitted comments, not only from FWC, but also from US Fish and Wildlife Service and the Department of Community Affairs.

On Tuesday, June 29, 2004, the Lee County Board of County Commissioners unanimously approved the final plan which included many modifications based on the April 2004 letter and a subsequent meeting with FWC and USFWS. This version of the MPP was approved by FWC on August 24, 2004 and given concurrence from USFWS on August 26, 2004. It has been used for permitting guidance since that time.

Plan Implementation
Even before final approval of the MPP, Lee County had implemented most plan components. The County continues efforts related to speed zones, including posting and enforcement, as well as habitat protection and education efforts.

The largest significant change has been the use of a new screening process to determine on a site specific basis the number of vessels to be accommodated by new or expanded boat access facilities. The MPP only applies (per statute) to facilities with 5 or more slips, unless the slips are repetitive use slips such as cruise ships, water taxis, etc. It does not apply retroactively to any facility that has already received state and federal permits. The MPP does not apply to reconfiguration or reduction of slips as long as a project does not adversely impact any more than 1000 square feet of submerged aquatic vegetation, such as seagrass.

Projects that require a review are evaluated individually and given a score based on factors including water depth, submerged aquatic vegetation impacts, manatee abundance, manatee mortality, manatee aggregation areas, proximity to open water, presence or absence of speed zones, and whether a project is a new or expanding facility. The total "score" is then used to categorize the site as preferred, conditional or non-preferred. Depending on the category and whether the project is located in an area of special concern, the maximum number of slips allowable is recommended. This is a slip to shoreline ratio and typically ranges from unlimited to 1 slip per 100 linear feet of shoreline.

Facilities that are subject to MPP review and score as conditional or non-preferred, are required to pay fees for additional marine law enforcement. A discussion of this fee can be found in the MPP on page 57.

The plan allows for a transfer of slip credits, discussed in detail in the MPP on page 51.

B. STAFF DISCUSSION

Staff is proposing to amend Objective 128.5, Marina Siting Criteria, and call the objective Marine Facilities Siting Criteria and add dry slip facilities with launches. Staff is also recommending that the citation to Objective 128.5 located in Objective 8.2 be changed to also refer to the "Marine Facilities Siting Criteria." The specific recommended language modifications for these 2 objectives are as follows:

> **OBJECTIVE 8.2:** All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marina~~e~~ Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.
>
> **OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA.** The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

Staff is also proposing to change the reference to Marinas in many policies of the plan and replace this term with a new term: "boat access facilities." This term is broader in nature. The MPP defines a Boat Facility as "a public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps." A dry storage facility is considered

part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. The MPP definition also provides that facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access or single-family docks with less than five (5) wet slips are not considered boat facilities. The specific recommended modifications are as follows:

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

Staff is proposing to modify Policy 128.5.6 to refer to the adopted MPP and that Section 8 of the MPP, the Marine Facility Siting Requirements, will be used to determine the appropriate number of slips in new or expanded facilities. This proposed Policy essentially ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3. requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan. The specific recommended language modifications are as follows:

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

The Lee Plan contains an objective that is specific to West Indian Manatees, Objective 107.7. The current objective is to "minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County." The objective also provides that "by 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees." Staff notes that the purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. Given this fact, Objective 107.7 and subsequent policies should be revised to acknowledge the existence of the MPP. Staff believes that the concept of management alternatives should be incorporated into Policy 107.7.1. Staff also believes that Policies 107.7.5 and 107.7.6 should be modified to recognize the existence of the MPP and the need to update the MPP in the future. Staff recommends the following specific modifications to Objective 107.7 and subsequent Policies:

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

C. CONCLUSIONS

State law requires Lee County to prepare a Manatee Protection Plan. The County has prepared and adopted a Manatee Protection Plan. The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. The proposed revisions ensure that Lee County is consistent with State Statutes, specifically Chapter 370.12(2)(t)3.

D. RECOMMENDATION

Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment as contained in Part I.B. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: November 27, 2006

A. LOCAL PLANNING AGENCY REVIEW

Staff provided a brief overview of the proposed amendment. One member of the Local Planning Agency asked why the threshold of five vessels was established in the proposed modifications to Policy 107.7.5. Natural Resources staff responded that this figure was consistent with state statutes.

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. **RECOMMENDATION:** The Local Planning Agency recommends that the Board of County Commissioners transmit the proposed amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Local Planning Agency accepted the findings of fact as advanced by the staff.

C. VOTE:

NOEL ANDRESS	**AYE**
DEREK BURR	**AYE**
RONALD INGE	**AYE**
CARLETON RYFFEL	**ABSENT**
RAYMOND SCHUMANN, ESQ.	**AYE**
RAE ANN WESSEL	**AYE**
VACANT	

PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT

DATE OF TRANSMITTAL HEARING: December 13, 2006

A. BOARD REVIEW: The Board of County Commissioners provided no discussion concerning the proposed plan amendment. This item was approved on the consent agenda.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. **BOARD ACTION:** The Board of County Commissioners voted to transmit the proposed plan amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Board accepted the findings of fact advanced by staff and the LPA.

C. VOTE:

A. BRIAN BIGELOW	**AYE**
TAMMARA HALL	**AYE**
BOB JANES	**AYE**
RAY JUDAH	**AYE**
FRANKLIN B. MANN	**AYE**

PART V - DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT

DATE OF ORC REPORT:

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

B. STAFF RESPONSE

PART VI - BOARD OF COUNTY COMMISSIONERS
HEARING FOR ADOPTION OF PROPOSED AMENDMENT

DATE OF ADOPTION HEARING:

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

	_____
A. BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANKLIN B. MANN	_____

OBJECTIVE 128.5: MARINA SITING CRITERIA. The county will consider the following criteria in evaluating requests for new and expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts. (Amended by Ordinance No. 00-22)

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POLICY 128.5.1: Proposed boat access facilities (and expansion of existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Deleted: marinas

Deleted: wet slips at existing marinas and new boat ramps

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values. (Amended by Ordinance No. 00-22)

POLICY 128.5.2: Cumulative effects of several boat access facilities in a small area will be considered in the review of proposed projects. (Amended by Ordinance No. 00-22)

Deleted: marinas and/or boat ramps

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POLICY 128.5.3: Boat access facilities must be consistent with the appropriate aquatic preserve management plan where applicable. (Amended by Ordinance No. 00-22)

Deleted: Marina and/or boat ramp siting

POLICY 128.5.4: Boat access facilities must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

Deleted: Marinas and boat ramp siting

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.
- Location of marinas in highly productive marine habitats should be discouraged.
- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged. (Amended by Ordinance No. 00-22)

POLICY 128.5.5: New boat access facilities must be designed to avoid erosion on adjacent shorelines. (Amended by Ordinance No. 00-22)

POLICY 128.5.6: Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of vessels for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities, including multi-slip docking facilities and boat ramps, which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as new dredging is discouraged.

POLICY 128.5.9: Boat access facilitylocations should minimize natural shoreline disruption.

POLICY 128.5.10: Boat access facilityconstruction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities must demonstrate that the site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems. (Amended by Ordinance No. 00-22)

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities will be evaluated in the context of cumulative impacts on manatees and marine resources. (Amended by Ordinance No. 00-22)

OBJECTIVE 107.7: WEST INDIAN MANATEES. Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population. (Amended by Ordinance No. 94-30, 98-09)

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Deleted: Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern. (Amended by Ordinance No. 00-22)

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Deleted: Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management alternatives to protect such habitats.

POLICY 107.7.2: Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality. (Amended by Ordinance No. 94-30, 98-09)

POLICY 107.7.3: Inform and educate the public through sign posting, lectures, and regulations about manatee protection.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of boat access facilities with a capacity of five vessels or more will be evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004. (Amended by Ordinance No. 00-22)

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to implement and update as necessary the Lee County Manatee Protection Plan approved by Lee County on June 29, 2004. (Amended by Ordinance No. 00-22)

POLICY 107.7.7: The county will continue to provide a permanent funding source to assist in the enforcement of vessel regulations for manatee protection. (Amended by Ordinance No. 94-30, 00-22)

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OBJECTIVE 128.5: MARINA SITING CRITERIA. The county will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts. (Amended by Ordinance No. 00-22)

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values. (Amended by Ordinance No. 00-22)

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects. (Amended by Ordinance No. 00-22)

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POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.
- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.
- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged. (Amended by Ordinance No. 00-22)

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines. (Amended by Ordinance No. 00-22)

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern. (Amended by Ordinance No. 00-22)~~Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of vessels for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities~~Marinas~~, including multi-slip docking facilities~~,~~ and boat ramps, which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~new dredging ~~may be considered~~is discouraged.

POLICY 128.5.9: Boat access facility~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems. (Amended by Ordinance No. 00-22)

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources. (Amended by Ordinance No. 00-22)

OBJECTIVE 107.7: WEST INDIAN MANATEES. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population. (Amended by Ordinance No. 94-30, 98-09)

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality. (Amended by Ordinance No. 94-30, 98-09)

POLICY 107.7.3: Inform and educate the public through sign posting, lectures, and regulations about manatee protection.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~boat access facilities ~~and boat ramps~~with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004. (Amended by Ordinance No. 00-22)

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area-specific m~~Manatee ~~p~~Protection ~~p~~Plan approved by Lee County on June 29, 2004~~s~~. (Amended by Ordinance No. 00-22)

POLICY 107.7.7: The county will continue to provide a permanent funding source to assist in the enforcement of vessel regulations for manatee protection. (Amended by Ordinance No. 94-30, 00-22)

CPA2005-41
Manatee Protection Plan

CPA2005-00041
MANATEE PROTECTION PLAN
BoCC SPONSORED
AMENDMENT
TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

BoCC Public Hearing Document
for the
December 13th, 2006 Public Hearing

Lee County Planning Division
1500 Monroe Street
P.O. Box 398
Fort Myers, FL 33902-0398
(239) 479-8585

December 1, 2006

LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
CPA2005-00041

☑ **Text Amendment** ☐ **Map Amendment**

✓	This Document Contains the Following Reviews:
✓	Staff Review
✓	Local Planning Agency Review and Recommendation
	Board of County Commissioners Hearing for Transmittal
	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: November 15, 2006

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. **APPLICANT/REPRESENTATIVE:**
LEE COUNTY BOARD OF COUNTY COMMISSIONERS
REPRESENTED BY LEE COUNTY DIVISION OF PLANNING AND THE DIVISION OF NATURAL RESOURCES

2. **REQUEST:** Amend the Conservation and Coastal Management Element and/or the Future Land Use Element to incorporate the "boating facility siting element" of the Manatee Protection Plan as required by F.S. 370.12.(2)(t)(3).

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY:

1. **RECOMMENDATION:** Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment. The existing policy language is shown below, with modifications proposed by staff shown in strike through, underline format. The proposed revisions are as follows:

OBJECTIVE 8.2: All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marinae Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.

OBJECTIVE 128.5: MARINAE FACILITIES SITING CRITERIA. The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.

- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area-specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- Florida Statutes (F.S. 370.12(2)(t)) require Lee County to prepare a Manatee Protection Plan (MPP).

- On June 29, 2004, the Lee County Board of County Commissioners unanimously approved the MPP. The MPP has been used for permitting guidance since that time.

- The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee.

- The recent Evaluation and Appraisal Report identified the need to incorporate the "boating facility siting element" of the MPP into the Lee Plan to be consistent with State Statutes.

- Proposed Policy 128.5.6 ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3 requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan.

PART II - STAFF ANALYSIS

A. LEE COUNTY MANATEE PROTECTION PLAN

Description of a Manatee Protection Plan (MPP)
The Manatee Protection Plan (MPP) is a planning document designed to provide countywide, comprehensive protection of the West Indian Manatee. The specific purposes are to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment in Lee County. The MPP is intended to satisfy the requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

The MPP provides guidance and recommendations used by local, state and federal entities. The Lee County Board of County Commissioners (BOCC), the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS) will implement the provisions of the MPP as appropriate. For instance, all three entities will use the boat facility siting portion of the plan to review permit applications for docking facilities, providing for a predictable and consistent approach to permitting.

Requirements for MPP Development
The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. The Florida Manatee Recovery Plan identifies development of site-specific manatee protection plans at the local level as a priority task important to the recovery of the species.

In 1989, the Governor and Cabinet recommended the development of MPPs in 13 "key" counties. This recommendation was not binding on local governments, but lead to development of guidance on MPP content. In August 2000, the Trustees of the Internal Improvement Trust Fund adopted a policy that prohibited new or expanded submerged land lease in key counties that were not making significant progress toward MPP adoption.

More recently, the 2002 Legislature amended Chapter 370.12(2) Florida Statutes, the Florida Manatee Sanctuary Act, to incorporate the 1989 directive for the development of county MPPs. This statute provided deadlines for MPP development and required adoption of the boat facility element into county comprehensive plans. F.S. 370.12(2)(t)1. Is reproduced below:

> *In order to protect manatees and manatee habitat, the counties identified in the Governor and Cabinet's October 1989 Policy Directive shall develop manatee protection plans consistent with*

commission criteria based upon "Schedule K" [attached] of the directive, and shall submit such protection plans for review and approval by the commission. Any manatee protection plans not submitted by July 1, 2004, and any plans not subsequently approved by the commission shall be addressed pursuant to subparagraph 2.

Additionally, there was an amendment made to the DRI statute that allows for certain exemptions from DRI requirements in a county with an approved MPP that has been incorporated in to the comprehensive plan. This is an allowance; not a requirement. The question of DRI exemption has never been pursued in the case of Lee County. F.S. 380.06(24)(k)1. is reproduced below:

Any waterport or marina development is exempt from the provisions of this section if the relevant county or municipality has adopted a boating facility siting plan or policy which includes applicable criteria, considering such factors as natural resources, manatee protection needs and recreation and economic demands as generally outlined in the Bureau of Protected Species Management Boat Facility Siting Guide, dated August 2000, into the coastal management or land use element of its comprehensive plan. The adoption of boating facility siting plans or policies into the comprehensive plan is exempt from the provisions of s. 163.3187(1). Any waterport or marina development within the municipalities or counties with boating facility siting plans or policies that meet the above criteria, adopted prior to April 1, 2002, are exempt from the provisions of this section, when their boating facility siting plan or policy is adopted as part of the relevant local government's comprehensive plan.

The plan states that it will be revisited and possibly revised on a five-year basis. More frequent revisions may occur under circumstances discussed in the MPP.

Specifics of the Lee County MPP
The MPP is posted on the Lee County website at the following location:
http://www.lee-county.com/naturalresources/MPP_final.pdf

Plan Development
As defined by the Florida Fish and Wildlife Conservation Commission (FWC), a comprehensive manatee protection plan typically includes speed zones, sign posting, enforcement, education, habitat protection, and a boat-facility siting plan. County staff actively worked with the Florida Fish and Wildlife Conservation Commission (FWC) for over a year to edit and complete a MPP consistent with the requirements of Florida Statutes. On January 20, 2004, the BOCC directed staff to submit the revised MPP to FWC for approval (Walk-on #1). On April 12, 2004, a letter from FWC transmitted comments, not only from FWC, but also from US Fish and Wildlife Service and the Department of Community Affairs.

On Tuesday, June 29, 2004, the Lee County Board of County Commissioners unanimously approved the final plan which included many modifications based on the April 2004 letter and a subsequent meeting with FWC and USFWS. This version of the MPP was approved by FWC on August 24, 2004 and given concurrence from USFWS on August 26, 2004. It has been used for permitting guidance since that time.

Plan Implementation
Even before final approval of the MPP, Lee County had implemented most plan components. The County continues efforts related to speed zones, including posting and enforcement, as well as habitat protection and education efforts.

The largest significant change has been the use of a new screening process to determine on a site specific basis the number of vessels to be accommodated by new or expanded boat access facilities. The MPP only applies (per statute) to facilities with 5 or more slips, unless the slips are repetitive use slips such as cruise ships, water taxis, etc. It does not apply retroactively to any facility that has already received state and federal permits. The MPP does not apply to reconfiguration or reduction of slips as long as a project does not adversely impact any more than 1000 square feet of submerged aquatic vegetation, such as seagrass.

Projects that require a review are evaluated individually and given a score based on factors including water depth, submerged aquatic vegetation impacts, manatee abundance, manatee mortality, manatee aggregation areas, proximity to open water, presence or absence of speed zones, and whether a project is a new or expanding facility. The total "score" is then used to categorize the site as preferred, conditional or non-preferred. Depending on the category and whether the project is located in an area of special concern, the maximum number of slips allowable is recommended. This is a slip to shoreline ratio and typically ranges from unlimited to 1 slip per 100 linear feet of shoreline.

Facilities that are subject to MPP review and score as conditional or non-preferred, are required to pay fees for additional marine law enforcement. A discussion of this fee can be found in the MPP on page 57.

The plan allows for a transfer of slip credits, discussed in detail in the MPP on page 51.

B. STAFF DISCUSSION

Staff is proposing to amend Objective 128.5, Marina Siting Criteria, and call the objective Marine Facilities Siting Criteria and add dry slip facilities with launches. Staff is also recommending that the citation to Objective 128.5 located in Objective 8.2 be changed to also refer to the "Marine Facilities Siting Criteria." The specific recommended language modifications for these 2 objectives are as follows:

> **OBJECTIVE 8.2:** All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marina~~e~~ Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.
>
> **OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA.** The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

Staff is also proposing to change the reference to Marinas in many policies of the plan and replace this term with a new term: "boat access facilities." This term is broader in nature. The MPP defines a Boat Facility as "a public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps." A dry storage facility is considered

part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. The MPP definition also provides that facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access or single-family docks with less than five (5) wet slips are not considered boat facilities. The specific recommended modifications are as follows:

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

Staff is proposing to modify Policy 128.5.6 to refer to the adopted MPP and that Section 8 of the MPP, the Marine Facility Siting Requirements, will be used to determine the appropriate number of slips in new or expanded facilities. This proposed Policy essentially ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3. requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan. The specific recommended language modifications are as follows:

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

The Lee Plan contains an objective that is specific to West Indian Manatees, Objective 107.7. The current objective is to "minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County." The objective also provides that "by 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees." Staff notes that the purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. Given this fact, Objective 107.7 and subsequent policies should be revised to acknowledge the existence of the MPP. Staff believes that the concept of management alternatives should be incorporated into Policy 107.7.1. Staff also believes that Policies 107.7.5 and 107.7.6 should be modified to recognize the existence of the MPP and the need to update the MPP in the future. Staff recommends the following specific modifications to Objective 107.7 and subsequent Policies:

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi-slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee pProtection pPlans approved by Lee County on June 29, 2004.

C. CONCLUSIONS

State law requires Lee County to prepare a Manatee Protection Plan. The County has prepared and adopted a Manatee Protection Plan. The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. The proposed revisions ensure that Lee County is consistent with State Statutes, specifically Chapter 370.12(2)(t)3.

D. RECOMMENDATION

Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment as contained in Part I.B. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: November 27, 2006

A. LOCAL PLANNING AGENCY REVIEW

Staff provided a brief overview of the proposed amendment. One member of the Local Planning Agency asked why the threshold of five vessels was established in the proposed modifications to Policy 107.7.5. Natural Resources staff responded that this figure was consistent with state statutes.

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. **RECOMMENDATION:** The Local Planning Agency recommends that the Board of County Commissioners transmit the proposed amendment.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Local Planning Agency accepted the findings of fact as advanced by the staff.

C. VOTE:

NOEL ANDRESS	**AYE**
DEREK BURR	**AYE**
RONALD INGE	**AYE**
CARLETON RYFFEL	**ABSENT**
RAYMOND SCHUMANN, ESQ.	**AYE**
RAE ANN WESSEL	**AYE**
VACANT	

PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT

DATE OF TRANSMITTAL HEARING: December 13, 2006

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANK MANN	_____

PART V - DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT

DATE OF ORC REPORT:

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

B. STAFF RESPONSE

PART VI - BOARD OF COUNTY COMMISSIONERS
HEARING FOR ADOPTION OF PROPOSED AMENDMENT

DATE OF ADOPTION HEARING:

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

	_____
BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANK MANN	_____

LEE COUNTY
MANATEE PROTECTION PLAN

June 17, 2004

Prepared by:
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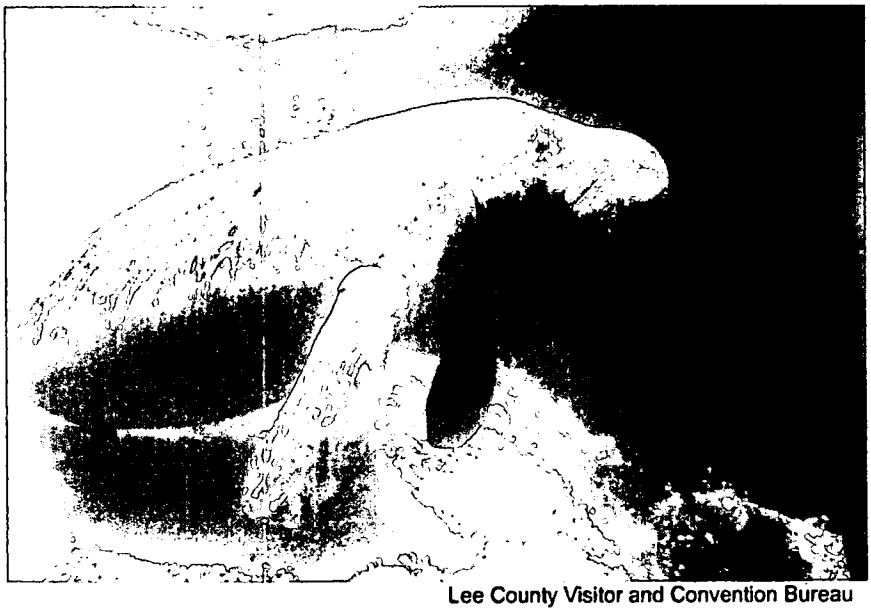

Lee County Visitor and Convention Bureau

Approved: June 29, 2004

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Approved: August 24, 2004

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Executive Summary

This Manatee Protection Plan is organized to present first a discussion of manatees and an analysis of manatee abundance in Lee County. An evaluation of boating activity , and the identification of evaluation criteria for the development or expansions of boat facilities follow this. Finally, thresholds and policies are presented to outline Boat Facility siting criteria in Lee County. Once finalized and approved by all parties, these thresholds and policies will explain how the plan is to be used and how preferred boat facility projects differ from non-preferred projects.

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List of Definitions

Following are the definitions for use in this plan:

Boat – A vehicle designed for operation as a watercraft propelled by sails, or one or more electric or internal combustion engine(s). For the purpose of this plan, canoes and kayaks are not covered by this definition.

Boat Facility – A public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps. A dry storage facility is considered part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. Facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access will not be considered boat facilities. For the purposes of this plan, single-family docks with less than five (5) wet slips are not considered boat facilities.

Boat Ramp – A structure, man-made or altered natural feature that facilitates the launching and landing of boats into a waterbody.

Ditch - A man-made trench or canal that was not built for navigational purposes (see Federal Register 33 CFR 329.24 for definition of navigable waterways).

Egress and Ingress - For the purposes of this plan, defined as the continuous pathway of deepest water that vessels would be most likely to travel to a facility and from a facility to a marked channel.

Open Water – For the purposes of this plan, defined as wide water bodies or waters adjacent to Passes. Charlotte Harbor is defined as the southern limit of the Charlotte Harbor Aquatic Preserve line north to the Lee County line, and Pine Island Sound is defined at the northern limit of the Pine Island Sound Aquatic Preserve line at the north of the sound, south to Redfish Pass. Gulf Passes for the purposes of this plan include: Matanzas Pass, Captiva Pass, Redfish Pass, Boca Grande, Big Hickory Pass, Big Carlos Pass, and New Pass.

Linear Shoreline - The mean high water line in tidally influenced areas and the ordinary high water line along waterways that are not tidally influenced. This definition shall not apply to shorelines artificially created through dredge and fill activities (such as boat basins or canals) after October 24, 1989. Such artificially created shorelines created before October 24, 1989 must have received the proper permitting authorization required at that time. Shoreline along man-made ditches (such as mosquito control, flood control ditches, etc.) shall not qualify as linear shoreline, regardless of their date of construction unless there is documentation of regular navigation use existing prior to July 1, 2004. Linear shoreline shall be

calculated using survey quality aerial photographs or by accurate field survey. The calculation of linear shoreline is based upon shoreline that is owned or legally controlled by the applicant.

Public Service Marinas – Marinas which generally lease wet storage to the general public on a first come, first served basis, and also offer services such as provision of supplies, sewage pump out, repair of boats, and wet or dry storage.

Single-Family Dock – A fixed or floating structure, including moorings, used for berthing buoyant vessels, accessory to a single-family residence, with no more than two (2) boat slips per residence. Notwithstanding, a shared single-family dock may contain up to four (4) boat slips. Said docks cannot be rented, leased or sold to a party unless said party rents, leases, or buys the associated single-family residence.

Slip – A space designed for the mooring or storage of a single watercraft, which include wet or dry slips, anchorage, beached or blocked, hoist, parked on trailers, open or covered racks, seawall, or the number of parking spaces for boat ramps. Piers authorized only for fishing or observation are not considered wet slips.

Submerged Aquatic Vegetation (SAV) – Fresh, saline (seagrass) or brackish submerged vegetation that may be used by manatees for food.

Warm Water Refuge – Known areas of warm water discharge, deep water or natural springs where manatees aggregate in the wintertime for thermoregulation. Listed below are the boundaries for the primary and secondary warm water refuges as defined for the purposes of this plan:

- **Orange River** – Beginning at the mouth of the Orange River east to the end of the river. The Upper Orange River is defined as the area between the FPL discharge Canal east to the end of the River.

- **Franklin Lock & Dam** – Encompassed by the defined manatee protection speed zone, all waters of the Caloosahatchee River within ¼ mile east of the easternmost end of the lock and within ¼ mile west of the westernmost end of the lock.

- **Matlacha Isles** – Beginning at the entrance to Matlacha channel (which provides access to the Matlacha Isles canal system) and encompasses the entire Matlacha Isles canal system.

- **Ten-Mile Canal** – All waters within the old quarry or "borrow" pit located on Ten Mile Canal.

- **Cape Coral Canals** – Beginning at the entrance of the Chiquita Canal (which provides access to the Eight Lakes area), and including the Eight Lakes area located in the southwestern portion of the Cape Coral Canals.

Lee County Manatee Protection Plan

1.0 Introduction

1.1 Setting

The West Indian (Florida) manatee is native to the state of Florida, with fossil records dating back 3 million years. There are three species of manatee in the genus *Trichechus*. Only one species occurs in Florida and it is recognized as a valid subspecies *Trichechus manatus latirostris*. There are morphological and genetic differences between the subspecies (Domning and Hayek, 1986). A biological basis for restricting gene flow (breeding of subspecies) may result from the cooler waters of the western Gulf of Mexico shoreline and the strong northward flow of the Florida Current through the Straits of Florida, both limiting interchange of individuals from each population.

Knowledge of critical habitats is essential to protecting this species. Manatees are dependent upon aquatic vegetation as a food source; must have access to fresh water; and are limited in range based on susceptibility to cold stress. They rarely travel through deeper waters and generally use such water only as migration routes between coastal regions (Hartman 1979).

The State of Florida prohibited the hunting or killing of manatees in 1893. The Florida Manatee was placed on the United States Endangered Species list in 1973 and is also covered by the Marine Mammal Protection Act (MMPA). The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. Manatees have received significant attention in Florida as the result of recent efforts by the State of Florida to expand protective zones in 13 "key" counties that limit boating speeds and access to certain manatee areas.

The cooperative State-County speed limit programs, a part of the long-range recovery goal for the species, are given authority under the Florida Manatee Sanctuary Act of 1978 (370.12(2) FS). The first local/state governmental efforts to locally protect manatees in Lee County began in February 1979 with a vessel speed zone in the Orange River and portions of the Caloosahatchee River. In November 1989 Lee County's Caloosahatchee River vessel speed zone plan to protect manatees became effective, and regulated vessel speeds from the Franklin Locks to the mouth of the Caloosahatchee River. The Florida Department of Environmental Protection (FDEP) contacted Lee County in December 1993 by letter to propose additional new countywide speed zones. The county held 27 public workshops during March and April 1994 to solicit comments on the proposed State plan and to develop its own speed zone proposal. This proposal was ultimately rejected and the State proposed new rule making in 1995. This 1995 proposal was invalidated as a result of an

administrative rule challenge and the State had to restart the rulemaking process. A revised rule proposal was published in 1998. Several rule challenges were filed but all were settled without going to hearing. The State Bureau of Protected Species Management was moved from the FDEP to the Florida Fish and Wildlife Conservation Commission (FWC) in July of 1999, before the 1998 proposal could be adopted. The revised/amended countywide rule was finally adopted by the FWC in November 1999 (FWC Rule 68C-22.005 F.A.C.). (See Figure 14 for the Boat Speed Zones)

1.2 Purpose

The purpose of this document is to provide for countywide, comprehensive protection of the West Indian Manatee. This document has been prepared in accordance with the directive from the Governor and Cabinet of Florida that each of 13 counties known to have a high population of manatees create a Manatee Protection Plan (MPP). The purpose of the Lee County Manatee Protection Plan is to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment, specifically in Lee County. The MPP is also intended to satisfy the new requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

1.3 Objectives

The long range recovery goal for the West Indian Manatee per the Marine Mammal Protection Act of 1972, is to maintain the "...health and stability of the marine ecosystem, "and their numbers at...optimum sustainable population," levels (Service 1989). Another goal of the Lee County MPP as outlined by the Florida Manatee Recovery Plan is to downlist the West Indian Manatee from 'endangered' to threatened'. Specific goals, objectives, and policies to achieve the reduction of manatee mortality and injury, the continued existence of suitable habitat, and minimization of harassment are contained in this plan.

2.0 Inventory of Existing Conditions

2.1 Manatee Habitat

Environmental requirements of the Florida Manatee have been fairly well documented. Three critical manatee requirements include fresh water, warm-water in the winter months, and abundant submerged aquatic vegetation (SAV) for food (Reynolds , 1992). Manatees inhabit bays, estuaries, rivers and coastal areas where seagrasses and other vegetation (submerged, emergent and shoreline) are common (Reynolds and Odell 1991). Rather than any single environmental requirement other than minimum temperatures being critical to

manatee survival in Florida, the interaction availability of aquatic vegetation, adequate depth and sources of freshwater probably best describe the critical combination for viable habitat.

Important "places" have been identified for portions of Lee County (Shapiro 2002) and reflect these habitat parameters. Two important places, namely the Florida Power and Light plant (Mezich 2000) and Matlacha Isles (Koelsch *et al.*, 2000) have been the subject of recent study. These studies confirm the important interplay between the following key habitat variables and affirm these locations as important manatee aggregation spots in Lee County.

2.1.1 Salinity and Fresh Water Sources

Natural freshwater sources in Lee County include most of the larger creeks and rivers. These sources include; Caloosahatchee River through the Franklin Locks, Trout Creek, Telegraph Creek, Orange River, Billy's Creek, Hancock Creek, Hendry Creek, Estero River, Spring Creek and the Imperial River. Artificial sources include the treated wastewater effluent sites in the Caloosahatchee River and freshwater discharge points of the Cape Coral Canal system, Ten Mile Canal, and many other drainage and residential canals.

2.1.2 Warm-Water Aggregation Points

Manatees generally aggregate at warm-water discharges from December through February (and to a lesser extent in adjacent months) and then disperse to other areas during spring and summer months. The major warm-water refuge in Lee County is the Florida Power and Light plant with a cooling intake on the Caloosahatchee River and discharge into the Orange River (Packard *et al.*, 1984; Mezich 2000). The plant has an U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) variance for a once through discharge of cooling water. FPL has a State-approved manatee plan with prescribed actions to minimize the complete loss of warm-water for emergency shut-down events or planned maintenance during the winter months.

Several secondary warm-water sites are found within the general vicinity of the Caloosahatchee River and the Ft. Myers power plant. These include Matlacha Isles, Deep Lagoon, Cape Coral Canals, 10-Mile Canal, and the Franklin Locks (Mezich 2000). Although Mezich considers Deep Lagoon to be a secondary warm-water site, no temperature data currently exists. It is for this reason that Deep Lagoon is not included as a Base Criterion in Section 8.4.1(B)(3). When the FPL power plant was down for repairs in January 1985, many manatees congregated at the Franklin Locks (Packard *et al.*, 1985). Secondary treated wastewater discharged to the Caloosahatchee River may also serve as warm-water refuges as do some deeper saltwater, freshwater and estuarine canals.

The Florida Power and Light (FPL) power plant warm-water discharge into the Orange and Caloosahatchee Rivers has been examined as part of the winter census taken by Dr. John Reynolds (Frohlich et al., unpublished).

2.1.3 Submerged Aquatic Vegetation

The SAV areas found in Matlacha Pass, San Carlos Bay and Estero Bay are very important to manatees as feeding areas. Although extensive SAV occur in Pine Island Sound, there is less apparent use by manatees, perhaps because of depth limitations.

Freshwater SAV also occurs in portions of the Caloosahatchee River. Water supply and flood management practices currently followed for Lake Okeechobee, however, can cause fluctuations in the distribution of SAV (and their elimination) periodically by causing significant and rapid changes in salinity and light transmission throughout the estuarine portions of the river. The greatest impact is on the upper estuarine portions of the river. This is the closest significant forage area to the FPL Power Plant. There has been no significant SAV documented in the immediate area of the power plant discharge or the Orange River. Fluctuations of SAV in the Caloosahatchee River can alter manatee behavior and the distance needed to travel in order to forage during the wintertime.

2.2 Patterns of Movements by Manatees in Lee County

The most detailed description of manatee abundance and distribution in Lee County is an unpublished manuscript by Frohlich *et al* (1994). They report on aerial survey data obtained during twice-monthly flights from January 1984 through December 1985. Based on the their observations, the annual use (distribution) of various water bodies by manatees was: Caloosahatchee River (including Orange River) 63%, Matlacha Pass 13%, Estero Bay 8%, Pine Island Sound 8%, and San Carlos Bay 7%. Frohlich *et al.* noted a greater disparity in manatee use between the Caloosahatchee River and the surrounding Bays in winter (December-February) compared to summer (June – August).

	Winter	Summer
Caloosahatchee River	80%	45%
Bays	20%	55%

In addition to aerial survey data, VHF tracking data have been used in GIS applications to show overall manatee distribution and use of Lee County waters. The western side of Pine Island above Regla Island and extending to Part Island in Pine Island Sound appears to be used very little, if at all by manatees. The principal reason for this may be that water depths (generally less than one meter) are too shallow for preferred manatee habitat (Frohlich *et al*). Matlacha Pass is

highly used by manatees as a travel corridor between Charlotte Harbor and the Caloosahatchee River or other locations. Frohlich *et al* describe Matlacha Pass as being most heavily used by manatees in the summer and fall months. Estero Bay and Pine Island Sound also had higher use in the summer and fall months.

Telemetry data can be useful in assessing manatee use patterns and trends because they focus intensely on activity of individual animals. Although it cannot be assumed that manatees moved directly from one point to another, it can clearly be shown that manatees can range over large areas. Movements can often be explained as a response to important habitat variables such as temperature and proximity to forage areas. Telemetry datasets may be used in conjunction with aerial survey and manatee mortality data in order to arrive at conclusions on manatee use. These data generally confirm other studies documenting primary use areas and seasonal distributions (Shapiro 2002).

The electricity-producing power plant operated by Florida Power and Light (FPL) on the Caloosahatchee River produces a discharge of warm-water into the Orange River that is an important influence on manatee distribution as well as other estuarine life. Manatees aggregate near warm-water sources during cold weather events. A 1995-96 aerial survey conducted in the vicinity of the Fort Myers Power Plant produced the Lee County record high count of 434 manatees (Reynolds, 1996).

The power plant is expected to continue operations at this site and has just completed the process of replacing the old oil fueled generators with natural gas fired generators. With this repowering, a pipeline delivers natural gas, which should reduce threats to manatees and manatee habitat due to the elimination of the barge traffic that had delivered oil fuel from storage tanks located on Boca Grande (Charlotte Harbor). These fuel barges traversed important manatee foraging areas in Pine Island Sound, San Carlos Bay and the Caloosahatchee River.

2.3 Population Status

Long-term studies suggest four relatively distinct regional subpopulations of the Florida manatee: Northwest, Southwest, Atlantic (including the St. Johns River north of Palatka), and St. Johns River (south of Palatka). These divisions are based primarily on documented manatee use of wintering sites and from radio-tracking studies of individuals' movements. Although some movement occurs among subpopulations, researchers found that analysis of manatee status on a regional level provided insights into important factors related to manatee recovery. The following is from the Population Status Working Group Statement in 2001 (Florida Manatee Recovery Plan, Appendix A):

> Estimates of survival and population growth rates are currently underway for the Southwest region. Preliminary estimates of adult survival are similar to those for the Atlantic region, i.e., substantially lower than those

for the Northwest and Upper St. Johns River regions. This area has had high levels of watercraft-related deaths and injuries, as well as periodic natural mortality events caused by red tide and severe cold. However, pending further data collection and analysis, scientists are unable to provide an assessment of how manatees are doing in this part of the state.

Over the past ten years, approximately 30% of manatee deaths have been directly attributable to human-related causes, including watercraft collisions, accidental crushing and drowning in water control structures, and entanglements in fishing gear. In 2000, 34% (94 of 273) of manatee deaths were human-related. The continued high level of manatee deaths raises concern about the ability of the overall population to grow or at least remain stable. The Manatee Population Status Working Group is also concerned about the negative impacts of factors that are difficult to quantify, such as habitat loss and chronic effects of severe injuries.

The group agrees that the results of the analyses underscore an important fact: Adult survival is critical to the manatee's recovery. In the regions where adult survival rates are high, the population has grown at a healthy rate. In order to assure high adult survival the group emphasizes the urgent need to make significant headway in reducing the number of human-related manatee deaths.

Since this statement was issued, the FWC's Florida Marine Research Institute (FMRI) concluded in their *Final Biological Status Review* (2002) that the Southwest region shows a declining manatee population even under optimistic and unrealistic cases of constant conditions and no catastrophes.

3.0 Abundance and Distribution of Manatees in Lee County

Manatees are resident along the central part of the west coast of Florida in semi-isolated populations that are concentrated in rivers and estuaries that are of suitable depth and provide an adequate source of food and freshwater (Reynolds and Odell 1991). In Lee County, the largest concentration of manatees are found in the upper tidal reaches of the Caloosahatchee River near the Orange River and the warm-water outflow of the FPL power generating plant. Other areas of importance to manatees in Lee County include Matlacha Pass, Pine Island Sound, San Carlos Bay, and Estero Bay.

The following is an excerpt from the previously mentioned unpublished manuscript by Frohlich *et al* (1991). This study confirms the importance of Lee County as manatee habitat in Florida.

The best estimate of manatee population size in Florida at the time of the study was a minimum of 1200 (Ackerman, in prep). The high count of 238 in this study was 20% of that number. Even this is likely an underestimate since 338 manatees were counted (Reynolds and Wilcox 1985, 1994) in the Caloosahatchee and Orange Rivers alone on 19 January 1985, after the strongest cold front in several years. That was the largest single aggregation of manatees ever recorded to date. Using Reynolds' count, Lee County may account for as much as 38% of the 1200 estimate of the minimum population size.

The striking change in the number and distribution of manatees from winter to summer is important. When manatees gather in relatively small areas like the FPL warm-water refuge, they are easier to detect and count than when dispersed in small groups over a wide area. However, we believe that the increase in numbers counted during the winter primarily reflects an influx of manatees into the study area. Most of the radio-tagged manatees left the study area at some time in summer; 77% of tagged manatees left at least once in June. Some tagged manatees went south to Collier County waters and some north to Charlotte Harbor, Sarasota Bay, and Tampa Bay. Winter cold fronts concentrated the year-round resident manatees from Lee County waters to the warm-water refuge, as well as attracting manatees from outside the study area.

During winter, the effects of cold fronts, and the resulting lower water and air temperatures, apparently influenced manatee distribution. Conducting surveys immediately following cold fronts will maximize counts because manatees would be most tightly aggregated. During warm periods in winter, manatee counts are lower because the animals are dispersed in a variety of habitats, and possibly are traveling (Packard et al. 1989).

Manatees were not evenly distributed throughout the survey route. Year-round, the most manatees were seen in the Orange River and the Caloosahatchee from the S.R. 31 bridge to the U.S. 41 bridge, and the fewest were seen in the north and central portions of Pine Island Sound and the Caloosahatchee from the Franklin Locks to Alva. Distribution of manatees among the zones varied between winter (November-March) and summer (April-October). During winter, the FPL power plant effluent, the Orange River, and the Caloosahatchee River from I-75 to U.S. 41 had the highest counts. During summer, zones the FPL power plant effluent and Orange River had very low counts, while the Caloosahatchee from I-75 to U.S. 41 had the highest. Estero Bay and San Carlos Bay also had high counts in summer.

Significant seasonal differences in distribution existed between rivers and bays. During winter, there were significantly more manatees seen in the rivers than in the bays, while during the rest of the year there was no difference. In winter, the upper Caloosahatchee (including the Orange River) had significantly higher counts of manatees than all other water bodies. Over 42% of all sightings were in the Caloosahatchee River and 21% in the Orange River. This is a much greater proportion of the manatee sightings than would be expected based on the size of the two rivers alone.

Although counts of manatees in the Caloosahatchee and Orange Rivers were highest in winter, some manatees were present year-round. More manatees were seen in the rivers than the bays on 52 % of the surveys, despite the bays accounting for a much larger portion of the study area. Coastal areas such as Matlacha Pass, Estero Bay, and Pine Island Sound were most heavily used in the summer and fall months.

Aerial survey data are used in GIS applications to illustrates locations of manatees and their relative abundance (Figures 1 – 4). The FWC provided data for aerial surveys conducted over the entire County during 1984-85, 1994-95, and 1997-98. The Estero Bay area was also surveyed during the 1986-88 period. It should be noted that points on the map indicate a sighting record that may contain one or more manatee. The aerial survey data reviewed and considered in the development of this MPP include the following:

- 1997-98 survey of major parts of Lee County (24 flights between January 1997 and January 1998).

- 1994-95 survey of major parts of Lee County (23 flights between October 1994 and November 1995). The flight path for this survey was very similar to the 1997-98 flight path.
- 1984-85 survey of major parts of Lee County (48 flights between January 1984 and December 1985). The flight path for this survey was similar to the 1997-98 flight path, but did not include some areas, such as Matlacha Isles and the Hendry Creek area, which were included in the later surveys.
- 1987-88 survey of Charlotte County and northern parts of Lee County (47 flights between January 1987 and December 1988). Only the northern portion of Lee County, generally south to northern Cayo Costa and northern Matlacha Pass, was included in this survey.

Some of these same data sets were utilized to examine the distribution and relative abundance of manatees in portions of Lee County (Shapiro 2002). While the absolute numbers have changed, the basic premise stated above by Frohlich

et al still holds true. Namely, manatees move in generally repeatable and predictable patterns on a macro scale in response to habitat variables such as temperature, salinity and SAV. This analysis confirmed the importance of areas previously identified as important places.

In terms of manatee abundance as it relates to the overall population in Florida, it should be noted that the estimates are significantly different than those cited above by Frohlich *et al.* Synoptic surveys conducted under the direction of the Florida Marine Research Institute in 2001 provide an estimate of the minimum total manatee population. The record high count of 3276 is often cited as the minimum population size, recognizing that survey coverage and conditions both likely contribute to an undercount of manatees. The highest number counted for the Gulf Coast was 1756 in January 2001 (FMRI). The record high count for Lee County occurred is 434 (Reynolds 1996). While not as high as estimated by Frohlich *et al.*, the manatees in Lee County clearly represents a significant portion of the Gulf Coast and Statewide population.

3.1 Pine Island Sound

Manatees have been documented in this area throughout the year; however, use is substantially less during the colder months (November through March). The vast majority of sightings were made around the barrier islands and the York Island and MacKeever Keys area, with very few manatees seen in the open part of the sound or along the western shoreline of Pine Island north of Regla Island. For the three main Lee County surveys (1997-98, 1994-95, 1984-85; an average of 17.3 manatees was seen per flight during the April through October period (average of 32.2 during the 1997-98 survey). The highest single day count for this period was 57, recorded on 9/9/97. An average of 7.3 manatees was seen per flight during the November through March period (average of 12.0 during the 1997-98 survey). The highest single day count for this period was 61, recorded on 11/15/95. Of the 298 manatees that were seen during the 41 surveys flown between November and March, 249 of the them were seen during the 16 flights that occurred in November or March. In other words, 49 manatees were seen during the 25 flights that occurred between December and February for an average of just under 2.0 manatees per flight. This is consistent with what would be expected during the coldest months of the year given the fact that there are no known warm water sites in this area.

3.2 Matlacha Pass

Manatees have been documented in this area throughout the year. For the three Lee County surveys considered (1997-98, 1994-95, 1984-85), an average of 22.1 manatees was seen per flight (average of 40.0 during the 1997-98 survey). (Note: The 1984-85 surveys did not cover the Matlacha Isles area, and none of the surveys covered Pine Island Creek.) Use during the colder months is centered around Matlacha Isles, a known aggregation point; however, the entire pass is used during these times. An average of 32.1 manatees was seen per flight during the November through March period (average of 61.8 during the

1997-98 survey). The highest single day count for this period was 124, recorded on 2/13/97, 38 of which were in Matlacha Isles. An average of 14.5 manatees was seen per flight during the April through October period (average of 22.0 during the 1997-98 survey). The highest single day count for this period was 49, recorded on 10/28/97.

3.3 Lower Caloosahatchee River (Ft. Myers and west)

Manatees have been documented in this area throughout the year. For the three Lee County surveys considered (1997-98, 1994-95, 1984-85), an average of 13.4 manatees was seen per flight (average of 27.1 during the 1997-98 survey). Use during the colder months is centered around the power plant upriver, which is a significant source of warm water. (see Section 3.4) An average of 20.1 manatees was seen per flight during the November through March period (average of 41.1 during the 1997-98 survey). The highest single day count for this period was 72, recorded on 1/30/98. An average of 8.2 manatees was seen per flight during the April through October period (average of 15.2 during the 1997-98 survey). The highest single day count for this period was 29, recorded twice on 4/30/97 and 8/19/97.

3.4 Upper Caloosahatchee River (East of Ft. Myers)

Manatees have been documented in this area throughout the year. For the three Lee County surveys considered (1997-98, 1994-95, 1984-85), an average of 34.9 manatees was seen per flight (average of 30.0 during the 1997-98 survey). Use during the colder months is centered around the power plant, which is a significant source of warm water; however, the entire area is used during these times. An average of 63.9 manatees was seen per flight during the November through March period (average of 56.3 during the 1997-98 survey). The highest single day count for this period during these surveys was 247, recorded on 1/20/97, 240 of which were in the power plant canal, the Orange River, or the section of the Caloosahatchee River nearest to its confluence with the Orange River. As many as 338 manatees have been seen in the power plant area on a single day during other surveys flown specifically to count manatee aggregations at Florida power plants. An average of 13.0 manatees was seen per flight during the April through October period (average of 7.8 during the 1997-98 survey). The highest single day count for this period was 81, recorded on 5/25/95.

3.5 Estero Bay

Manatees have been documented in this area throughout the year. For the two main Lee County surveys (1997-98, 1994-95), an average of 22.2 manatees was seen per flight (average of 25.4 during the 1997-98 survey) for the entire area from the northwestern end of Matanzas Pass to the Collier County line. (Note: The 1984-85 surveys were not considered in the average because they did not cover Hendry Creek, Mullock Creek, Tenmile Canal, Fishtrap Bay, or the Imperial River.) Use during the colder months is centered primarily around Tenmile Canal and Mullock Creek, and to a lesser extent, the Imperial River.

Manatees do, however, use the entire area during these times. An average of 17.0 manatees was seen per flight during the November through March period (average of 18.2 during the 1997-98 survey). The highest single day count for this period was 38, recorded on 1/20/97. An average of 26.8 manatees was seen per flight during the April through October period (average of 31.5 during the 1997-98 survey). The highest single day count for this period was 45, recorded twice on 6/25/97 and 7/24/97.

4.0 Mortality of Manatees in Lee County

Understanding where and how Florida Manatees die is very important to the determination of management goals and program priorities. State manatee mortality data from 1974 through 2002 were obtained from FWC to accomplish this task. Table 1 presents Lee County manatee mortality by type for the reporting period and Table 2 presents manatee mortality by County for the reporting period. Data collection began about 1974 along the west coast of Florida by Federal and State agencies. The first recorded manatee death under this program for Lee County occurred in 1975.

The location of each manatee carcass found and reported to the FWC has been entered into a Geographic Information System (GIS). Carcass recovery location does not necessarily correspond with the exact location of death and almost certainly does not correspond exactly with the point of contact for watercraft mortality. Additional data are also available on the FWC web site at www.floridaconservation.org/manatee. Figure 5 shows the location of manatee carcasses recovered or verified by FWC staff. Dead manatees have been found in many areas of Lee County.

Mortality caused by watercraft tends to be of particular interest because it is a significant human caused source of mortality, and one that presents potential corrective management options in the form of vessel speed restrictions. Two areas, the Caloosahatchee River and Estero Bay have 47.2% and 22.8% of all Lee County watercraft deaths respectively. Together, these areas also have the largest number of total deaths from all causes 67% with 51.5% from the Caloosahatchee River and 15.5% from Estero Bay. These data are very suggestive of the important role of the Caloosahatchee River for manatees particularly in the winter months.

Natural death data provide some unusual information as the result of a high number of deaths, which occurred in the winter of 1982. The dinoflaggelate, which causes "red tide", appeared to be concentrated in small solitary filter-feeding tunicates of the family Mogulidae. Manatees were ingesting these tunicates while grazing for food near the mouth of the Caloosahatchee River (Buergelt et al., 1984). *Karenia brevis* was implicated in deaths of large numbers of manateein 1963, 1982, and 1996, when seven, 39, and 149 animals,

respectively, died in southwest Florida during the winter/spring. The circumstances surrounding the large-scale mortality of manatees in 1982 and 1996 were attributed to a set of unusual environmental conditions. *Karenia brevis*, which typically develops 18–74 km offshore at low concentrations, usually comes inshore during the fall/winter and then dissipates

(http://www.floridamarine.org/features/view_article.asp?id=5964)

Red tides do not usually appear inshore during the winter/spring months when manatees are congregated in low- or zero-salinity areas in the warmer waters of the coastal power plants, at warm water spring refugia, or in residential canals. Unusually, in the winter/spring of 1982 and 1996, red tide encroached inside the barrier islands of southwest Florida. High-salinity areas (above 24 ppt) allowed persistently high concentrations of *K. brevis* cells (>1 x 10^5/L) to be maintained. In the spring, as the water temperature warms, manatees usually disperse downstream into the inshore bays. If red tide has come inshore during this period (as occurred in 1982 and 1996), then the likelihood of manatees being exposed to red tide during their post-winter movements is fairly high and depends on where manatees move and their proximity to the red tide bloom.

(http://www.floridamarine.org/features/view_article.asp?id=5964)

Seasonally, mortality throughout Peninsular Florida is higher in the winter-spring (42.6% –December - March). In Lee County, these months have 49.3% of manatee deaths. Seasonal summaries of deaths by categories illustrate strong contrasts in patterns of death. December through March corresponds to the period beginning with low temperature, which start rising in the spring and may also have high boating activities. April through November represent the wet high temperature season with slightly lower boating activity. Boat deaths in the winter-spring are higher than the summer (Figure 6) and highly concentrated in the Caloosahatchee River, however, a significant number of deaths also occur during the summer. This could be attributed to the increasing amount of year round residents in Lee County and summer boating activities. Perinatal deaths are only one-third higher in the summer than in the winter-spring (Figure 7). In all but a few cases, these perinatal individuals were found in sheltered waters. Deaths due to natural causes are extremely skewed to the winter-spring months when compared with the summer months (Figure 8). Those manatees with an undetermined cause of death are four times higher in the winter -spring than in the summer (Figure 9).

As shown on Table 3, statewide watercraft mortality represents the highest percentage of mortality by cause. However, in Lee County the other natural category is the highest percentage of cause. Table 4 shows that overall, natural causes represent the highest percentage of mortality statewide (including perinatal mortality figures). This follows true for Lee County as well. Both Natural and Undetermined causes out number human-related causes in Lee County.

5.0 Boat Activity Patterns

Several boating studies have been conducted in Lee County. These studies have generally been limited to observations of boat type, size, relative speed, travel direction and compliance with posted speed restrictions if applicable. Later studies used a radar gun to try to give more accuracy to the speed determination. Mote Marine Laboratory conducted the studies referenced for this plan under contract with the now Florida Fish and Wildlife Conservation Commission. These studies included *"Evaluation of Boat Traffic Patterns and Boater Compliance in Lee County, Florida"*, October 2, 1998, *"Evaluation of Boat Traffic Patterns in Estero Bay, Florida"*, November 9, 1999, and *"Quantitative Analysis of Recreational Vessel Speeds Prior to the Establishment of Speed-Restricted Zones in Lee County, Florida"*, October 20, 1999. Mr. Jay F. Gorzelany, with Mote Marine Laboratory, prepared the three studies.

Excerpts from "Evaluation of Boat Traffic Patterns and Boater Compliance in Lee County, Florida", (Gorzelany, 1998):

> A one-year study was conducted in order to provide information on vessel abundance, traffic patterns, and boater compliance. More than 500 hours of field data from aerial surveys, land and boat-based traffic surveys, and land and boat-based compliance surveys were conducted. Observational data on 26,538 vessels in Lee County waters, including 9,309 vessels during aerial surveys, 13,553 vessels during traffic surveys, and 3,676 vessels during compliance surveys was collected. Significant findings from this study were as follows:
>
> Of the two aerial survey methods performed during the study, a method involving the video recording of vessels over a standard flight path was most effective, particularly when surveying highly congested areas such as tidal inlets and portions of the Intracoastal Waterway.
>
> For all survey flights combined, 7,337 vessels (78.8%) were identified as small powerboats (SP), 946 vessels (10.2%) were identified as large powerboats (LP), and 693 vessels (7.4%) were identified as sailboats (SA). The remainder (approximately 3.5%) was identified as a mixture of miscellaneous vessel types, including personal watercraft, inflatables, kayaks and canoes, and a variety of commercial vessels. The majority of vessels observed (7,448, 80%) were identified in the 16'-25' size class; 1,116 vessels (12%) were in the 26'-39' size class, and 298 vessels (3%) were in the 40'-64' size class. All remaining size classes comprised less than 5% of all vessels observed. Of the 9,309 total vessels observed, 5,095 (54.7%) were recorded as traveling, 4,104 (44.1 %) were recorded as anchored or drifting, and the remainder (1.1%) were engaged on other

activities, including milling, water skiing, or other recreational activities. No noticeable variation in vessel type, size, or activity was observed between individual flights.

Highest one-day aerial survey counts in Lee County (1,713) occurred on Sunday, May 24, 1998 (Memorial Day Weekend). Lowest one-day survey counts (141) occurred on Monday, September 15, 1997. A difference in aerial survey counts between weekday and weekend flights, and between survey dates were statistically significant. Differences between morning and afternoon flights were not statistically significant. Though a clear seasonal trend was not evident, vessel counts in general were lower during the fall and winter, and higher during the spring and summer.

Aerial surveys identified eight high-use boating areas within Lee County. These areas were; 1) Boca Grande Pass (Charlotte Harbor), 2) Cabbage Key / Useppa Island area (Pine Island Sound), 3) Northern Captiva Island / Redfish Pass area (Pine Island Sound), 4) Eastern San Carlos Bay / Miserable Mile area, 5) the lower Caloosahatchee River, Shell Island to Redfish Point, 6) the southeast corner of San Carlos Bay, including the Sanibel Causeway and the Punta Rassa area, 7) Matanzas Pass, and 8) Big Carlos Pass. Several of these sites are seasonal high-use areas, while others are year-round high-use areas.

Boat and land-based traffic surveys determined that differences between weekend and weekday vessel counts to be statistically significant, with an approximate doubling of vessels in Lee County on weekends. Though afternoon vessel counts were somewhat higher than morning vessel counts, differences were not statistically significant. Similarly, differences between sampling quarters were not significant, though observations supported findings from aerial surveys, which indicated that vessel counts in general were higher during the spring/summer sampling period than the fall/winter sampling period.

Largest concentrations of vessels observed during boat traffic surveys were at the Miserable Mile Site (San Carlos Bay). As many as 1,273 vessels were counted at this site on a single day, with as many as 315 vessels in-use were observed during a one-hour survey period. Vessel counts at Miserable Mile accounted for 62% of all vessels surveyed during the Boat Traffic Survey Task.

The majority of vessels leaving the Caloosahatchee River (61.7%) traveled south toward the Sanibel Causeway and Gulf of Mexico. An additional 33.3% of vessels traveled west along Miserable Mile toward Pine Island Sound. The remainder of vessels (5%) traveled either north toward Matlacha Pass, or back toward the river or the adjacent shoreline.

Direction of travel was recorded for each vessel transitioning through the study area at each site, and the main traffic patterns were analyzed. From Centennial Park, 52.9% of all vessels observed traveled downriver, 27.7% traveled upriver, and 19.3% remained within the immediate area. From the Matlacha area, 66.1 % of all vessels traveled to the north, under the Matlacha Bridge toward Charlotte Harbor, 20.4% traveled to the south toward San Carlos Bay, 8.0% traveled west toward Little Pine Island, and the remainder (5.4%) stayed within the Matlacha area. For vessels leaving the Caloosahatchee River (Miserable Mile Site), 61.7% traveled south toward the Sanibel Causeway and Gulf of Mexico, 33.3% continued to the west along Miserable Mile toward Pine Island Sound, 2.8% turned north toward Matlacha Pass, and the remainder (2.1 %) either turned back toward the river or turned towards the mangroves just south and east of the mouth of the river. Hourly observations of traffic entering and exiting the Caloosahatchee River were also taken. Observations confirmed that the majority of boat traffic exits the river in the morning and enters the river in the afternoon. For morning surveys (0900-1200 hrs.), an average of 22.5 vessels/hr. were observed leaving the river, while only 5.8 vessels/hr. were observed entering the river. For afternoon surveys (1300-1600 hrs.), an average of 18.6 vessels/hr. were observed exiting the river and 27.2 vessels/hr were observed entering the river. The amount of boat traffic entering and exiting the river was most similar between 1300-1359 hrs (24.4 vessels/hr exiting the river vs. 20.2 vessels/hr entering the river).

At the Miserable Mile Site, vessels entering and exiting the Caloosahatchee River comprised the largest volume and concentration of boat traffic of all areas in the study, particularly during weekends. By combining the total number of vessels observed entering the river (2,191) and the total vessels exiting the river (2,782), it was calculated that, on the average, a different vessel was either in the process of entering or exiting the mouth of the Caloosahatchee River every 34.7 seconds during a weekend day. For particularly busy weekend days, such as April 5, 1998, vessels were observed either entering or leaving the river every 18.9 seconds. Between 1400 and 1459 hours, on this date, a different vessel was observed at the mouth of the river every 11.4 seconds.

Excerpts from_"Evaluation of Boat Traffic Patterns in Estero Bay, Florida", (Gorzelany, 1998)

This report found that Boat traffic data from Estero Bay is consistent with findings from the 1997-98 Lee County boat traffic study (*"Evaluation of Boat Traffic Patterns and Boater Compliance in Lee County, Florida"*). The aerial survey task of the 1997-98 study characterized Estero Bay as a relatively shallow water boating destination, comprised primarily of small, shallow draft vessels (Gorzelany, 1998). Big Carlos Pass was identified as one of eight high-use boating areas within Lee County. The current

study similarly characterized Estero Bay with a boating population comprised of a relatively large proportion of small, shallow draft vessels. High-use boat traffic areas in this study were identified at Big Carlos Pass and New Pass. These two sites comprised more than 60% of the total boats surveyed. Vessel composition (size and type) was similar between these two sites, however the use of these two areas by recreational vessels was somewhat different.

New Pass appeared to be more of a travel corridor between Estero Bay and the Gulf of Mexico. This is demonstrated by a relatively high proportion of vessels identified as "traveling", and by origin and destination data indicating that the majority of vessels are traveling through New Pass (95%), while only a small percentage remain within New Pass (<3%). Big Carlos Pass, in contrast, appears to function more as a recreational boating destination. A higher proportion of vessel activities identified as "pleasure" and "fishing" in this area demonstrates this. Origin and destination data also indicated a higher proportion of vessels whose destination was Big Carlos Pass itself (11 %). While aerial survey data did not identify New Pass as a high-use boat traffic area, data collected from this study suggests that it probably is. The fact that very few recreational vessels remain within the New Pass area may partially explain why fewer vessels were counted in New Pass during aerial surveys. Along with the large amount of boat traffic in the Big Carlos Pass / New Pass area, the relatively high proportion of fast-moving vessels (90%). makes these areas of particular importance in terms of manatee protection.

Because the four main areas of Lee County (Estero Bay, San Carlos Bay, Caloosahatchee River, and Matlacha Pass) were surveyed during different years and somewhat different sampling-periods, a limited number of direct comparisons can be made. Trends in seasonal, weekly, and daily variations boat traffic appear similar between Estero Bay and other Lee County survey areas. Boat surveys conducted during the spring, (primarily April and May) consistently provided the highest vessel counts at all survey sites.

Presumably, two factors determine the volume of vessel traffic in Lee County; 1) Favorable weather and boating conditions, and 2) The number of residents in the area (which varies seasonally). Both of these criteria are probably optimal during in the spring, since weather conditions are favorable, and the human population in Lee County is estimated to increase by approximately 16%, or approximately 67,000 seasonal residents (Lee County Economic Development Office data). Presumably, other seasons will likely have either optimal boating conditions with fewer residents (summer and fall) or less favorable boating conditions and more residents (winter). A similar seasonal trend in boat traffic abundance was observed at Venice Inlet (Gorzelany, 1996). Like other Lee County sites,

greatest abundance of vessels in Estero Bay was observed later in the afternoon (1400 hrs to 1600 hrs). With regard to vessel size and type, the Caloosahatchee River and San Carlos Bay survey areas were the most similar, and in fact probably shared many of the same vessels, which transitioned between the river and San Carlos Bay. San Carlos Bay also had a relatively small percentage of small boats, primarily jon boats and personal watercraft, due to the fact that this was more of an unprotected, high traffic area. These two areas would be more appropriately characterized as travel corridors rather than travel destinations. The Estero Bay area, with a wider variety of vessel types, is appropriately characterized as a travel destination and recreational area. Presumably, the Matlacha area is more appropriately identified as a fishing area, with a high proportion of small powered vessels, primarily open fisherman or jon boat type. For all survey areas combined, the proportion of vessel sizes and types in Lee County was shown to be similar to findings from other Florida boat traffic studies (Morris, 1990, Gorzelany, 1996, Tyson and Combs, 1999).

During the 1997-98 Lee County traffic study, a survey was conducted during a holiday weekend (Memorial Day). During the 1998-99 Estero Bay study, a survey was conducted during Labor Day weekend. While relatively large numbers of vessels were counted during these surveys, in neither instance did these surveys provide the highest single day vessel counts. This suggests that while a great deal of focus is placed upon the volume of vessel traffic during holiday weekends, the amount of boat traffic during non-holiday weekends may be equal or greater during certain times of the year.

Differences in recreational boat travel patterns with tide phase is unique to certain Estero Bay traffic sites. Unlike other boat traffic survey areas, which have been conducted in water depths that were navigable at all times, the relatively shallow portions of Estero Bay, particularly at the southern sites (Big Hickory Pass and Intrepid Waters), significantly changed travel patterns at times. The shallowness of these southern sites also explains why very few large, deeper draft vessels were observed at the southernmost sites. The similarity of vessel distribution between Intrepid Waters and Big Hickory Pass is not surprising, since these two sites were in close proximity to each other and probably shared many of the same boats. Along with their close proximity to each other, the Intracoastal Waterway connects both the Intrepid Waters and Big Hickory Pass survey sites, probably resulting in many of the same boats traveling through both areas. Observed vessel speeds at the Big Hickory Pass site were substantially slower, with only 11% of vessels observed at Planing Speed.

Statistical results indicated that there were significant differences between survey sites, along with significant relationships between numbers of vessels observed and vessel type, size, time of day, weekend versus weekday, and tide phase. A discussion of statistical significance versus statistical relevance has been addressed in previous studies (Gorzelany, 1996, 1998, 1999). In has been demonstrated that standard statistical testing of large data sets (more than 19,000 data for the Estero Bay study) tends to enhance, or distort, relatively small differences between data sets (Krebs, 1989). As a result, relatively minor variations or relationships may have no relevance to the goals of the study. For this reason, statistical results should be approached with caution, with perhaps more focus on the practical differences or relationships between data sets.

In spite of variations in quarterly, weekly, daily, and hourly observations of vessel traffic, the relative proportion of vessels remained fairly consistent between the five Estero Bay survey sites. New Pass, for example, consistently had between 2.5 and 3.5 times as many vessels as Intrepid Waters on any given day. Big Hickory Pass consistently had between 1 and 1.5 times as many vessels as Intrepid Waters. The number of vessel counts between Big Carlos Pass and New Pass rarely varied by more than 10%. Similar relationships may be explored in future studies in order to predict vessel traffic in larger areas by sampling a smaller number of sites which may be representative of the level of boating activity in a given area as a whole.

Excerpts from "Quantitative Analysis of Recreational Vessel Speeds Prior to the Establishment of Speed-Restricted Zones in Lee County, Florida", (Gorzelany, 1999)

According to the report, October 20, 1999, a total of 36 survey hours were conducted at three sites located in Lee County waters. Quantitative speed data was collected from 3,513 vessels during the study This number is slightly less than the final vessel count listed in the quarterly progress reports, because the following vessels were eliminated from the final data set:

Vessels for which there was no numerical speed acquired
Vessels which were not targeted within the Intracoastal Waterway
Vessels that were not under power at the time, which they were observed.

Of the 3,513 vessels targeted, speeds of 799 vessels were acquired at the Caloosahatchee River site, speeds of 482 vessels were acquired at the Matlacha Pass site, and 1,872 vessels were acquired at the Estero Bay site. Boating conditions were evaluated as either "Good" or Excellent" during 93% of survey time (89% in the Caloosahatchee River, 92 % Matlacha Pass, and 99% in Estero Bay). Poor boating conditions were recorded for only 2 survey minutes at one site.

In addition to these characterizations of vessel types and activities, two studies have been conducted to evaluate boater response to relation to new speed restrictions. Gorzelany (2000) found in looking at the mouth of the Caloosahatchee that boat traffic patterns changed in response to new speed zones. Specifically vessels avoided prior routes that were less traveled once they were made slow speed, in favor of faster but more crowded areas. The study also found a significant relationship between the level of boater compliance and the presence of law enforcement. This relationship was strongly supported by the results of a study in Mullock Creek (Gorzelany 2002) that found a high level of blatant non-compliance. Obviously, the effectiveness of manatee speed zones is related to the effectiveness of the enforcement component of manatee protection (see Section 7.1). The studies generally agree that there are other patterns readily identifiable in the boating activity including seasonal and weekly variations.

5.1 Vessel Type, Vessel Size, and Direction of Travel

In each of the Lee County studies, vessels in the 16' to 25' size class comprised the largest proportion of vessels observed. A relatively higher proportion of larger vessels (greater than 26 feet in length) were observed at the Caloosahatchee River site, however, and a higher proportion of smaller vessels, primarily personal watercraft, were observed at the Estero Bay site. Large powerboats identified as yacht/cruisers comprised the largest proportion of vessels at the Caloosahatchee River site, while smaller powerboats, primarily open fisherman-type were more abundant at Matlacha Pass and Estero Bay. A noticeably higher proportion of other shallow draft vessels such as pontoon boats, deck boats, and personal watercraft were also observed at the Estero Bay site. The Estero Bay site also had the largest proportion of vessels identified as rental boats. Differences in both vessel size and vessel type between sampling sites was determined to be statistically significant. Direction of travel along the ICW at each sampling site was not statistically significant, and the number of vessels traveling in each direction was similar.

5.2 Qualitative Speed Analysis

In each of the Lee County studies, traveling was the predominant activity observed, and "planing" was identified as the predominant qualitative speed, comprising 75.3% of all vessels in the Caloosahatchee River, 89.2% of all vessels in Matlacha Pass, and 82.1% of all vessels in Estero Bay. Vessels traveling at Idle or Slow speeds comprised only a small percentage of recorded vessels (8.3% in the Caloosahatchee River, 2.9% in Matlacha Pass, and 2.6% in Estero Bay). Larger yachts and other powerboats traveling to and from the upper portions of the Caloosahatchee River probably account for the somewhat higher proportion of vessels traveling at slower speeds at this site. At the Estero Bay and Matlacha Pass sites, the proportion of vessels identified as "cruising" were

predominantly pontoon-type boats. At the Caloosahatchee River Site, the proportion of vessels identified as Cruising were a mixture of pontoon-type boats and larger yacht/cruiser-type boats.

Statistical analyses in this study provided some curious results. In spite of apparently close similarities between certain data sets, significant differences were found. When comparing mean vessel speeds between morning and afternoon surveys, for instance, one-way ANOVA identified a statistically significant difference between morning and afternoon vessel speeds. This was determined in spite of the fact that the differences in mean vessel speeds were less than 1 mph (25.62 mph for morning surveys vs. 24.96 mph for afternoon surveys). Similar statistical results were found in previous studies (Gorzelany, 1996, 1998). Because statistical significance derived from large data sets may tend to enhance relatively small variations in data (Krebs, 1989), results should be interpreted cautiously. Instead, the statistical relevance should be considered. While there may be a calculated statistical significance between morning and afternoon vessel speeds, the practical differences may be insignificant.

Because this study is designed to provide a baseline of information on existing vessel speed in Lee County, a limited number of comparisons have been attempted, and only appear as an overall characterization of vessel speeds in Lee County. Spatial comparisons between the sampling locations, in spite of apparent statistical significance, appear to be minimal. Similarly, differences between morning and afternoon surveys, though statistically significant, do not appear to be statistically relevant.

In terms of applied uses for manatee protection, it is important to remember that the numerous variables of boating locations and behaviors require each area to be treated individually. When evaluating speeds, it is also important to remember that the percentage of compliance may be less important than the absolute number of blatant violators (Shapiro 2002).

6.0 Inventory of Boating Facilities

Although marinas and boating facilities are generally defined as docks or basins, which provide mooring and launching facilities for boats, some distinctions and elaboration are necessary. Public service marinas should be distinguished from other types of marinas, which often do not provide public services. Public service marinas generally lease wet storage to the general public on a first come, first served basis, and also offer services such as provision of supplies (gas, bait, fishing tackle), sewage pump out, repair of boats, and wet or dry storage. Other types of private marinas may not provide these services, or may only provide limited service (such as mooring).

For these purposes, marinas will be defined as commercial marinas with various services provided, and docking facilities will be defined as common facilities with five slips or more. Utilizing these criteria, not only are public service marinas encompassed by these definitions, but many private marinas and other facilities are included as well. Condominiums, which have at least 5 slips, would also be defined as docking facilities. Dry storage is included if wet storage of 5 slips or more is provided or the dry storage has direct water access through a lift or other means of conveyance on the property of the proposed project or access is provided adjacent to the project. The following inventory was complied by Lee County staff and was further integrated with the Southwest Florida Regional Planning Council Support Services document, which inventories existing marinas and boat ramps. This information is listed in Table 6, an inventory of Marinas and Ramps, and illustrated in Figure 10.

In addition to the illustration of the marina facilities found in Figure 10, an inventory of slip and mooring data in Lee County is also provided. Using data from the Regional Waterway Management System Study for Lee County (Antonini, et. al., 2000, 2001, 2002) an inventory was developed (Tables 7a and 7b, a Summary of Boat Facilities) as well as a density grid (Figure 11). Data in the aforementioned Figure was captured during a visual census of individual moorings and occupancy of said moorings throughout Lee County. An inventory of all moorings, including marina wet slip and dry slip space was completed. Data collection was performed using Trimble GPS equipment, identifying each individual slip with its own unique data point. To illustrate, a 200 slip marina would be represented by 200 individual points while a two-slip dock behind a single family residence would be represented by two individual points. Also included in this inventory are boat ramps, both private and public. In addition to available slips, data were also collected in the same fashion for vessels present or not present. The data were collected during the weekdays, to maximize the potential for capturing vessels while they were located at their 'home mooring'. This inventory does not include permitted slips that are not yet built, or slips vested by the Department of Community Affairs that may not be currently "existing". This information will not reflect changes made since the date of the census; however, a comprehensive inventory of Lee County marine facilities is planned for completion by the end of 2005.

These points were then entered into a quarter-mile grid system that has been superimposed over Lee County to aid in trend analysis. Comparing these data, Lee County was able to extract number of available slips (number of constructed slips), number of vessels (number of occupied slips), and number of unoccupied slips (slips constructed but not housing a vessel at time of data collection). These numbers are represented in density maps of Lee County in Figure 11. The three maps represent 1. Total number of constructed slips in Lee County at the time of the survey; 2. The number of vessels observed moored at these storage facilities in Lee County at the time of the survey; and 3. Number of observed unoccupied slips in Lee County at the time of the survey. Therefore,

the figure labeled 'Currently Available Slips' represents the total number of slips, docks, and dry storage units that were catalogued at the time of the survey. The figure labeled 'Currently Vacant Slips' represents those slips, docks, and dry storage units observed where no vessel was moored/stored/etc. The figure "Currently Occupied Slips" represents those slips, docks, and dry storage units observed where a vessel was moored. These surveys were conducted during normal business hours on weekdays, so the numbers observed are assumed to be quite accurate. Analyzing these three gives a clear indication of the importance of single family residential riparian right of access as it relates to boating activity, existing and future.

Characteristics of marinas vary widely. Some are located on freshwater while others are found on saltwater. Some are publicly owned and operated while many are privately owned and/or operated. A wide range of services may be provided, ranging from mooring only to full provision of facilities and services. All types of marinas are located in Southwest Florida.

According to the document *"Where Do They Come From?, An Analysis of the Origination of Boat Traffic and How It Relates to Manatee Mortality in Lee County, Florida, Riley and Stead, 1999,:*

> Single Family Docks and Multi-Family Docks represent the second most popular storage method in Lee County. Property owners with boats realize both an economic and convenience advantage by storing the boat on a single-family dock in their riparian waterfront. The sizes of vessels run from 12 feet to 50 feet and beyond. The average size is less than 30 feet.
>
> Single-family docks are exempt from permitting with the FDEP or the U.S. Army Corps of Engineers, if they fit specific criteria. Briefly, the dock must be less than 1000 sq. ft or 500 sq. ft. depending on its location in Class III waters or an Aquatic Preserve. A single-family dock is allowed two slips under exempt status from permitting; therefore two vessels may moor at a single-family dock. The second vessel is often smaller and many times is personal watercraft (PWC). There are no vessel size or type restrictions. The construction of a single family or multifamily dock does require a building permit from the local government. There is no manatee review criterion with the local government ordinances.

While the requirements for permitting of single family dockage may change, it is expected that such residential docks will never be scrutinized to the same level as commercial marinas. This is appropriate as the riparian rights attached to those single family homes provides that the homeowner has ingress and egress by vessel. In this way, the dock does not limit access but may influence how or where the vessel is stored and used. The importance of residential property as a source of boat traffic in Lee County is further supported by Sidman *et al.* (2001)

who found via mail and telephone surveys that 40% of respondents kept their vessel at a dock at their house. In the Caloosahatchee River, approximately 70% of the respondent's trips originated from the residential canals of Cape Coral.

The City of Cape Coral is an area of special interest in the analysis of existing boating facilities. The City of Cape Coral could be considered as a large area of potential boating facilities due to its design as a boater-friendly subdivision. Each saltwater access waterway lot in the city has the potential of at least one boat (and potentially up to two) per buildable lot. Cape Coral staff has estimated that up to 40,589 saltwater and freshwater single-family lots occur within the city. Of this total, 23,000 lots exist on salt-water accessible canals. At buildout, these saltwater accessible lots could potentially accommodate approximately 46,000 boats.

A wide range of boat types occurs in Lee County. Table 8 lists the size class of vessels Registered in Lee County for years 1995-1996, 1996-1997, 1997-1998, 1998-1999, 200, 2001, and 2002. As is evident in the table, the largest category of vessel registered in Lee County are boats in the 16' to 25' 11" category, comprising almost 57% of all boats registered. Boats of this size and smaller can generally be towed on a trailer and launched at a boat ramp, although launching may also occur at other types of facilities. Not much is known about the types of vessels that impact manatees most severely, however, vessels smaller than 26' have the ability to navigate throughout many of the shallow waters of the county, increasing the likelihood of manatee encounters. Vessels of larger classes generally require wet slip facilities, however these vessels comprise only about 12% of the vessels registered in the county. Vessels of these size classes also generally need to stay within designated channels, but due to their size and displacement also present a potential conflict to manatees within these channels, should an encounter occur. Seasonal boat visitors registered in other counties or states will add to this number. If related to seasonal residents this number may find a 10% to 15% increase during tourist season.

Table 9 presents the number of total vessels registered in Lee County by Fiscal Year since 1986. During the 1988-89 to 1998-99 period, Lee County saw an 18% increase in the number of boats registered in the county. This growth trend is expected to continue into the future and mirrors the general growth trend of population for Lee County. This trend is represented by Table 5.

7.0 Current Manatee Protection Measures

Lee County is constantly seeking ways to protect the West Indian manatee, and its habitat. For many years, ongoing programs supported by Lee County have provided direct and indirect protection to the manatee. These initiatives take many forms and are outlined below.

7.1 Law Enforcement Efforts

Each year, Lee County invests significant resources to enhance marine law enforcement activity. Lee County has shown a strong, continued commitment to sustaining and increasing the level of marine enforcement. Local option boat registration surcharges were instituted by ordinance in 1985 and continue to be directed solely for marine law enforcement. This revenue varies annually as a function of boat registration, but presently averages about $28,500 per month. Twenty percent of the funding secured from the West Coast Inland Navigation District is allocated annually for marine enforcement. Each year this amount increases, and has significantly increased in recent years. Figure 12 represents WCIND monies spent in Lee County on Marine Law Enforcement efforts for the years FY1996 through FY2003 . Revenues from these two sources totaled over $570,000 for local marine law enforcement enhancements in Fiscal year 2001-2002 alone; over 1.6 million dollars in the past four fiscal years.

In conjunction with the award, the County has set up procedures to track activity for all local agencies that receive County funding. Table 11 shows the number of hours of Marine law enforcement provided by the local law enforcement entities for fiscal years 1996 through 2001 as well as the number of citations. Historically the type of citation was not tracked and there is not a reliable way to determine what percentage of citations were related to manatee protection and what were related to boating safety. Newer tracking methods will differentiate these types and allow for closely evaluation of potential patterns.

Through reports submitted to the County, the County is advised of the local law enforcement effort each month by agency. The county has recently refined the reporting system to correspond with four zones based upon the US Army Corps reach designations (See Figure 13). Activity is reported in terms of patrol hours by zone and includes manatee zone citations, total citations, manatee zone warnings, and manatee sightings. Although Federal agencies (US Coast Guard and Service) and the FWC provide significant enforcement presence on local waters, their activity is not directly funded by or reported to Lee County. As such, the comprehensive picture of marine enforcement is larger than represented above and in the figures cited. Because this activity is out of the control of Lee County, it is not discussed in detail. These agencies are included for purposes of cooperative details and coordination via the Lee County Marine Law Enforcement Task Force. Data from FY2001 and FY2002 show a dramatic increase in the number of on the water hours and citations reported by the Lee County Sheriff's Department and the Cape Coral Police Department, the two largest reporting agencies. (See Table 12).

The County is now planning to bring law enforcement coordination to an even higher level by introducing the use of GPS positioning equipment in order to automate the tracking process. This initiative is scheduled to start in early 2004.

The County is planning to implement this locally due to the continued emphasis at the State and Federal levels confirming the importance of directed law enforcement efforts. This effort is currently funded, and testing of equipment and software has begun. When fully operational, every enforcement unit receiving funding through WCIND will be equipped with a transmitter that will allow for GIS analysis of enforcement patterns, density, gaps and coordination between participating agencies. This information will be used in correlation with manatee sighting, mortality, speed zone area, and boat use pattern information to help allocate resources to maximize benefits for manatee protection and boating safety. In addition to local agencies, the FWC has agreed to place the GPS data units on all vessels operating in Lee County as well. This will generate data on all vessels conducting regular patrols for manatee protection and will provide a full, comprehensive analysis tool for all of Lee County.

Lee County is the only local government to date that has gone through the complete process of having a supplemental funding plan developed and approved to implement the terms of the Service Draft Interim Guidance. We have a contract signed by the Lee County Sheriff and account mechanisms in place. While recent State and Federal actions have resulted in the Federal Interim Guidance suggesting that additional fees for marina enforcement are no longer necessary, this tool is useful for additional conservation measures proposed by larger marine developments. (See further discussion in Section 8.4.5)

Lee County also hosted a training seminar on manatee speed zones and manatee procedures for law enforcement from all State and local agencies. In attendance were officers from the City of Ft. Myers, City of Cape Coral, U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, U.S. Coast Guard, Florida Department of Environmental Protection (Parks Division), and Lee County Sheriff's Office. In addition to helping coordinate enforcement efforts, the seminar is designed to keep officers up to date with manatee issues and educate new officers to the complexities of manatee enforcement. This session was very well received and Lee County plans to hold additional sessions as needed.

The aforementioned County sponsored educational session is provided in addition to the training provided by the Florida Fish and Wildlife Conservation Commission Field Staff. On an annual basis, FWC Manatee Salvage, Rescue, and Research staff holds a training session for FWC marine law enforcement officers to emphasize proper manatee procedures. This session focuses on FWC protocol for collecting dead manatees and rescue situations including: the importance of GPS locations for all dead/injured animals (initial locations); importance of placing an evidence tag (w/ GPS location and date, etc.) on lines attached to specific manatee carcasses when securing them to boat ramps; descriptions of different types of injuries that manatees might sustain so that each officer can best describe to the biologist what type of rescue situation to

prepare for, etc; stressing the importance of obtaining as much information about the location and condition of the manatee for necropsy data and rescue situations (including dead=fresh, moderate, badly decomposed, identifying new/old injuries, and recording GPS.

State law enforcement as provided by the Florida Fish and Wildlife Conservation Commission Division of Law Enforcement has increased in Lee County. The first new positions approved in over ten years are expected to be fully operational in early 2003. The State has previously and is expected to continue making manatee enforcement a priority.

Additionally, local law enforcement entities have created the Lee County Marine Law Enforcement Task Force in order to coordinate manatee protection and other law enforcement efforts within Lee County. Included in the formation of this task force are Lee County SO, Cape Coral PD, Ft. Myers PD, Sanibel PD, and the Florida Fish and Wildlife Conservation Commission – Division of Law Enforcement, United States Coast Guard, and Service. As a function of this task force, the Lee County Sheriff has agreed to deputize officers of Cape Coral's Marine Unit, effectively making additional law enforcement presence available and present throughout the Caloosahatchee River. The additional coordination maximizes the potential enforcement benefits for manatee protection as well as boating safety. Table 13 represents the amount of combined resources that are realized within the task force, and approximate hours of marine law enforcement coverage. Due to the nature of law enforcement in a marine environment, it would be inappropriate to list specific, detailed coverage hours. However, the numbers listed in the table provide a an average representation of coverage provided by the different members of the task force. The Lee County Marine Law Enforcement Task Force mission statement and goals are provided in Appendix IX.

7.2 Manatee Speed Zones

Some of the first boat speed restrictions for manatee protection were implemented to protect the wintering herd that gathered near the Florida Power and Light (FPL) power plant in Fort Myers. The plant uses water drawn from the Caloosahatchee River just east of I-75 for cooling, and discharges the warm water into the Orange River. In 1979, this area was regulated with slow and idle speed zones effective each year from November 15 through March 31.

In 1989, year round speed zones were established for major portions of the Caloosahatchee River from the Franklin Lock and Dam to the mouth of the river at Shell and Sword Points. The primary features were the additions of: ¼ mile slow speed shoreline buffers from the mouth of the river to the Caloosahatchee (New US 41) Bridge; slow speed outside most of the ICW channel from the

Edison (Business 41) Bridge to the Seaboard Coastline Railroad Trestle (adjacent to the 1979 zones); slow speed within ¼ mile of the Franklin Lock structures.

In 1990, State staff began the process of developing additional speed zones to cover all Lee County areas used by manatees on a regular or frequent basis. Lee County reviewed several draft concepts for these new zones. In an effort to develop a locally acceptable set of speed zones and eliminate the need for additional State intervention, the County adopted several special management areas by way of local ordinance in 1990 (Ord. 90-51). These areas included several slow speed zones as well as a zone prohibiting combustion engine operation to protect manatees and seagrass habitat near York Island and MacKeever Keys. The no-motor zones were ultimately never posted or enforced because of Federal agency objections during the permit process that said the zones created undue interference on navigational rights.

The County ordinance was not deemed sufficient to provide the necessary protection desired by the State and they continued to develop a countywide speed zone plan. A proposed rule was invalidated in 1995 and the State had to restart their efforts.

State staff worked between 1996 and 1998 to conduct surveys and complete a detailed economic analysis of proposed speed zones. They also continued to refine the evaluation of new and historic manatee data as it related to the potential creation of protective boat speed restrictions. In August 1998, the State published a notice of proposed rulemaking for countywide speed zones. This proposal was also subject to several administrative challenges, all of which were settled without going to hearing.

Lee County supported the FDEP and then FWC through the process of adopting the latest amendment to the Florida Administrative Code creating vessel speed restrictions for the purpose of manatee protection (FAC 68C-22.005). Once the code had been adopted, Lee County planned, permitted, and installed all the necessary signs to mark the zones, thereby making them enforceable. The County also assumed the ongoing responsibility for inspection and maintenance of the signs, as well as semiannual sign changes at seasonal zones. Please refer to Figure 14 for reference to these speed zones.

As the result of settlement agreements for recent lawsuits, the Service implemented new speed zones in Lee County. The Service recently adopted a slow speed refuge in the ICW channel at Shell Point. More recently, there was a Federal rulemaking process that established additional slow speed zones throughout the length of the Caloosahatchee river, as well as 25 mile per hour limits in the main body of the river. Please Refer to Figure 15 for maps of the Federal speed zones. The FWC committed to evaluate the effectiveness of zones in the Caloosahatchee (2002) and then the balance of the county (2003)

as part of their settlement, but made no definitive commitment to change the existing regulations. The FWC evaluation of Lee County speed zones was completed in November of 2003. In its final report (Nov 2003) the State concluded that the existing State speed zones are adequate and no new speed zones were needed.

In addition to the State zones, the Lee County Vessel Control and Water Safety Ordinance 02-14 (Appendix I) establishes more restrictive idle speed zones within 500 feet of developed shorelines. These often correspond to areas used by manatees and boaters and provide an additional level of protection. In addition to routine sign posting and maintenance, there is an ongoing program in place to coordinate signage improvements with local law enforcement agencies, and to coordinate posting to be compatible with the more restrictive local boating ordinances.

7.3 Habitat Preservation

Virtually all manatee habitat in Lee County is owned by the State of Florida (i.e. sovereign submerged lands) and as such the County's ability to directly preserve manatee habitat is limited. There are several State Preserves, Reserves, State Parks, Save Our Rivers Projects (SFWMD), and Aquatic Preserve Buffer Zones (DEP) located throughout the County. Please refer to Figure 19: Regionally Significant Natural Resources for a depiction of current protected areas. Lee County does work towards preservation of manatee habitat in several ways.

In efforts that directly impact the boating public and County waterways, the County has included specific information about seagrass protection in the Lee County Boater's Guide. In addition to information provided in the maps, Natural Resources staff has begun conducting seagrass education seminars for area boaters groups. To date programs have been given to the Imperial River Conservancy, Bonita Bay Captain's Club, and the Bonita Bay Fishing Club. Both efforts help to keep boaters in the best water for navigation and minimize the potential for prop scarring. Methods are being examined that would allow the program to be expanded to additional boating groups.

Lee County works indirectly to protect manatee habitat through regulation and management of water quality. Water quality and the deterioration thereof have potentially devastating implications for manatee food sources. As water quality declines and light penetration is reduced, there will be a direct negative impact to SAV abundance. This impact will affect the deepest edge of grass beds first, areas which are more easily accessible by manatees.

Specifically, Lee County has the NPDES MS4 stormwater permit. This has several conditions which assist in promoting good water quality. The educational component requires education of engineers, contractors and the general public.

They are to be educated in construction site management, illicit discharge identification and reporting of suspected discharges. This reduces the amount of silts and sediments in the receiving waters and other potential runoff pollutants. Education is also conducted using the 'Enviroscape' educational tool at group gatherings and other public events. This illustrates the benefits of reducing herbicides, pesticides and other pollutants in daily life.

Lee County has also distributed several hundred placards for installation on storm drains to notify the public that they should not "dump" pollutants as the drain goes to the bay. We have tried to illustrate the potential effects by supplementing the text with a graphic image of estuarine life, including a version depicting a manatee. Installation has been accomplished through the combined efforts of public employees and volunteer labor.

Vessels abandoned on waters of the State are a potential source of debris and water quality pollution that could negatively affect manatees. Lee County is very involved in derelict vessel removal. During fiscal years 1999 through 2002, Lee County removed 120 vessels at a cost of $257,000. Lee County has a very aggressive, very active derelict vessel removal program that works with the FWC to remove vessels that pollute the waters of Lee County.

The Lee County Solid Waste Department collects hazardous waste quarterly from homeowners and sponsors used oil collection sites throughout Lee County. This is another important method to keep deleterious substances from impacting manatee habitat. In the business community, the Pollution Prevention Program inspects and verifies small quantity generators through out the County, providing proper education on tools for managing hazardous waste and alternative practices to eliminate the use of hazardous substances that generate hazardous waste. The Lee County Extension Service is also working to educate licensed pesticide and herbicide applicators.

In addition to working with homeowners and businesses in Lee County, Lee County also participates with other governmental entities on important water quality issues. Of paramount importance is the management of Lake Okeechobee and the associated flood control practices that result in changes to Caloosahatchee River water quantity, quality, and timing. The Caloosahatchee is a focal point for manatee activity in Lee County. In addition to potential impacts to fresh water drinking supplies and general estuarine disruption, recent fresh water releases were observed to decimate SAV in proximity to the FPL power plant, the primary winter use area for manatees. Lee County attempted legal action to stop these damages. That effort was unsuccessful, but the interest has been maintained to develop a proactive stance to prevent future such damages. A coalition of interests along the Caloosahatchee has been formed to try to influence better management practices of Lake Okeechobee.

Lee County has supported financially and participated in such events as the Keep Lee County Beautiful Monofilament recycling program at boat ramps and Monofilament Madness, an annual boater cleanup of debris from remote islands and shorelines. Lee County also participates in the annual International Coastal Cleanup sponsored by the Ocean Conservancy. These programs provide an important way to remove materials from local waterways that have potential to kill or injure manatees through ingestion or entanglement.

Lee County has actively worked with FMRI in their ongoing investigation of harmful algal blooms. The County is prepared and collects water samples for analysis as requested by FMRI. The presence of red tide is a risk to manatees because of direct toxicity problems as well as implications of reduced motor function causing an increased threat to secondary problems such as watercraft impact. Knowledge of red tide bloom boundaries can provide an important management tool. When red tide is present in manatee areas, increased emphasis should be placed on public education and enforcement of existing speed zones. The public should be made aware of the increased risk to manatees and reporting procedures if they see distressed animals. Strictest compliance with vessel speed restriction must also be achieved to prevent watercraft collisions with impaired manatees.

Lee County is also a participating member of the Charlotte Harbor National Estuary Program. The NEP is a partnership that involves stakeholders in all or parts of seven counties. The NEP has developed a Comprehensive Conservation Management Plan with defined goals, quantifiable objectives, and priority actions designed to maintain and improve the ecological integrity of the greater Charlotte Harbor estuary. The NEP provides a forum to coordinate with regional interests on issues that directly and indirectly influence manatee habitat.

It is also possible to indirectly influence manatee habitat through management of adjacent uplands. The County has a very active conservation land acquisition and management program that gives emphasis to riparian and wetland properties that could have benefits to manatees by precluding development in these areas and protecting water quality. Lee County Ordinance No. 96-12 (See Appendix IV), created the Lee County Conservation Land Acquisition and Stewardship Advisory Committee, (CLASAC), comprised of fifteen citizens. The CLASAC held its first meeting on February 20, 1997 and has been meeting regularly (usually once a month) to review real property nominated for potential purchase by Lee County. The CLASAC has formulated an official nomination form entitled Lee County Conservation 2020 (See Appendix V). This is a willing seller acquisition program. Recent purchases are shown in Figure 16.

As of August 2002, Lee County has acquired 7,928 acres of property for preservation. A significant portion of this property is riparian. While each parcel will have a management plan developed that may allow for passive recreation, over 37 miles of shoreline has been placed under preservation through County

acquisition. The Caloosahatchee Creeks Preserve in particular, is a parcel that had been slated for intense development including marina facilities in an important area of the Caloosahatchee for manatee use (Figure 17).

In addition to direct purchases, the Conservation 2020 program fosters partnerships with other Federal, State, and private conservation land programs. The combined efforts create a significant network of conservation areas throughout the county (Figure 18). As such, the County attempts to facilitate the protection and restoration of emergent and shoreline vegetation that may be used for manatee foraging.

7.4 Education Initiatives

Education is an integral part of Lee County's manatee protection efforts. Initiatives are taken on many fronts to reach a variety of demographic groups. Manatee/human interaction problems may include swimming with, feeding and watering manatees, as well as chasing them. Actions that alter a manatee's natural behavior are harassment and are illegal. Education is being directed to prevent identified manatee/human interaction problems, including boat/manatee interactions.

Over 30,000 boater's guides were directly mailed to people who registered a vessel in Lee County in fiscal year 2002/2003. Total distribution to date is over 270,000 since 1997. This guide is regularly updated to show the latest information on manatee protection and vessel speed regulations and is the only comprehensive source for this information available to the public in Lee County. These guides are distributed to all area marinas, bait shops, boat dealers, realtors, and chambers of commerce. Funding for development and printing of updated versions is secured through grant funds from the West Coast Inland Navigation District (WCIND).

Excerpts from the Boater's Guide have been used in newly developed signs, which were placed at all local public boat ramps (see Figure 20) during the 2002/2003 fiscal year at a total cost of over $28,000. These signs show an overview of Lee County and its speed zones as well as a detailed view of the area particular to the location it is installed. Partial funding was obtained from the State through the Advisory Council on Environmental Education (ACEE). Funding is currently being sought to place these signs at all water access points, public and private.

Recent Federal additions of speed zones in the Caloosahatchee have rendered all materials printed from the most recent revision of the Lee County Boater's Guide inaccurate. Once the final rule was passed for Lee County, making the Federal speed zones effective, Lee County acted immediately to create a website which showed the new zones (http://www.lee-

county.com/naturalresources/guide.htm.) Lee County was the first entity to produce publicly accessible maps and information which reflected the new Federal speed zones. Business cards have been printed with the web address for the electronic boater's guide, and have been handed out at functions such at the Ft. Myers Boat Show and boater's education classes. All local law enforcement agencies have also been supplied with the web information in their education efforts with the public.

Lee County has worked extensively with WCIND to not only develop the Boaters Guide, but to find a mechanism to supplement manatee education, particularly for new boaters. We are implementing a cooperative project with the Calusa Nature Center and Planetarium, a local nonprofit organization, to produce a Boaters Environmental Education Module. This presentation will be a combination of power point and video. The expectation is to make this module and the presentation equipment available for use by all groups conducting boater education classes, including the local Power Squadrons and United States Coast Guard Auxiliaries. Groups utilizing these materials will be trained in its use by Calusa Nature Center Staff. These additional materials are intended to integrate into current programs, to supplement information presently provided in boater's education classes. It is estimated that this project will be completed some time during 2004.

An updated video is also in production through the Lee County Sheriff's Department Marine Enforcement Division to educate new boaters and visitors about Lee County speed zones and manatee protection. Groups participating in the creation of this video included the Lee County Sheriff's Office, Lee County Division of Natural Resources, Save the Manatee Club, Florida Fish and Wildlife Conservation Commission, and the United States Coast Guard. This video will be used as part of a traveling enforcement display at boat shows and other public events and includes a mock enforcement vessel and sample signage. Completion of the video is expected in May of 2004. It is expected that this video will also be played on the Lee County Government channel at appropriate times of the year.

Additionally, Lee County has secured funding for expansion and upgrade of the manatee exhibit at the Calusa Nature Center and Planetarium. The current exhibit, a cooperative effort including the County, FWC, and WCIND, reaches more than 100,000 visitors annually. The new funding will be used to double the exhibit venue sites, upgrade existing exhibit elements at the museum facility and create a portability dimension to the exhibit that will be used to bring portions of the exhibit into area schools. Another element of the portability component will be availability for use at boater education classes in conjunction with the video presentation. This project is scheduled for completion within 12 months.

Education in the local school system has been and will continue to be supported. In 1998, a 5th Grade curriculum was developed to provide education about

manatees and their habitats. The curriculum was designed to be useful in the classroom, but had particular emphasis on materials and activities to be completed in conjunction with a fieldtrip to Lee County Manatee Park. County staff continues to work closely with the Lee County School District to implement this ongoing project. In fiscal year 2002/2003 a student from FGCU is working in cooperation with Lee County to evaluate existing curriculum components and design additional teacher materials. The work will include training workshops to educate teachers about the manatee curriculum. This project is scheduled for completion within 12 months.

In addition to school fieldtrips, Manatee Park also draws over 100,000 visitors annually. Staffing includes volunteers and Service employees in addition to County personnel. Programming includes free educational walks twice per day from November through March as well as the annual Manatee Day celebration. The park provides numerous active and passive educational opportunities. In conjunction with the location at the warm water discharge from the FPL power plant, the park is a focal point for manatee education and awareness.

Division of Natural Resources staff has been accompanying FWC's Florida Marine Research Institute (FMRI) staff on aerial flights of Lee County during synoptic surveys. Lee County DNR desires to have at least one staff member accredited by the State as an official 'Manatee Spotter'. This staff member would then be able to conduct aerial surveys of Lee County, taking note of the various areas in which manatees are congregating. This information will be used in several ways. First, the information will be translated to the local Marine Law Enforcement Task Force (see enforcement section) for use in allocation of resources in patrol and enforcement situations. Second, the information will be translated into a weekly 'Manatee Report' to be distributed on Thursday and Friday for use by local media outlets, in much the same manner as the weekend fishing and boating forecasts. This provides an outlet to inform the boating public of the movements of manatees in Lee County, thereby increasing awareness and decreasing the potential for vessel/manatee interactions.

Many organizations other than the County are also active in environmental education, including manatee protection. These include commercial ventures offering tours of manatee areas as well as other governmental and private non-profit organizations. While the activities of these organizations is outside the control of Lee County, the common educational mission is one that Lee County continues to support and promote. The following is a partial list of other organizations and the type of materials or activities that they provide. The list is for illustration purposes and does not necessarily equate with County support or approval of particular positions or materials of the listed organizations.

Organization	Materials/Activities
Calusa Nature Center and Planetarium	Museum displays, educational programs
Charlotte Harbor Environmental Center	Educational Programs
FDEP	Brochures related to seagrass and habitat issues

FPL	Brochure, internet directory
FWS	Technical and public information available via internet
FWC	Numerous publications, videos, materials and staff for group presentations; manatee statistics
Save the Manatee Club	Signs, brochures, and other materials as well as educational programs
Sea World	Internet based educational resources
USGS Sirenia Project	Information on manatees and current research

7.5 Intergovernmental Coordination

In addition to efforts to coordinate local law enforcement as previously described, Lee County has specifically attempted to coordinate with FWC and Service. This has been increasingly important as issues related to dock permitting, refuges, sanctuaries and MMPA rule making become more complex.

In 2001, a coalition of environmental organizations sued the United States Army Corps of Engineers and the Service alleging that they failed to adequately protect manatees as required by the Endangered Species Act (ESA) and MMPA. Dock permitting regulations at the Federal level have changed several times as a result of the evolving direction of legal settlements. In an effort to educate the public and the local marine construction industry, representatives from the permitting agencies were assembled for a public meeting to discuss dock permitting. Presentations were made and time was allocated for questions and answers. A large number of positive comments resulted, and it is expected that similar meetings will be hosted on an annual or as needed basis.

Internally, local government staff has also had difficulty understanding how the permitting process has changed. As the final step in permitting, local governments generally serve as a compliance check to be sure all other State and Federal requirements have been met. This function had become complicated with the February 2002 Service designation of "Areas of Inadequate Protection" (AIP). To clarify this issue, Lee County hosted an all-day meeting on May 16, 2002, with representatives from the Service, Florida Fish and Wildlife Conservation Commission Bureaus of Protected Species and Law Enforcement, United States Army Corps of Engineers, Lee County Community Development, and Lee County Natural Resources staff. The purpose of the meeting was to discuss current manatee issues and AIP designations. Issues including manatee mortality, speed zone effectiveness, and permitting were addressed. Similar meetings will be hosted as necessary to continue productive dialogue between these agencies as it relates to manatee protection in Lee County.

8.0 Marine Facility Sighting Requirements

State and Federal rules and regulations as well as Lee County's policies, all include rigorous protection for the West Indian manatee, their habitats, and water quality. Each of these layers requires stringent permit review for both marina and dock development. In particular the objectives and policies listed under the Lee Plan Goals 77 and 98 (See Appendix II and X) apply to marine facility development. The following section outlines permit requirements and review processes placed upon permittees by the Federal, State and County permitting processes. This section is the "boating facility siting element" as referenced in Florida Statutes 370.12(2)(t)3.

8.1 Federal Permitting

At the Federal level, marinas and other boating facilities are regulated by a variety of different laws. These laws include:

- Rivers and Harbors Act of 1899
- Fish and Wildlife Coordination Act of 1958
- Wild and Scenic Rivers Act of 1968
- National Environmental Policy Act of 1969
- Clean Water Act of 1972
- Marine Protection, Research and Sanctuaries Act of 1972
- Coastal Zone Management Act of 1972
- Marine Mammal Protection Act of 1972
- Endangered Species Act of 1973
- Magnuson-Stevens Act (Essential Fish Habitat) of 1996

The primary Federal agency responsible for issuing permits for marine facilities is the United States Army Corps of Engineers. Federal permits for marine facilities will require either an individual permit (single family dock permit) or a joint permit which is filed with both the US Army Corps of Engineers and the Florida Department of Environmental Protection. In many instances, the United States Army Corps of Engineers will also require a dredge and fill permit application, especially for large marina facilities.

There are six examples of marine facilities operations that may be exempt from the Federal permit review process. They are as follows.

Nationwide permits:

NW-2	Structures in artificial canals (for single family docks)
NW-3	Maintenance (for previously authorized structure)
NW-28	Modification of existing Marinas (no expansion, additional slips, or dredging)

The United States Army Corps of Engineers (USACE), Jacksonville District, also issues regional permits in which the permittee may be exempt from the full permit

review process. To qualify for these permits, applicants must follow the Standard Construction Precautions and the project must be determined to not likely to adversely affect the manatee. The regional permits are as follows:

SAJ-17	Minor Structures in Florida
SAJ-20	Private Single-Family Piers in Florida
SAJ-33	Private Multi-Family and Government Piers

In the past, the USACE has also issued State Programmatic General Permits (SPGP) to the Florida Department of Environmental Protection. Through this program, the USACE has delegated the authority to issue Federal permits for certain activities to the State of Florida. Projects that impact seagrasses, marshes, or mangroves, impact manatees or their critical habitat, or are located near the Intracoastal Waterway or Federal channels do not qualify for the SPGP and must therefore go through the full Federal Permitting Process.

Submission of a permit application to the USACE initiates the Federal permitting process. Under the Settlement Agreement of January 5, 2001, the USACE is reviewing permits more thoroughly, they have revised their Manatee Key, and have begun consultation with the Service on permits on a regular basis. The USACE reviews each permit application using their Manatee Key as well as their Manatee Biological Evaluation for projects involving dredging, filling, in-water construction, construction of docks, marinas, boat ramps, boat slips, dry storage, or any other watercraft access structure. The proposed project is then evaluated based upon its potential effect upon the manatee and its habitat and given one of three determinations: no affect, not likely to adversely affect, and may affect. Both the not likely to adversely affect and the may affect determinations require that the USACE consult with the Service. The Service then evaluates each permit application and provides its opinion to the USACE on the effects of the proposed project on the West Indian manatee. Based on this opinion, the USACE will either approve or deny the permit application.

It should also be noted that the USACE has determined that all Nationwide Permit authority and Regional Permits for activity in Lee County may not be utilized because the County is designated as an area of enhanced scrutiny for manatee protection. This effective revocation now means that all permits for boating access facilities in Lee County, including single family docks and seawalls, even in manmade canals, must now undergo the full Federal permitting process as described above. Additionally, Service has issued a policy directive that such consultation will be completed via a formal Biological Opinion until such time as MMPA Incidental Take regulations are adopted and implemented.

8.2 State Permitting

At the State level, boating and marina activities are regulated by several different State agencies through a variety of law and code. The following is a listing of the laws under which Marina facilities are currently regulated:

- Chapter 253, Florida Statutes: State Lands
- Chapter 258, Florida Statutes: Aquatic Preserves
- Section 370.12(2), Florida Statutes, the Florida Manatee Sanctuary Act
- Chapter 373, Part IV Florida Statues, Florida's Water Resources Act
- Chapter 376, Florida Statutes: Coastal Protection
- Chapter 403, Florida Statutes: Environmental Control

Under these laws currently in place construction or revision of marina facilities requires an Environmental Resource Permit be submitted to the State of Florida. Either the Florida Department of Environmental Protection or the appropriate Water Management District reviews permit applications, depending upon the type of project proposed.

In virtually all cases in Lee County, applicants will be required at a minimum to follow the standard manatee protection construction conditions developed by FWC. Those conditions (June 2001) provide for the following:

> a. The permittee shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collisions with manatees. All construction personnel are responsible for observing water-related activities for the presence of manatee(s).
>
> b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, The Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act.
>
> c. Siltation barriers shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exist from essential habitat.
>
> d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
>
> e. If manatee(s) are seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure protection

of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. Operation of any equipment closer than 50 feet to a manatee shall necessitate immediate shutdown of that equipment. Activities will not resume until the manatee(s) has departed the project area of its own volition.

f. Any collision with and/or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-232-2580) for north Florida or Vero Beach (1-772-562-3909) in south Florida.

g. Temporary signs concerning manatees shall be posted prior to and during all construction/dredging activities. All signs are to be removed by the permittee upon completion of the project. A sign measuring at least 3 ft. by 4 ft. which reads *Caution: Manatee Area* will be posted in a location prominently visible to water related construction crews. A second sign should be posted if vessels are associated with the construction, and should be placed visible to the vessel operator. The second sign should be at least 81/2" by 11" which reads *Caution: Manatee Habitat. Idle speed is required if operating a vessel in the construction area. All equipment must be shutdown if a manatee comes within 50 feet of operation. Any collision with and/or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. The U.S. Fish and Wildlife Service should also be contacted in Jacksonville (1-904-232-2580) for north Florida or in Vero Beach (1-772-562-3909) for south Florida.*

The State of Florida currently not only regulates the construction and placement of Marina facilities, but actively regulates Florida Waters to protect the West Indian Manatee. The FWC has the statutory responsibility to protect manatee habitat by regulating watercraft. The State of Florida recognized that limiting the speed that boats travel in manatee habitat helps prevent deadly collisions between boaters and manatees. Consequently, the Legislature provided for the designation of manatee habitat speed zones, motorboat-prohibited zones, and no-entry zones. Speed zones restrict the speed of boats and limit their wakes; motorboat-prohibited zones restrict the use of engine-powered boats; and no-entry zones prevent any human disturbance of a designated manatee habitat. The FWC provides evaluations of expected impacts to manatees to the regulatory agencies, including the Department of Environmental Protection and the water management districts. These FWC comments regarding the expansion of existing, or the construction of new, marine facilities and mooring or docking slips, by the addition or construction of five or more powerboat slips are for the

express purpose of protecting manatees from harmful collisions with motorboats or from harassment (Florida Statutes 370.12(2)(g)).

8.3 County/Local Permitting

In January 1983 the Governor's Blue Ribbon Marina Committee issued their final report, which contained recommended siting criteria that formed the basis for future policies regarding marina siting. The Lee County Comprehensive Plan (Lee Plan) contains Objectives and Policies that have incorporated the Recommendations of the Governor's Blue Ribbon Marina Committee and has expanded on these issues. These Objectives and Policies are included in Appendix X.

It should be noted that these policies apply to unincorporated Lee County. Municipal plans may have different goals, objectives, and policies.

Other considerations for local permitting include zoning restrictions. In Lee County, docks are not a primary use, but rather an accessory use to the principal (upland) use. As such they are only allowed in the following zoning categories.

Project Type	Zoning Category	Description
Commercial Marina	CM	*CM marine commercial district.* The purpose and intent of the CM district is to permit the designation of suitable locations for and to ensure the proper development and use of land and adjacent waters for commercial marinas and other uses incidental to such facilities. The principal uses of land at these locations shall be limited to waterfront-dependent uses required for the support of recreational boating and fishing. The marina siting and design criteria to be used are those set forth under objectives 98.5 and 98.6 of the Lee Plan.
	IM	*IM marine industrial district.* The purpose and intent of the IM district is to permit the designation of suitable locations for and to ensure the proper development and use of land and adjacent waters for commercial and industrial waterfront-dependent land uses. Such uses are more intense than those normally encountered in a recreational marina, yet fall short of the intensity of use represented by the storage and commodity handling facilities and equipment attendant to the waterborne commerce movement facilities which are the principal focus of the PORT district. The marine industrial district is intended to accommodate such uses as boatbuilding, major hull and engine maintenance and repair, landing, icing and shipping of fish and seafood (fish and seafood processing requires a special exception), and other uses of similar scope and scale. The marina siting and design criteria to be used are those set forth under objectives 98.5 and 98.6 of the Lee Plan.
	PORT	PORT *district.* The purpose and intent of the PORT district is to designate and facilitate the proper development and use of land and adjacent waters in a suitable location and of appropriate characteristics for use in support of waterborne commerce movement. Such uses include wharfs and docks for sea- and river-going bulk carriers (ships and barges), bulk storage of commodities, warehousing for goods received or awaiting shipment, and

		other uses of similar scope and scale, including such accessory uses as are necessary for the competent administration of a port facility.
Multislip docking facility	CT	*CT tourist commercial district.* The purpose and intent of the CT district is to permit the designation of suitable locations for and to facilitate the proper development and use of land for the commercial provision of accommodations and services for tourists and other visitors and shortterm or seasonal residents. The term "accommodations," as used in this subsection, is intended to include housing, various amenities including recreational facilities, and local retail trade in goods and service, both general and specific to the locality or attractor or principal activities. Areas designated tourist commercial are expected to be located near or adjacent to an attractor of tourism such as gulf beach frontage, theme parks, major public or private parks and other recreational or scenic resources.
	C1; C2	*C-1A, C-1 and C-2 commercial districts.* The purpose and intent of the C-1A, C-1 and C-2 districts is to regulate the continuance of commercial and select residential land uses and structures lawfully existing in the C-1A, C-1 and C-2 districts as of August 1, 1986, and as originally permitted by the county zoning regulations of 1962, as amended, and 1978, as amended, respectively. Subsequent to February 4, 1978, no land or water shall be rezoned into the C-1A, C-1 or C-2 districts. In no case shall new development be permitted in any existing C-1A, C-1 or C-2 district which is not consistent with the Lee Plan.
	C2A	*C-2A commercial district.* The purpose and intent of the C-2A district is to recognize and provide for the continuation of most commercial and residential uses as set forth in the C-2 zoning district use regulations but prohibiting the industrial and manufacturing uses permitted by the C-2 district. This district is not available to landowners through normal procedures, but shall be used only by the Board of County Commissioners on its own initiative to achieve the purpose stated in this subsection.
Boat ramp		Aloud in above categories except C1 as well as in the following
	CC	*CC community commercial district.* The purpose and intent of the CC district is to permit the designation of suitable locations for medium- to large-scale consumer-oriented commercial facilities, particularly for multiple-occupancy complexes known as community or regional shopping centers, and to facilitate their proper development and use. In addition to the retail sale of consumer goods, this district is intended to permit a wide range of services, financial and other, including business and professional offices, all arranged in discrete commercial centers or evolving business districts. Such centers or districts differ from neighborhood commercial facilities in concentrating a greater floor area of use and a broader mix of goods and services in order to serve a wider market or service area and a larger population. This is expected to create greater impact on surrounding land uses and therefore require buffering and designed gradients of intensity adjacent to less intense uses.
	CG	*CG general commercial district.* The purpose and intent of the CG district is to permit the designation of suitable locations for and to facilitate the proper development and use of consumer-oriented commercial facilities which are of a type or scale which are not suited for and do not generally seek locations in neighborhood, community or regional shopping centers. Such uses frequently consist of a single principal building containing sales, administration, repair services or manufacture; often rely on large ground areas for storage or display of goods; and are relatively insensitive to the impacts of adjacent land uses while generating substantial impacts on their neighbors. High visual exposure and easy accessibility, usually from

		arterial roads or suburban highways, are important.
	CR	*CR rural commercial district.* The purpose and intent of the CR district is to designate and to facilitate the proper development and use of land for limited commercial purposes in the nonurban areas of the county. In addition to the neighborhood scale provision of basic goods and services, it is the intent that the rural commercial district be used to provide other goods and services, specific to rural productive activities, such as farming or ranching, and for the rural lifestyle in general. The standard of physical development shall be or shall closely approximate that of a minor commercial place as set forth in standard 13.1(2) of the Lee Plan.

Note that for zoning purposes *multi-slip docking facility* means two or more docks which will provide vessel mooring slips to unrelated individuals, either for rent or for sale. A multi-slip docking facility is distinguished from a marina in that it has no commercial activity associated with it, including boat rentals.

Any change in zoning is carefully evaluated against the comprehensive plan requirements. Additional information is available in the Land Development Code of Lee County, Chapter 34.

8.4 Facility Screening for Manatee Protection

In addition to the existing Comprehensive Plan language, Lee County has developed the following screening process to be implemented specifically as a way to evaluate potential impacts to manatees from the development of new boating facilities. This marine facilities siting element (MFSE) is an integral part of Lee County's Manatee Protection Plan. The goal of this section is to reduce vessel/manatee interaction that could lead to manatee injury or death. The MFSE pertains to development of new sites, and includes the expansion, rehabilitation and reconfiguration of existing sites. For those areas defined in this plan as warm water refuges (see list of definitions), the entire score and mitigation outcomes will be considered as guidelines for development within the boundaries of the warm water refuges. However, in addition to these guidelines, these projects may also require a case-by-case review by the federal and state wildlife agencies to determine whether or not the outcomes are appropriate. Depending on the activity proposed, the location, and the most current manatee and boating information, the review recommendations for these areas may differ from the guidelines presented in this plan.

Although marinas and boating facilities are generally defined as docks or basins, which provide mooring and launching facilities for boats, some distinctions and elaboration are necessary. Public service marinas should be distinguished from other types of marinas, which often do not provide public services. Public service marinas generally lease wet storage to the general public on a first come, first served basis, and also offer services such as provision of supplies (gas, bait, fishing tackle), sewage pump out, repair of boats, and wet or dry storage. Other

types of private marinas may not provide these services, or may only provide limited service (such as mooring).

For these purposes, marine facilities which will undergo the MFSE evaluation process will be defined as commercial marinas with various services provided, and docking facilities will be defined as common facilities with five or more wet or dry slips. Utilizing these criteria, not only are public service marinas encompassed by these definitions, but many private marinas and other facilities are included as well. Condominiums, which have at least 5 slips, would also be defined as docking facilities. Dry storage is only included if wet storage of 5 slips or more is provided or the dry storage has direct water access through a lift or other means of conveyance. Ramps will be evaluated based on the number of parking spaces as a proxy for slips. Please refer to Section 6.0 Inventory of Boating facilities for an inventory of existing marinas and boat ramps. This information is listed in Table 6 and illustrated in Figure 10. Proposed projects of 5 slips or more shall be evaluated per the MFSE, and projects with less than 5 slips will be evaluated if those slips are known to represent intense, repetitive commercial use (such as water taxis, charter boats, ecotour/excursion vessels, cruise ships, etc.)

Lee County has developed a scored matrix system to evaluate potential marine facilities sites. The evaluation matrix is comprised of a variety of biological and geographic criteria upon which each proposed facility will be evaluated. Proposed marine facilities will be evaluated against each one of the outlined criteria and given a score based upon suitability. Evaluation and scoring will be performed in a multi-step process. The proposed project will be evaluated against three base factors, generating a base score. The proposed project will then be evaluated against three mitigating factors, generating a mitigating score. The mitigating score shall be subtracted from the base score to determine a project's final score. Projects are to be evaluated based upon their total score, the sum of the parts, not against each individual criterion. It is the entire score of a proposed project that will be used in the evaluation process. Based upon this aggregate score, the project will be reviewed to determine if it is an area of special concern to the Service, and a recommendation will be made for the project. Several of the referenced evaluation factors are defined and available for use in GIS applications.

There are several instances in which the MFSE review process will not apply. These instances are as follows:

Projects located in the No Marina Zones, delineated in Figure 21. The areas delineated in this figure are lands held by either government or private entities for the primary purpose of conservation. These zones are not recommended for new marine facility developments.

Redevelopment of existing marine facilites shall be reviewed. Areas designated as No Marina Zones are available for public access projects or small-scale redevelopment provided that the development creates no net addition of powerboat slips and satisfies the other screening criteria.

Projects that have valid permits and currently hold Chapter 380 vested status which allows for construction of slips (wet or dry) that may not be constructed at the time in which the Lee County Manatee Protection plan is adopted and implemented by the Board of County Commissioners, shall be exempted from the MFSE screening process.

Existing projects that propose reconfigurations where there is no net addition of slips (or there is a proposed reduction of slips), and where there are no adverse impacts to sea grasses, shall be exempted from the MFSE screening process. In these instances, standard manatee construction conditions and manatee education should be incorporated into any authorizations and followed by the permittee.

Single-family docks shall not undergo MFSE review. Potential cumulative and secondary impacts to manatees from these docks are expected to be offset by the additional law enforcement funds generated by vessel registration surcharges (discussed in Section 7.1).

Projects located in the upper Orange River (FPL discharge canal east to the end of the Orange River) are considered Special Non-Preferred.

8.4.1 Criteria for Screening Sites

The Lee County Comprehensive Plan policies discourage dredging, and encourage sites close to existing, deep-water areas (Policies 98.5.4, 98.5.6, 98.5.8, 98.6.10, 98.6.12, 98.6.15, and 98.6.16). These policies can be interpreted as limitations on the creation of additional canal systems and the connection of canals that currently do not have direct navigable access. This type of dredging shall be strongly discouraged.

The general screening process will be used to identify desirable locations for new marine facilities, as well as to evaluate the redesign and or expansion of existing sites. The first evaluation for screening is for the protection of seagrass or other submerged aquatic vegetation and for sufficient water depth. These screening criteria must be met directly or by way of the described variance procedure, or the project will be prohibited. If a project satisfies the criteria in this first screening process, then the following process is followed:

The six criteria used to evaluate proposed marine facilities in Lee County are divided into two categories: base criteria and mitigating criteria. Base criteria are:

1) Manatee Mortality; 2) Manatee Abundance; and 3) Project proximity to important warm-water refugia. Mitigating criteria are: 1) Project proximity to speed zones; 2) Expansion of existing facilities; 3) Proximity to Passes and Open Water. These six factors were chosen for several reasons. First, these criteria were deemed to be of high value and importance to the protection of the manatee. Second, each is applicable to nearly all areas of Lee County where it is anticipated that projects will be proposed. Finally, projects will be reviewed to determine if they are located in an area of special concern to the Service.

It is understood that this is a dynamic process, and that the results of the siting criteria will likely change through time. The project ranking will not necessarily be the same in the future. For example, expansion will be evaluated based on the conditions at the time of application; previous scores will not be applicable. Updates to the criteria or process will not be applied retroactively to previously approved projects.

8.4.1 (A)(1) Seagrass/Submerged Aquatic Vegetation Protection

The first step in the screening process is the evaluation of submerged aquatic vegetation (SAV, such as seagrass). A project shall be prohibited if:

The footprint of a boating facility/marina (including all docks, access walkways, finger piers, mooring areas, turning basins, and ingress and egress pathways) will directly or indirectly adversely impact an area greater than 1000 square feet of SAV. Quantitative seagrass information must be collected using a scientifically acceptable method of determination and collected during the months of April through October.

A project may request a possible variance if a pressing need is demonstrated and if the facility is used by the general public (Policy 98.5.7; and meets the definition of a Public Service Marina). If a variance is requested and the project does not meet submerged aquatic vegetation requirements then adequate mitigation and restoration of seagrass is required after minimization. If adequate minimization is not possible or mitigation is not expected to be successful, the variance shall be denied.

8.4.1 (A)(2) Water Depth Requirements

The next step in the screening process is the evaluation of adequate water depth at a proposed project. A project shall be prohibited if :

The water depth within mooring areas, turning basins and ingress and egress pathways is less than –4 feet at MLW. If a pressing need is demonstrated and

the facility is used by the general public (Policy 98.5.7; and meets the definition of a Public Service Marina), then a project may be considered with a vessel draft restriction. The required vessel draft restriction must provide adequate water depth for the proposed vessel use within mooring areas, turning basins, and ingress and egress pathways. Adequate water depth shall be considered a minimum of one foot clearance between the deepest draft of the vessel (with the engine in the down position) and an unvegetated bottom or the top of submerged resources (if present) at mean low water. As per Policy 98.5.8 in the Lee County Comprehensive Plan, new slips should be located in areas of adequate depth, as only minimal dredging will be considered.

8.4.1 (B) Base Criteria

For each application, a radius of five miles will be used when analyzing manatee and boater use. This radius will be used for the mortality, abundance and proximity to warm water refuge evaluations. The calculation of data within a five-mile radius will include all data within connected water bodies. If the water body connection is not located within the five-mile radius, then the data for unconnected water bodies will not be included for that area.

8.4.1 (B) (1) Manatee Mortality

Using only the last ten complete calendar years of data, relative risk of watercraft mortality is determined by dividing the number of watercraft deaths within a five-mile radius of a project site by the number of watercraft-related deaths for the entire County. A location's designation will change over time to reflect changes in the data. If a project location is close to a county line, where the five-mile radius includes watercraft mortality in part of another county, the data for that county shall also be included in the calculation. Based on the outcome of the calculation, the project receives the following scores:

Score $\leq 0.05 = 0$
Score > 0.05 and $\leq 0.10 = +4$
Score > 0.10 and $< 0.24 = +6$
Score $\geq 0.24 = +9$

These scores will be added to the other scores for the base criteria.

8.4.1 (B) (2) Manatee Abundance

Relative manatee abundance is determined by calculating the average number of manatees observed per aerial survey flight within a five-mile radius. The most recent, complete surveys should be used where available (AMLEE97; 24 flights between 1/20/97–1/30/98). For the areas of Boca Grande and Burnt Store Marina where the Lee County aerial surveys did not fly, the surveys done in

Charlotte County can be used (AMCHAR; 48 flights between 1/14/87-12/14/88). Flight paths should be considered when determining manatee abundance in order to make sure that the area of the five-mile radius was completely flown. If the data sets are incomplete or data was collected on separate days, then the project must be evaluated on a case-by-case basis using a single, best-fit single data set. Based on the outcome of the calculation, the project receives the following scores:

Score ≤ average number of 5 manatees = 0
Score > average of 5 and ≤ average of 15 manatees = +4
Score > average of 15 and ≤ average of 25 manatees = +6
Score > average of 25 manatees = +9

These scores will be added to the other scores for the base criteria.

8.4.1 (B) (3) Proximity to Warm Water Refuges

Lee County has a primary and several secondary warm water sites where manatees aggregate. While manatees travel great distances from warm water sites in Lee County to feeding areas (i.e. from FPL to coastal waters), some secondary warm water sites are closer to foraging areas and result in shorter travel distances. For the purposes of this plan, a conservative estimate of five miles will be used as the average distance traveled. The water bodies and their boundaries for this base criterion are defined in the List of Definitions. The scores increase, as one gets closer to a refuge, which reflects the relative importance of specific locations:

<u>For the Orange River, Franklin lock/dam, and Matlacha Isles:</u>
Distance ≥ 5 miles = 0
5 miles > Distance ≥ 1 miles = +2
1 mile > Distance ≥ 0.5 miles = +4
Distance < 0.5 miles = +6

<u>For the Ten-mile Canal and Cape Coral Canals:</u>
Distance ≥ 5 miles = 0
5 miles > Distance ≥ 1 miles = +1
1 mile > Distance ≥ 0.5 miles = +2
Distance < 0.5 miles = +3

These scores will be added to the other scores for the base criteria.
The upper Orange River (FPL discharge canal east to the end of the Orange River) has been given its own designation (Special Non-Preferred) because it is a critical area not included in the aerial survey studies due to overhanging vegetation, which obscures visibility of the waterway. While it likely has manatee use, the more important factor is that any boats moored in this area will likely

pass the discharge canal, increasing boat traffic in the most important winter aggregation site in the county.

Additionally, the portion of the Caloosahatchee river upriver of the Cape Coral bridge and downriver of the train trestle that is not covered by the radii of one of the aforementioned aggregation sites shall also receive a score. Projects proposed in this area of the Caloosahatchee or any canals or tributaries which provide access into this specific area shall also receive a score of one (+1).

8.4.1 (C) Mitigating Criteria

8.4.1 (C) (1) Proximity to Speed Zones

Speed zones are developed based on the best existing data at the time of rule development. Over time, they may not account for changes in manatee distribution, boating safety issues, or future changes resulting from additional development. In most circumstances, however, they can be an offsetting measure for additional boat traffic.

For the purposes of this plan, speed zones will not be considered an offsetting measure for projects if those projects are proposed within warm water aggregation sites (as described in the List of Definitions). These areas are extremely important for manatee survival, and speed zones are not likely to completely offset disturbance impacts from high levels of boat traffic.

All Federal, State and local speed zones that are legally posted and enforceable can be considered when using this screening criterion. The scoring system is based on the relative amount of protection provided by the zone. This criterion is scored as follows:

> The project is located within a speed zone but is within a warm water refuge = 0
> The project is located within any type of zone for manatee protection, or the County's vessel control ordinance, and is not within a warm water refuge = -1
> The project is located within a year-round Slow or Idle speed zone for manatee protection and is not within a warm water refuge = -2

These scores will be deducted from the total base score.

8.4.1 (C) (2) Expansion of an Existing Facility

The Lee County Comprehensive Plan policies favor expansion of facilities over new construction (Policy 98.5.4). This will allow one point to be deducted from the total base score if the facility already exists and was legally constructed as of

the approval of this plan. This criterion only pertains to existing locations that are "environmentally sound" as stated in the Policy. For the purposes of this MFSE, the definition of "environmentally sound" is a location that scores 4 or less in both mortality and abundance.

New facility = 0
Existing, environmentally sound facility = -1

8.4.1 (C) (3) Proximity to Open Water

The Lee County Comprehensive Plan policies (Lee Policy 98.5.6) encourage the establishment or expansion of marinas and boating facilities near passes and wide water bodies such as the Gulf of Mexico, Pine Island Sound and Charlotte Harbor. Because data indicate that there are fewer manatees in the middle of Charlotte Harbor as compared to Pine Island Sound, it results in a higher score being deducted from the base score. The water bodies and their boundaries available to be used for this mitigation criterion are defined in the List of Definitions .

Located within two miles of a Gulf Pass, or directly accesses Pine Island Sound = -1
Located within one mile of a Gulf Pass or directly accesses Charlotte Harbor= -2

8.4.1 (D) Proximity to Areas of Special Concern (ASC)

The final step of the process is determining if the project is located in one of the two areas of Lee County that have been designated by the Service as Areas of Special concern. Projects located in these areas will have different outcomes as a result of their location. It is the opinion of the Service that projects located in these areas may represent a higher risk to manatees than others for several reasons. The Service believes that all of the screening criteria listed above are important in the determination of projects into categories as preferred, conditional, or non-preferred. However, these criteria alone may not consider all relevant factors in determining the outcomes of these categories. In addition to these criteria, other information that can be considered when determining the appropriate outcomes for each category include: (1) telemetry data, (2) boat traffic information and configuration of waterways, and (3) rescue data.

Telemetry Data:

The two most highly used warm water refuges in Lee County are the discharge canal at the Orange River and the canals of Matlacha Isles. Tagged manatees have been documented traveling between these two sites, with numerous tagged

manatees recorded in the both the Caloosahatchee River and Matlacha Pass. In data collected by FMRI, provided to the County by FFWCC, a tagged manatee, Sanibel, was observed in the Orange River in early January 1998, traveled to Matlacha Isles for March and April, returning to the Orange River and adjacent canals near the Franklin Locks in early May 1998. In a study by Weigle, et al (2001) two manatees, Lucky and Easter, were also documented traveling between these two areas. While telemetry data are available for other parts of Lee County such as Estero Bay, St. James City area, Sanibel and the Burnt Store area, the majority of points are found within the Caloosahatchee River and Matlacha Pass waterway systems. These data indicate that the Caloosahatchee River and Matlacha Pass represent an important corridor between these two aggregation sites; thus, there is a potential likelihood for an adverse interaction between manatees and watercraft to occur.

Boat Traffic and Waterway Configuration:

An evaluation of boat traffic patterns and boater compliance in Lee County performed by Gorzelany (1988) indicates that the likelihood of adverse interactions between manatees and watercraft is high in the area between the Orange River and Matlacha Isles. This report indicates that the flow of traffic in this area is nearly constant, particularly on weekends. According to observations of the study, a boat passes about every 35 seconds, usually at planing speeds. As stated in the report, this constant level of vessel traffic may place animals traveling through this area at an elevated risk for watercraft collision. While there are other parts of the county that show high boat use areas, the area of greatest manatee/boat overlap is in the mouth of the Caloosahatchee River. It is the mouth of the river that acts as a conduit to the Caloosahatchee River and Matlacha Pass.

In addition to the amount of vessel traffic, the configuration of the waterways in question may also add to the potential for manatee/vessel interactions. Boat traffic congestion is typically concentrated in those waterways where the configuration of the waterway narrows or curves. Whereas Pine Island Sound and Estero Bay are relatively open waterbodies, Matlacha Pass and the Caloosahatchee River both have areas that "bottleneck" in places with high manatee and vessel concentrations. Due to the overlap of vessel and manatee travel patterns, this increases the risk of adverse interactions between manatees and watercraft. Additionally, Lee County also sees an increase in boater use in the wintertime, which corresponds with the greatest use of manatees. This similar high use time period may also increase the risk of adverse watercraft/manatee interactions due to the overlap of boat and manatee travel patterns.

Rescue Data:

For documented rescues in Lee County between 1969 and December 2002, 65 percent have occurred in either Matlacha Pass or the Caloosahatchee River waterway systems. While not all of these rescues are related to watercraft-related injuries, the percentage of rescues indicates that there is a relatively high level of manatee use in these areas. This rescue data also shows that Matlacha Pass and the Caloosahatchee River are areas that require higher precautions.

Description of Boundaries for Areas of Special Concern:

Caloosahatchee River

All waters of the Caloosahatchee River west of the State Road 31 Bridge and east of Intracoastal Waterway channel marker 93. The area depicted in yellow in Figure 22 illustrates the western boundary of the Caloosahatchee River area of special concern.

Matlacha Pass

All waters of Matlacha Pass south of channel marker 77, north of the Intracoastal Waterway in San Carlos Bay and west of Intracoastal Waterway channel marker 93. The area depicted in yellow in Figure 22 illustrates the boundaries of the Matlacha Pass area of special concern.

8.4.2 Results of the Screening Process

The first two steps in the screening process are to determine consistency with the seagrass and water depth requirements. Projects not consistent are generally prohibited. Variances to these requirements, however, are outlined and can be considered.

If a project is located in the upper Orange River (FPL discharge canal east to the end of the Orange River), it is designated as Special Non-Preferred, discussed in the next subsection. All three base scores are added together, and any scores received from the three mitigation criteria are deducted to produce a total score for a site. The total scores and geographic locations will be used to designate project outcomes. The maximum number of slips is expressed as a ratio of slips to feet of shoreline.

Score	Category	Area of Special Concern?		Maximum Number of Slips
		Yes	No	
≤8	Preferred		X	Unlimited
		X		5:100

9-16	Conditional		X	5:100
		X		3:100
17-24	Non-Preferred	X	X	1:100
N/A	Special Non-Preferred	N/A		1:150

It is important to recognize that certain projects may own or control shoreline that is discontinuous and transfer the slip credits to one construction location. This transfer of slip credits (TSC) is not applicable to construction of preferred projects outside areas of special concern, and is not allowed for projects that score as non-preferred or special non-preferred.

Main Project Area Outcome	TSC is allowed from shoreline scored as: Preferred ASC	Conditional	Conditional ASC	Non-preferred	Non-preferred ASC	Special Non-preferred
Preferred ASC	Yes	No	Yes	No	Yes	Yes
Conditional	No	Yes	Yes	Yes	Yes	Yes
Conditional ASC	No	No	Yes	No	Yes	Yes

ASC – project in an area of special concern.

Credits from discontinuous shoreline segments are transferred based on the scores of the individual shoreline segments. Credits from discontinuous shoreline segments will be calculated on actual length and not rounded up to the nearest hundred. Credits from shorelines with existing docks may be given credit for the actual number of slips removed. Applicants must provide documentation of the number of existing slips, all slips must be removed from the parcel and rebuilding of docks is not allowed. Credits can be acquired from property through fee simple, conservation easements or other means that preclude future potential for slip development on those properties in perpetuity. The restriction must be legally described, including a sketch, and recorded with the deed of the subject parcel. Any shoreline that has been so restricted may only have the restriction lifted upon written approval of the County, FWC and the Service.

8.4.3 Mitigation Measures Based on Results of Screening Process

The mitigation measures required for each project score are designed to offset the relative risk for manatees. Secondary and cumulative impacts are addressed by limiting the density of development in areas of high manatee importance. The Lee County Comprehensive Plan (Policy 98.5.2) and the State's Environmental Resource Permitting rules require that cumulative impacts be addressed.

All projects represent some level of risk to manatees based on the fact that manatee and boater movements are not entirely predictable. As a result, all projects will be required to comply with the following: 1) standard manatee construction conditions; and 2) manatee educational program (as per section 8.4.5). Additional mitigation measures will apply as listed below.

Preferred: These projects may allow unrestricted development outside of areas of special concern. Within areas of special concern, a maximum of five (5) slips can be constructed for every 100 feet of linear shoreline controlled by the applicant. Shoreline length for the project location will be rounded up to the next hundred foot increment. (Example: 0' to 100' = 1 slip, 101' to 200' = 2 slips)

Conditional: These projects present a medium risk to manatees and require additional mitigation measures that shall include, but not be limited to funding for enforcement as per section 8.4.5. Projects outside areas of special concern may construct up to five (5) slips per 100 feet of linear shoreline. Within areas of special concern, a maximum of three (3) slips can be constructed for every 100 feet of linear shoreline controlled by the applicant. Shoreline length for the project location will be rounded up to the next hundred foot increment.

Non-Preferred: These projects are the most critical for manatee conservation and survival, and only minimal development should be allowed. They represent the highest risk to manatees and require additional stringent mitigation measures that shall include, but not be limited to funding for enforcement as per section 8.4.5. The total number of powerboat slips for the facility may not exceed one slip for every 100 feet of owned, contiguous linear shoreline.

Special Non-Preferred: Limited to the upper Orange River (FPL discharge canal east to the end of the Orange River). This area represents a high risk to manatees due to the increase in boat density at the most important warm water refuge in the County. Mitigation measures shall include, but not be limited to funding for enforcement as per section 8.4.5; conservation easements prohibiting future wet or dry marine facilities or a permit restriction for the total maximum number of wet and dry slips requested; and the total number of slips for the facility shall not exceed one slip for every 150 feet of owned, contiguous linear shoreline, and shall be for residential use only.

Boat Facility Siting Summary Table

Base Criteria **Points in Steps 2, 3 & 4 are added to create a Base Score**		
Step 1a. Seagrass /SAV Protection	The footprint of a boating facility/marina (including all docks, access walkways, finger piers, mooring areas, turning basins, and ingress and egress pathways) that will directly or indirectly adversely impact an area greater than 1000 square feet of SAV shall be prohibited. Quantitative seagrass information must be collected using a scientifically acceptable method and collected during the months of April through October. If a variance is granted and the project does not meet seagrass/SAV protection requirements, then adequate mitigation and restoration of sea grass is required after adequate minimization. If minimization, mitigation and restoration is not expected to be successful, variance shall be denied.	*Go to Step 1b if not prohibited*
Step 1b. Water Depth Requirements	Water depth within mooring areas, turning basins, and ingress and egress pathways shall be at least four (4) feet mean low water, or a project shall be prohibited. If a pressing need is demonstrated and the facility is used by the general public (Policy 98.5.7; and meets the definition of a Public Service Marina), then a project may be considered with a vessel draft restriction. The required vessel draft restriction must provide adequate water depth for the proposed vessel use within mooring areas, turning basins, and ingress and egress pathways. Adequate water depth shall be considered a minimum of one foot clearance between the deepest draft of the vessel (with the engine in the down position) and an unvegetated bottom or the top of submerged resources (if present) at mean low water.	*Go to Step 2 if not prohibited*
Step 2. Manatee Mortality	Using the last 10 complete calendar years, calculate the number of watercraft-related deaths within a five mile radius of the project location, divided by the countywide number of watercraft deaths: Equal to or Less than 0.05 = 0 Greater than 0.05 and less than or equal to 0.10 = +4 Greater than 0.10 and less than 0.25 = +6 Equal to or greater than 0.25= +9	*Go to Step 3.*
Step 3. Manatee Abundance	Most recent Aerial Survey within 5 mile radius Equal to or Less than an average number of 5 manatees = 0 Greater than an average of 5 and less than or equal to 15 manatees= +4 Greater than an average of 15 and less than or equal to 25 manatees = +6 Greater than an average of 25 manatees = +9	*Go to Step 4.*

Boat Facility Siting Summary Table

Step 4. Proximity to Warm Water Refuges **(Lee Policies 98.5.1 and 98.5.6)**	<u>For the Orange River, Franklin lock/dam and Matlacha Isles:</u> Greater than or equal to 5 miles = 0 Greater than or equal to 1 mile and less than 5 miles = +2 Greater than or equal to 0.5 miles and less than 1 mile = +4 Less than 0.5 miles = +6 <u>For Ten-Mile Canal and Cape Coral Canals:</u> Greater than or equal to 5 miles = 0 Greater than or equal to 1 mile and less than 5 miles = +1 Greater than or equal to 0.5 miles and less than 1 mile = +2 Less than 0.5 miles = +3	*Go to Step 5.*
Mitigation Criteria Points are deducted from the Base Score (total points from Steps 2, 3 & 4) to create a Total Score		
Step 5. Proximity to Speed Zones	Speed zones must be legally posted and enforceable in order to be considered as mitigation. The project is located within a speed zone but is within a warm water refuge = 0 The project is located within any type of manatee speed zone, or is within the County's shoreline ordinance and is not within a warm water refuge= -1 The project is located within a year-round Slow or Idle speed zone for manatee protection and is not within a warm water refuge = -2	*Go to Step 6.*
Step 6. Expansion of an existing facility (Lee Policy 98.5.4)	Project represents an expansion of an existing facility in an environmentally sound location as defined in 8.4.1(C)(2) = -1	*Go to Step 7.*
Step 7. Proximity to Open Water (Lee Policy 98.5.6)	Located within two miles of a Gulf Pass, or directly accesses Pine Island Sound = -1 Located within one mile of a Gulf Pass or directly accesses Charlotte Harbor= -2	*Go to Step 8.*
Location Designations and Required Mitigation Measures		

Boat Facility Siting Summary Table

Step 8. Results of Screening Process	Project must meet seagrass criteria and water depth requirements as outlined in Steps 1a and 1b or it is prohibited; The Total Scores will be used to designate project locations as follows: Preferred: 0-8 Conditional: 9-16 Non-Preferred: 17-24 Exceptions to the above scores are as follows: Special Non-Preferred if located in the upper Orange River (FPL discharge canal east to the end of the Orange River);	*Go to Step 9.*
Step 9. Evaluation of Areas of Special Concern	**Determine if the project is located within an area of special concern.**	***Go to Step 10.***

Boat Facility Siting Summary Table

Step 10. Mitigation Measures for Project Designations	**Preferred:** These projects may allow unrestricted development, since they represent a relatively low risk to manatees. Since they still represent a risk, mitigation measures are required and shall include, but not be limited to: 1) standard manatee construction conditions; 2) manatee educational programs (per section 8.4.5) **Preferred – Area of Special Concern:** These projects may allow 5 slips per 100 feet of linear shoreline. Mitigation measures are required and shall include, but not be limited to: 1) standard manatee construction conditions; 2) manatee educational programs (per section 8.4.5) **Conditional:** These projects may allow 5 slips per 100 feet of linear shoreline. They present a medium risk to manatees and require restrictive mitigation measures that shall include, but not be limited to: 1) standard manatee construction conditions; 2) manatee educational programs (per section 8.4.5); 3) funding for enforcement per section 8.4.5 **Conditional – Area of Special Concern:** These projects may allow 3 slips per 100 feet of linear shoreline. They present a medium risk to manatees and require restrictive mitigation measures that shall include, but not be limited to: 1) standard manatee construction conditions; 2) manatee educational programs (per section 8.4.5); 3) funding for enforcement per section 8.4.5 **Non-Preferred**: These projects are the most critical for manatee conservation and survival, and only minimal development should be allowed. They represent the highest risk to manatees and require stringent mitigation measures that shall include, but not be limited to 1) standard manatee construction conditions; 2) manatee educational programs per section 8.4.5: 3) funding for enforcement per section 8.4.5; 4) the total number of slips for the facility may not exceed one slip for every 100 feet of owned, contiguous linear shoreline. **Special Non-Preferred**: This area represents a high risk to manatees due to the increase in boat density at the most important warm water refuge in the County. Mitigation measures shall include, but not be limited to 1) standard manatee construction conditions; 2) manatee educational programs per section 8.4.5; 3) funding for enforcement per section 8.4.5; 4) conservation easements prohibiting future wet or dry marine facilities or a permit restriction for the total maximum number of wet and dry slips requested; and 5) The total number of slips for the facility shall not exceed one slip for every 150 feet of owned, contiguous linear shoreline, and shall be for residential use only.

8.4.4 Examples

In this section, three existing public projects are selected and run through the MFSE matrix as described above.

Site	Mortality (County WC#=118; 1994-2003)	Aerial Survey Abundance	Warm Water	Speed zones	Existing Facility	Near Ocean Pass	Total Site Score
Matanzas Harbor Moorings	+6 (17/118)	+4 (13.8)	+0	-2	-0	-1	**7**
Punta Rassa Boat Ramp	+6 (21/118)	+9 (32.5)	+1	-1	-0	-2	**13**
Davis Blvd Boat Ramp	+6 (14/118)	+9 (28.5)	+4	-2	-0	-0	**17**

Example #1 – Matanzas Harbor Moorings
For this example, it is assumed based on position and proximity to the federal channel that seagrass and water depth will not be constraints. Although it receives the highest score for mortality, the abundance is moderate and it receives mitigating credits because of the year round speed zone and proximity to Matanzas Pass and the Gulf of Mexico. It scores as a preferred site.

Example #2 – Punta Rassa Boat Ramp
For this example, recent work at the site supports the notion that seagrass and water depth will not be constraints. It receives the highest scores for mortality and abundance. It is within five miles of the Cape Coral Canals secondary warm water refuge. The area is covered by the County slow speed ordinance and is adjacent to the Gulf of Mexico. It scores as a conditional site.

Example #3 – Davis Boulevard Boat Ramp
This example is a County boat ramp just upriver of Highway 31, in a manmade canal off the Caloosahatchee River with no seagrass of water depth constraints. It receives the highest scores for mortality and abundance. It is between 0.5 and 1 mile of the Orange River primary warm water refuge. The area is covered by a year round state manatee protection zone, and is not close to open water as defined. It scores as a non-preferred site.

8.4.5 Mitigation Measures

Law Enforcement Enhancement

As the crux of the speed zone criterion is regulated through Federal and State law, or county ordinance, applicants are unable to create new speed zones in areas that do not currently contain them. Increasing compliance in existing zones is an area that

applicants can affect through a variety of means. Applicants have several options to increase compliance in the speed zones that are currently in place near their project area. Funds can be allocated for signage and/or buoys to help delineate the zones, or applicants may provide funds for additional law enforcement.

Of higher priority for this criterion will be funds allocated for additional marine law enforcement. In order to offset expected cumulative and secondary impacts from additional boats, applicants will make a payment to the Lee County Manatee Protection Fund as required by Section 8.4.3. In their interim guidance documents, the US Fish and Wildlife Service calculated that for each new boat slip, an increase of 1.65 hours of law enforcement per year for ten years is a sufficient conservation effort. Service calculated this cost at $520.00 per slip + $26.00 for administrative costs for a total of $546.00 for high-risk counties, of which Lee County is one. Documents showing the Service breakdown calculations of these costs are shown in Appendix VIII. At the request of the Lee County Department of Natural Resources, the Lee County Sheriff's Office provided figures for the same 1.65 hours for the ten-year period and the dollar amount was comparable to that provided by the Service. Lee County has entered into an agreement with the Lee County Sheriff's Office to provide a mechanism for Lee County applicants' contributions to increase marine law enforcement by the necessary hours per year. Monies contributed to Lee County in this manner will be used to increase on-the-water marine patrol hours. Lee county has created a form (See Appendix VI) by which applicant's donations are collected by the county at the time of local permit issuance and dispersed to the Lee County Sheriff for use in Marine Enforcement. Funds collected from this fund will be used in the appropriate zone in which the project is located (see Figure 13). At this time, it is anticipated that the funds will be used exclusively for on the water hours. As the amount of monies collected grows large enough that additional plant and positions are required, this may change. Information on number of additional hours funded by these monies will be reported to the Lee County Division of Natural Resources just as current WCIND hours are reported. Information on the number of additional hours funded by these monies or other contributions to law enforcement efforts will be reported to the Service and the FWC on an annual basis.

Educational Programs

All projects must include educational programs to off-set some of the potential risks to manatee that projects may create. These programs should be site-specific to the proposed project. The program should be designed to educate every user of the proposed facility to manatee protection issues in the specific area as well as County-wide with a focus on boating activities. Applicants may wish to refer to Section 7.4 to see what efforts are currently being conducted by the County and other entities. Synergistic relationships within educational efforts which either extend or build upon previously undertaken or current programs are encouraged. Educational programs will be evaluated on a case by case basis by County Staff.

9.0 Summary of Findings

If one examines all aspects of law enforcement activity, educational initiatives, habitat preservation, and permit regulation currently in place in Lee County it becomes readily apparent that there are multiple layers of protection with regards the aforementioned aspects of manatee protection. The details of the various topics as listed are outlined in the body of the Lee County Manatee Protection Plan. New initiatives outlined in the MPP will further the cause of manatee protection beyond what currently exists. There is always room for improvement and reevaluation is necessary as conditions or our knowledge base changes. As such, Lee County will continue to evaluate all elements of the MPP and related Comprehensive Plan elements at regular intervals to ensure that the best possible protection for manatees is being afforded.

10.0 Recommendations and Implementation

Recommendations for continuing ongoing research and the need for additional data that need to be collected before the next revision of this plan are included in this section. The recommendations within this plan and the MFSE will eventually be incorporated into Lee County's Comprehensive Plan. The mechanism and need for revision of the MPP is also included in this section.

10.1 Ongoing Research, Monitoring and Needed Data Collection

Directed Law Enforcement efforts will be facilitated by initiating enhanced coordination with the use of GPS positioning equipment on law enforcement vessels. This initiative is scheduled to start in early 2004.

Assess, as much as possible, the quantity and distribution of marine law enforcement resources, including recommendations of changes to ensure adequate coverage of regulatory zones for manatee protection. Evaluate options to increase compliance in identified problem areas.

Will continue having a County staff member gain experience and become State-certified to perform aerial surveys for distribution and abundance counts.

By the end of 2005, complete a comprehensive water access study to assess existing and future water access demand throughout Lee County. This study should include information on Boating Facility demand.

Assess the use of Deep Lagoon by manatees as a secondary warm water refuge, including the collection and analysis of water temperature data.

10.2 Development of Objectives and Policies

Objectives and policies need to be developed that can eventually be implemented as County Ordinance and incorporated into the County's Comprehensive Plan. These

policies shall also address and encourage active participation in the plan by the various municipalities in the County through appropriate mechanisms. These policies will be developed after the final approvals of this plan and included as an addendum at a later date.

10.3 Mechanism for Periodic Review and Revision

The Lee County Manatee Protection Plan will be reviewed five years after it is formally approved by both Lee County Board of County Commissioners and the Florida Fish and Wildlife Conservation Commission. The clock for revision will start once the last authorized signature is in place.

Thereafter, a routine evaluation of the plan will be scheduled every five years. During said review the plan will be revised as needed and will be supplemented with standard data and information as addressed below. Lee County recognizes that some instances may exist where the routine review cycle must be abbreviated. In the event that an exceptional review is required, the next routine review will be scheduled five years from that revision date. The following is a list of such exceptions and their effective dates. Any failure to conduct the review and revisions according to the stated schedule shall not invalidate the plan nor any provisions of the county code associated with it. Thus, failure to conduct the update on schedule in no way affects the enforceability of this plan.

Exceptions	Effective Date
* State delisting of the West Indian Manatee	– upon promulgation and implementation.
* Significant change in legal requirements	– as required by law.

During a routine review of the plan, the data that are included in the plan will be updated with that which is the best available. Specific data areas to be addressed are: 1) Data on mortality and population, 2) Vessel registrations 3) Demographic information, and 4) existing marine facilities. The update may be conducted by Lee County staff or by an outside vendor. In addition, during a routine review of the plan, the boat facility siting criteria will be evaluated.

Other information to be considered during the periodic review of the Manatee Protection Plan includes, but is not limited to:

- Findings of a state or federal assessment of the adequacy of manatee zones, if available. Any changes in the zones will be reflected in the revised report.
- Findings of a state or federal assessment of the southwest stock of the West Indian Manatee if available.
- Data from studies identified in section 10.1 of the Manatee Protection Plan.

Figure 1. Aerial Survey Manatee Sightings 1984-1985

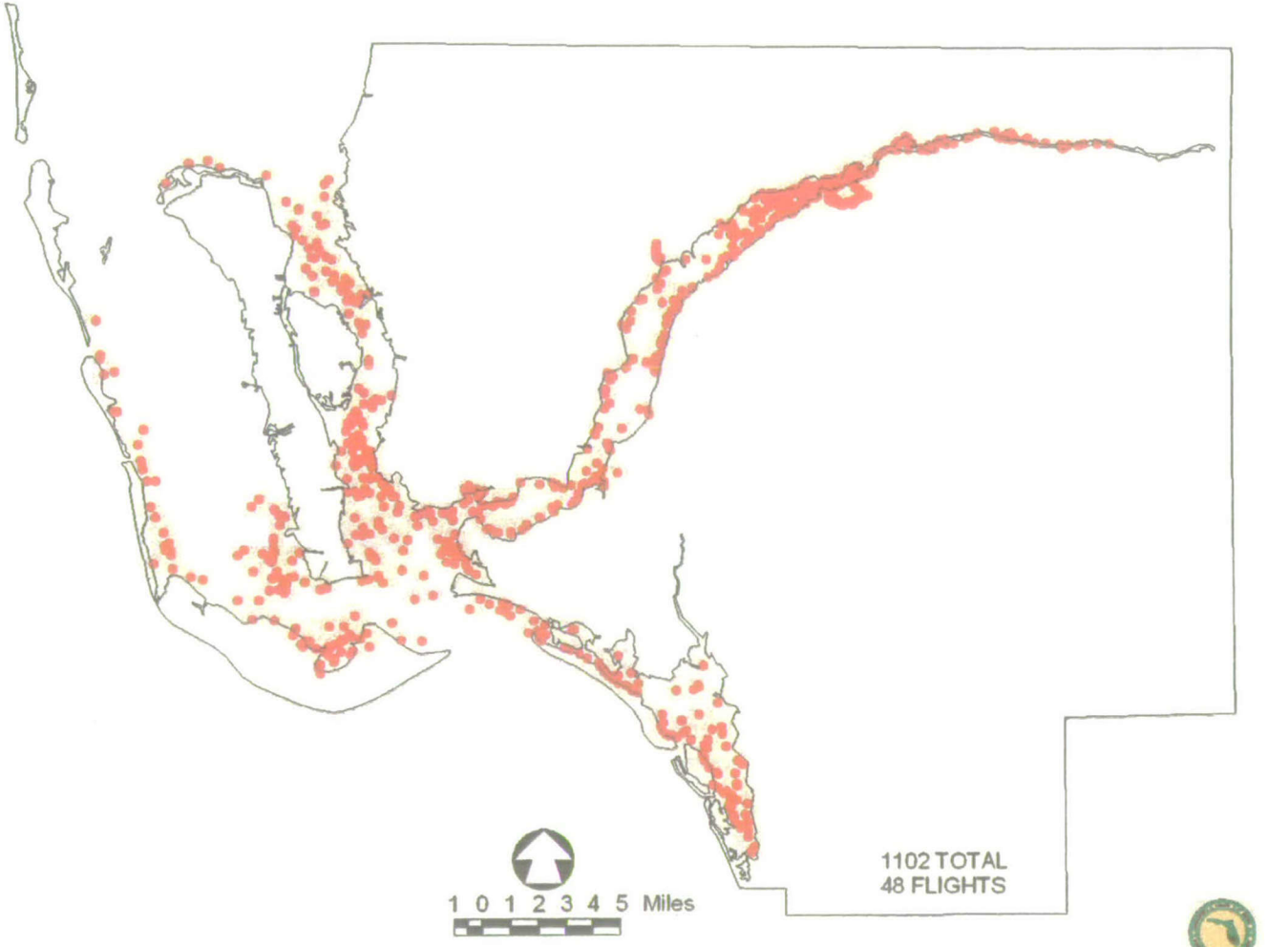
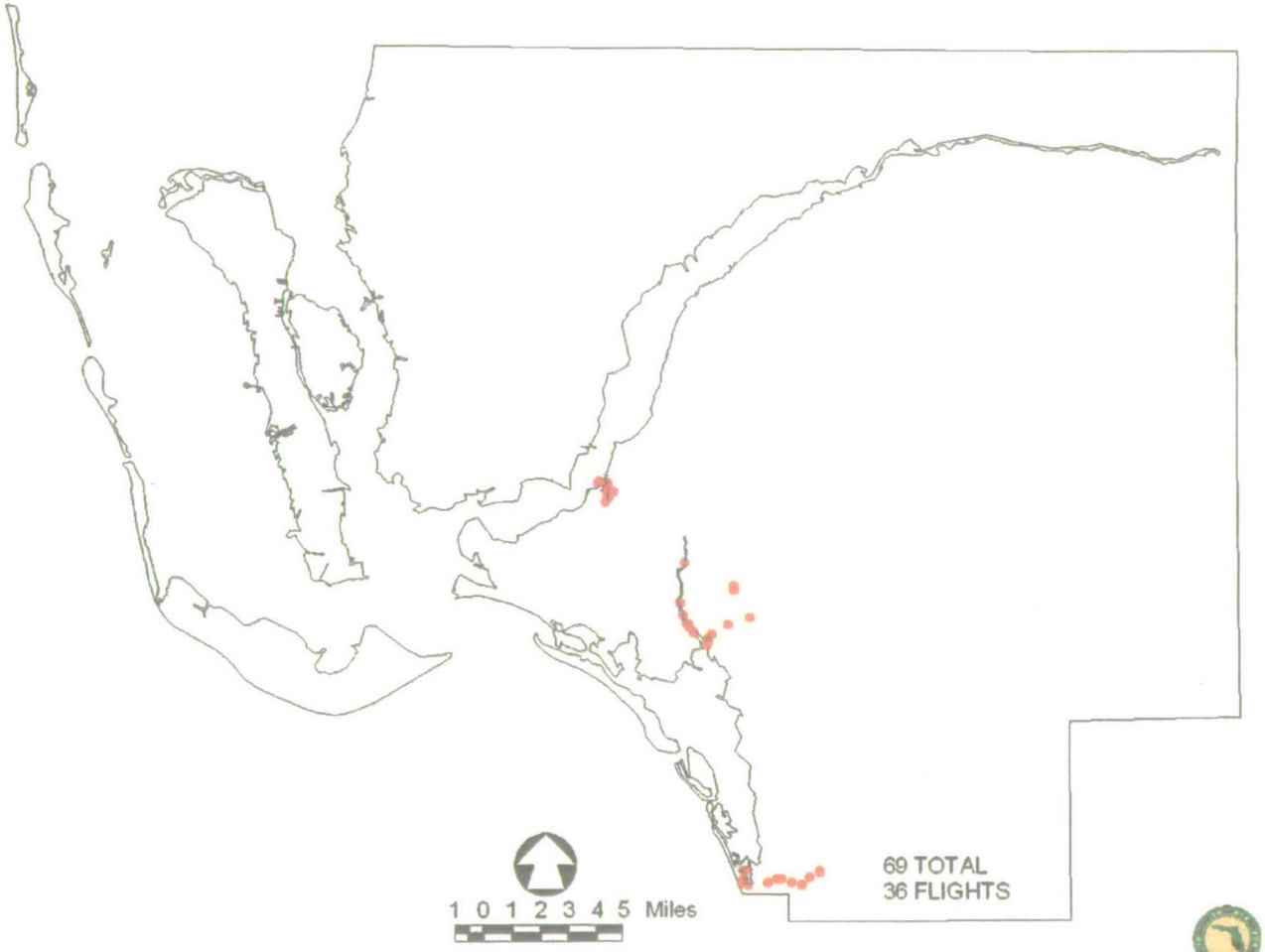


Figure 2. Aerial Survey Manatee Sightings in Selected Areas of Lee County

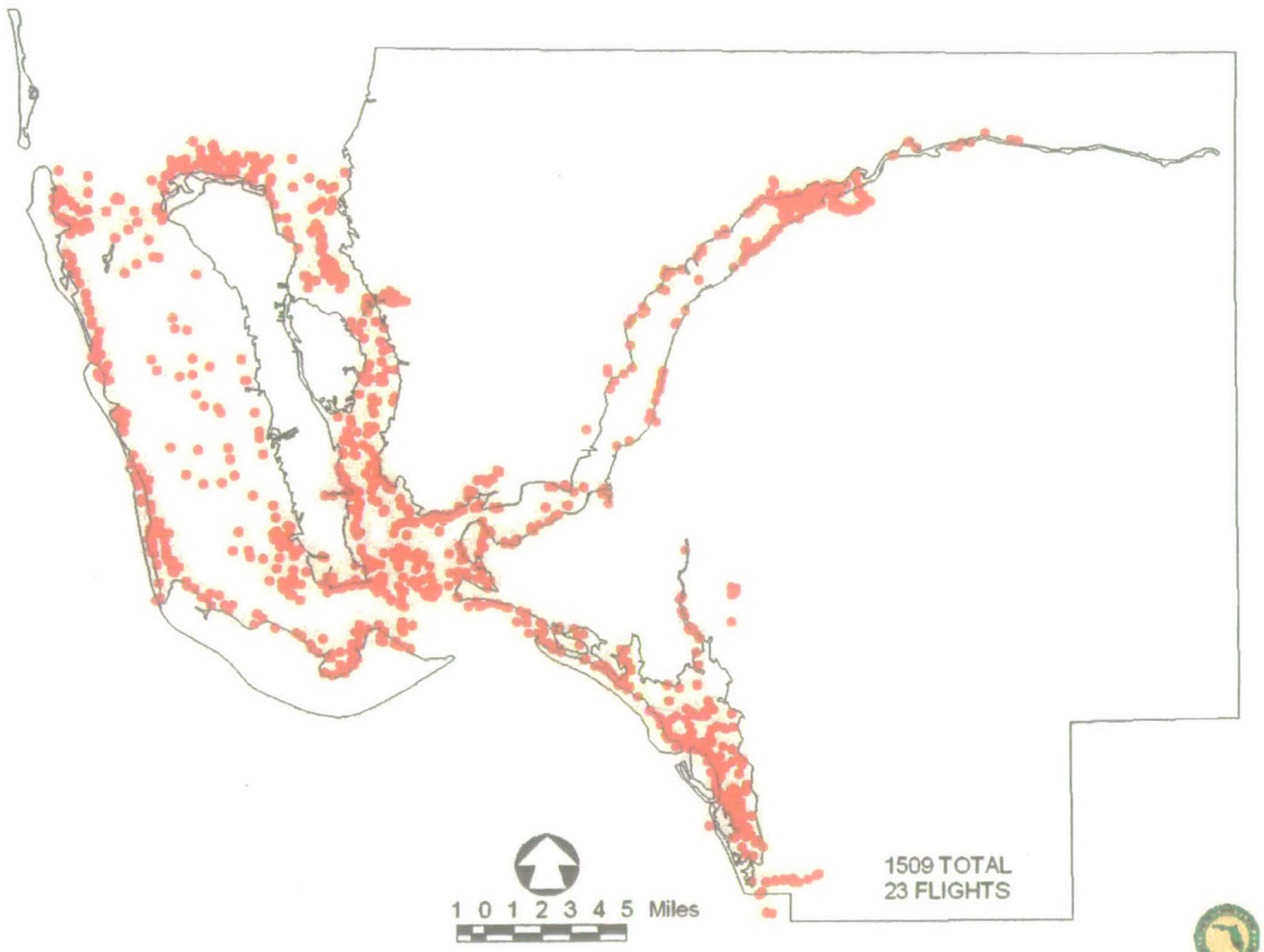


AERIAL SURVEY MANATEE SIGHTINGS 1986-1988

Source: Florida Fish and Wildlife Conservation Commission

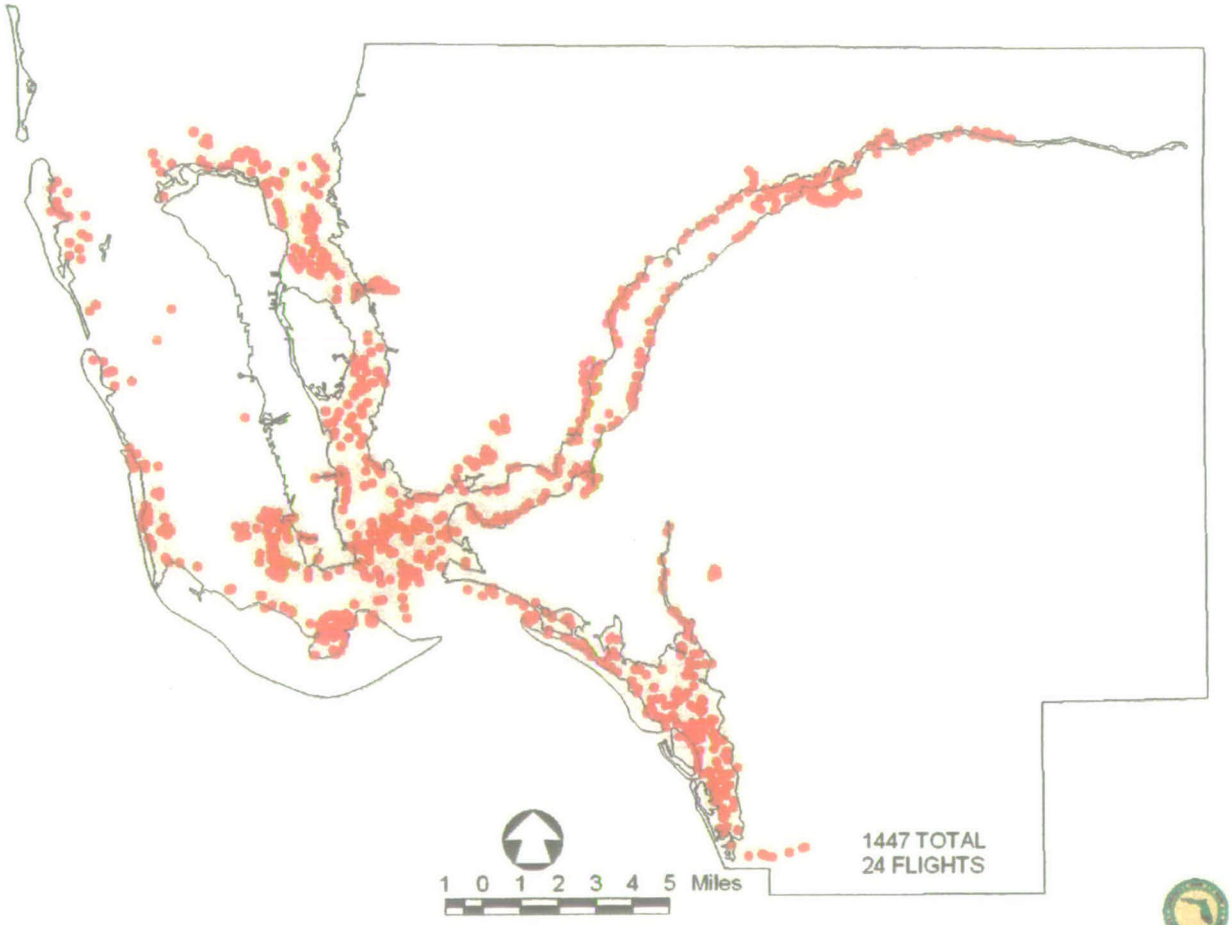
Southwest Florida Regional Planning Council GIS Department

Figure 3. Aerial Survey Manatee Sightings 1994-95



AERIAL SURVEY MANATEE SIGHTINGS 1994-1995

Figure 4. Aerial Survey Manatee Sightings 1997-98



AERIAL SURVEY MANATEE SIGHTINGS 1997-1998

Figure 5. Manatee Mortality Carcass Recovery Locations by Type

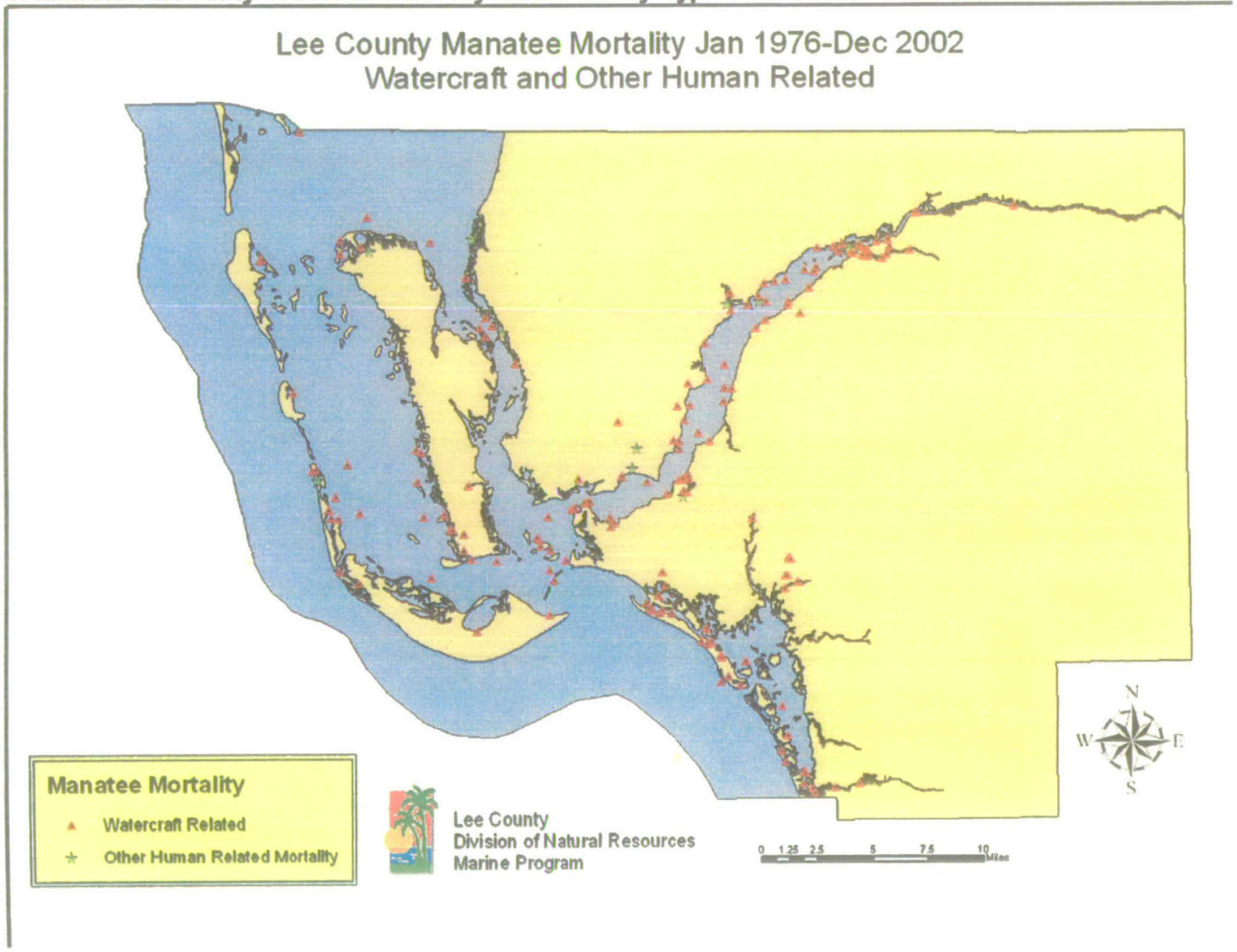
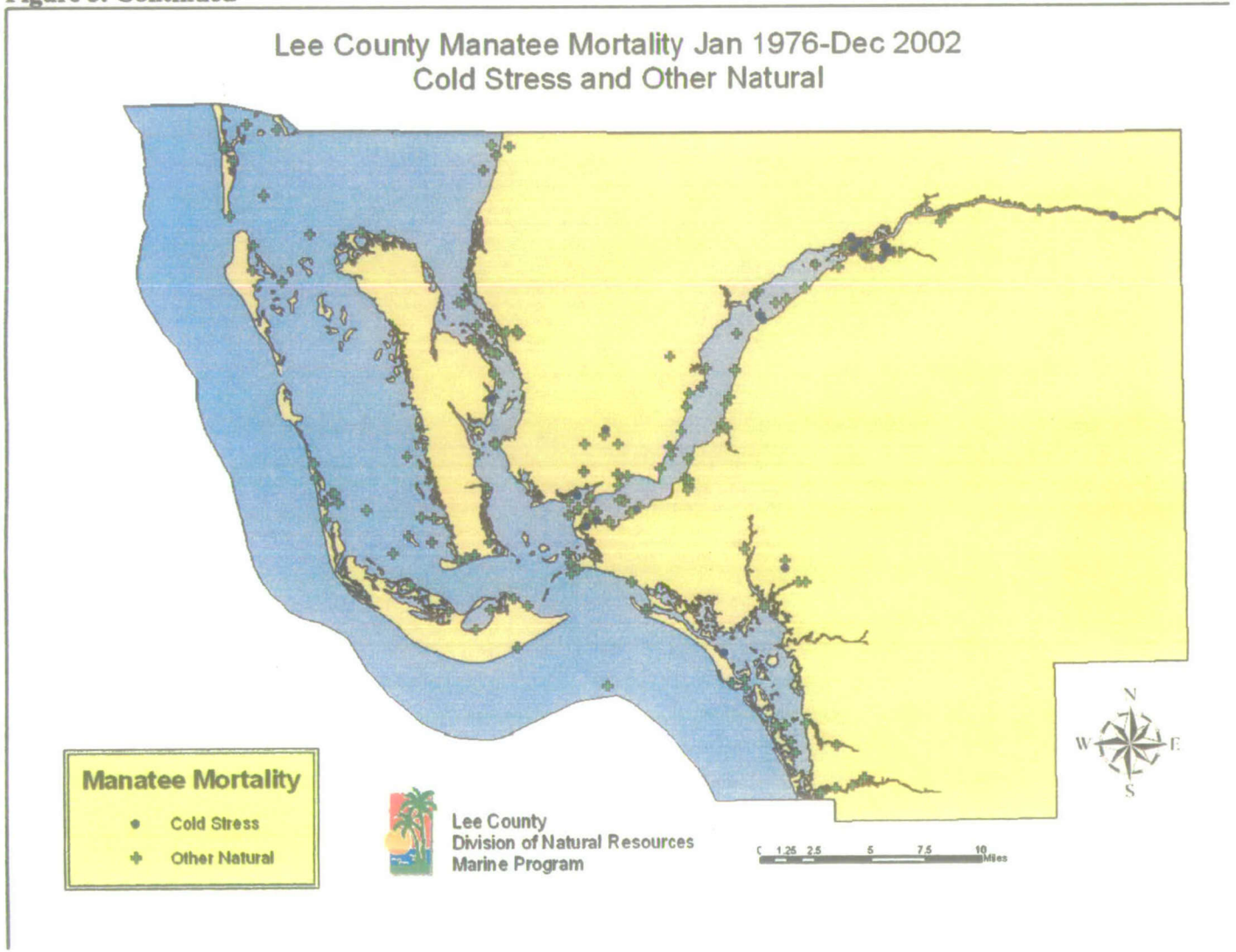


Figure 5. Continued



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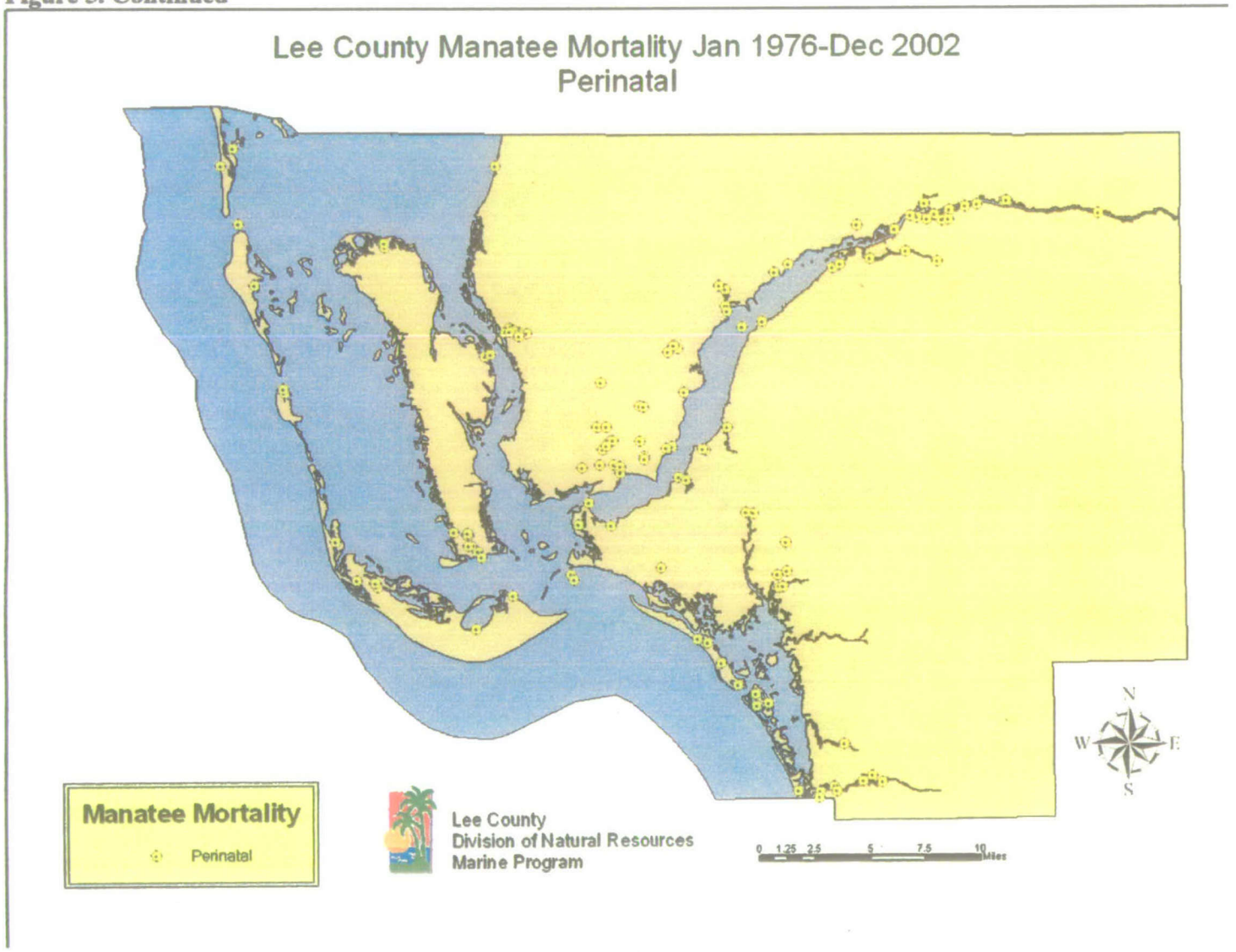

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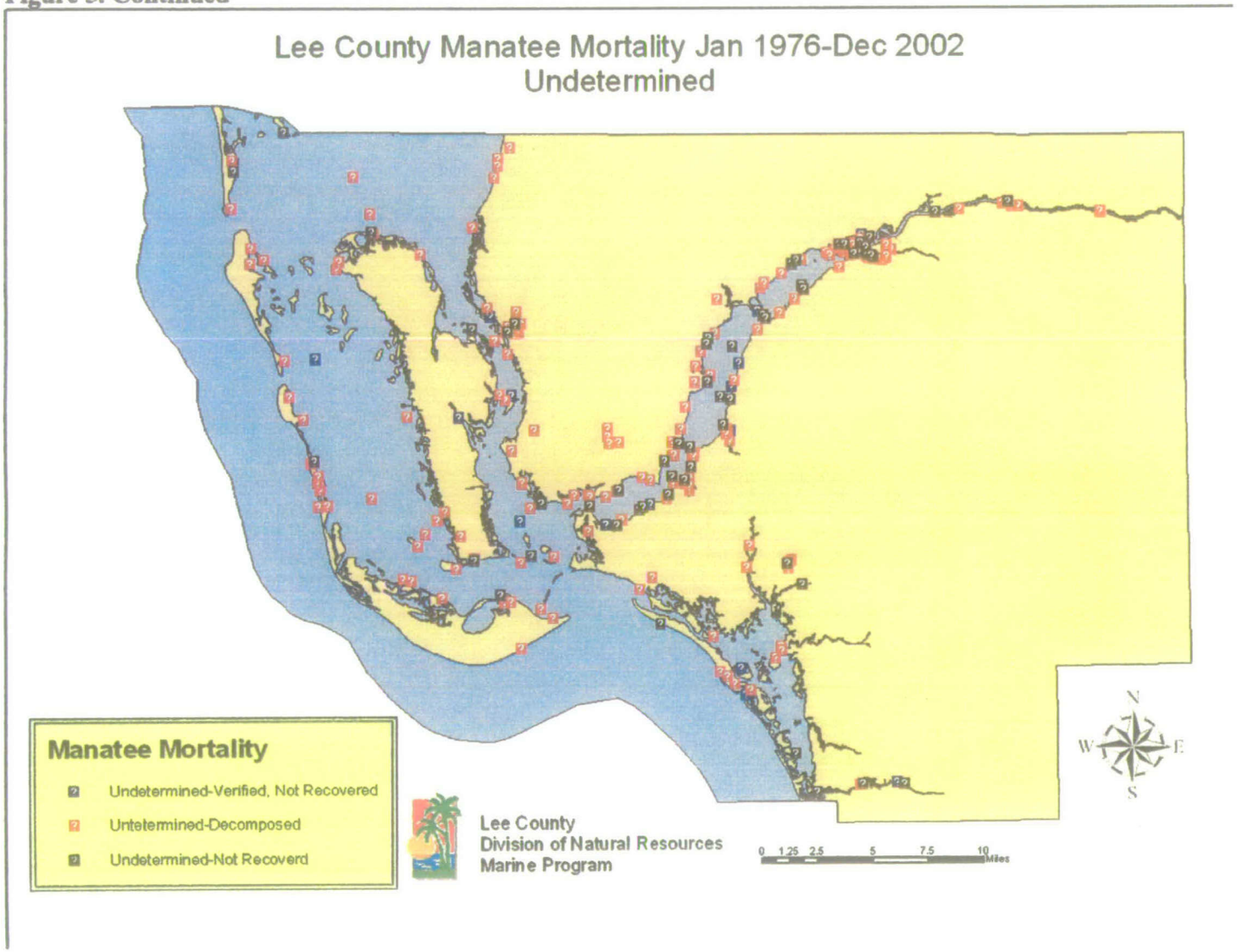


Figure 6. Seasonal Manatee Mortality by Watercraft

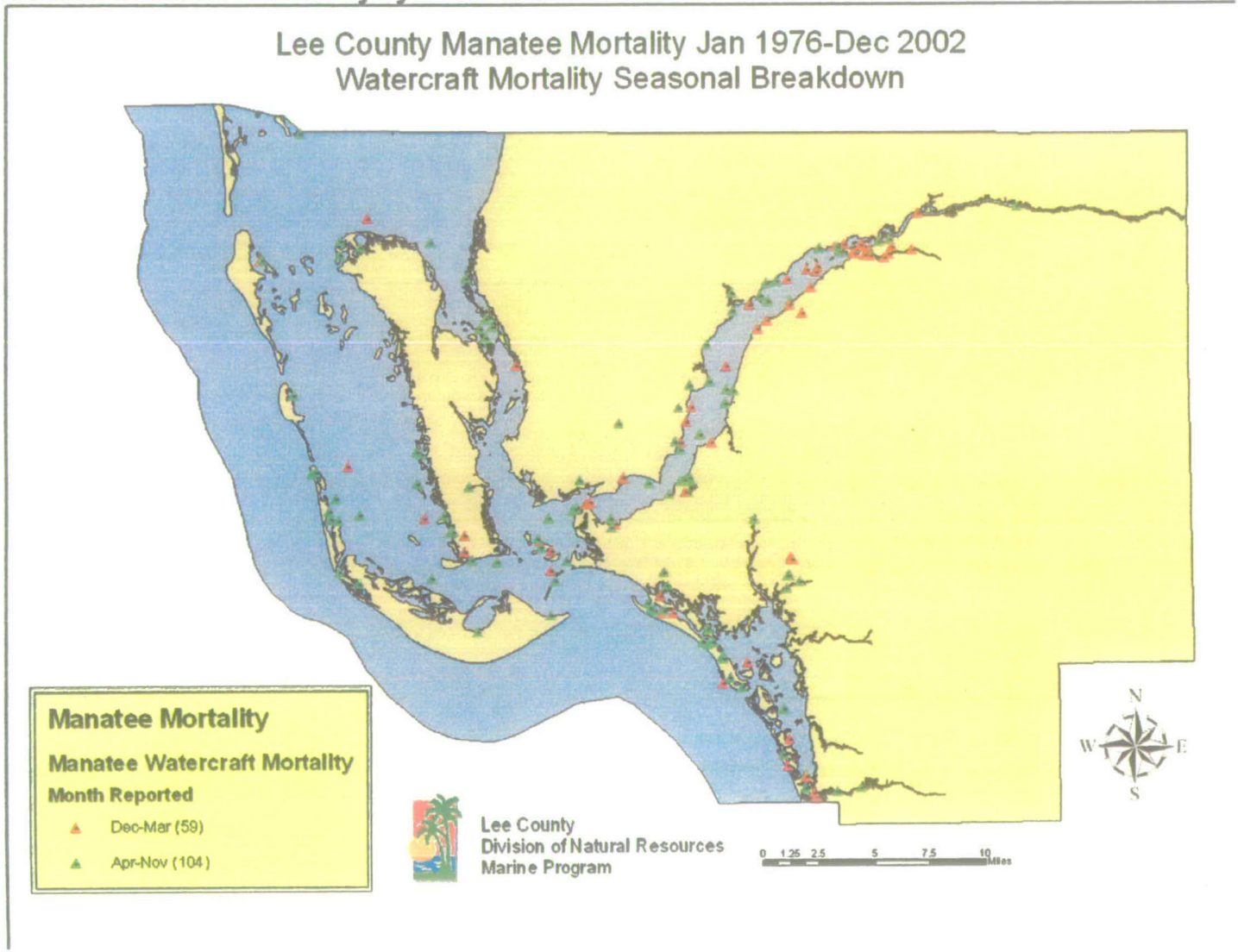


Figure 7. Seasonal Manatee Perinatal Mortality

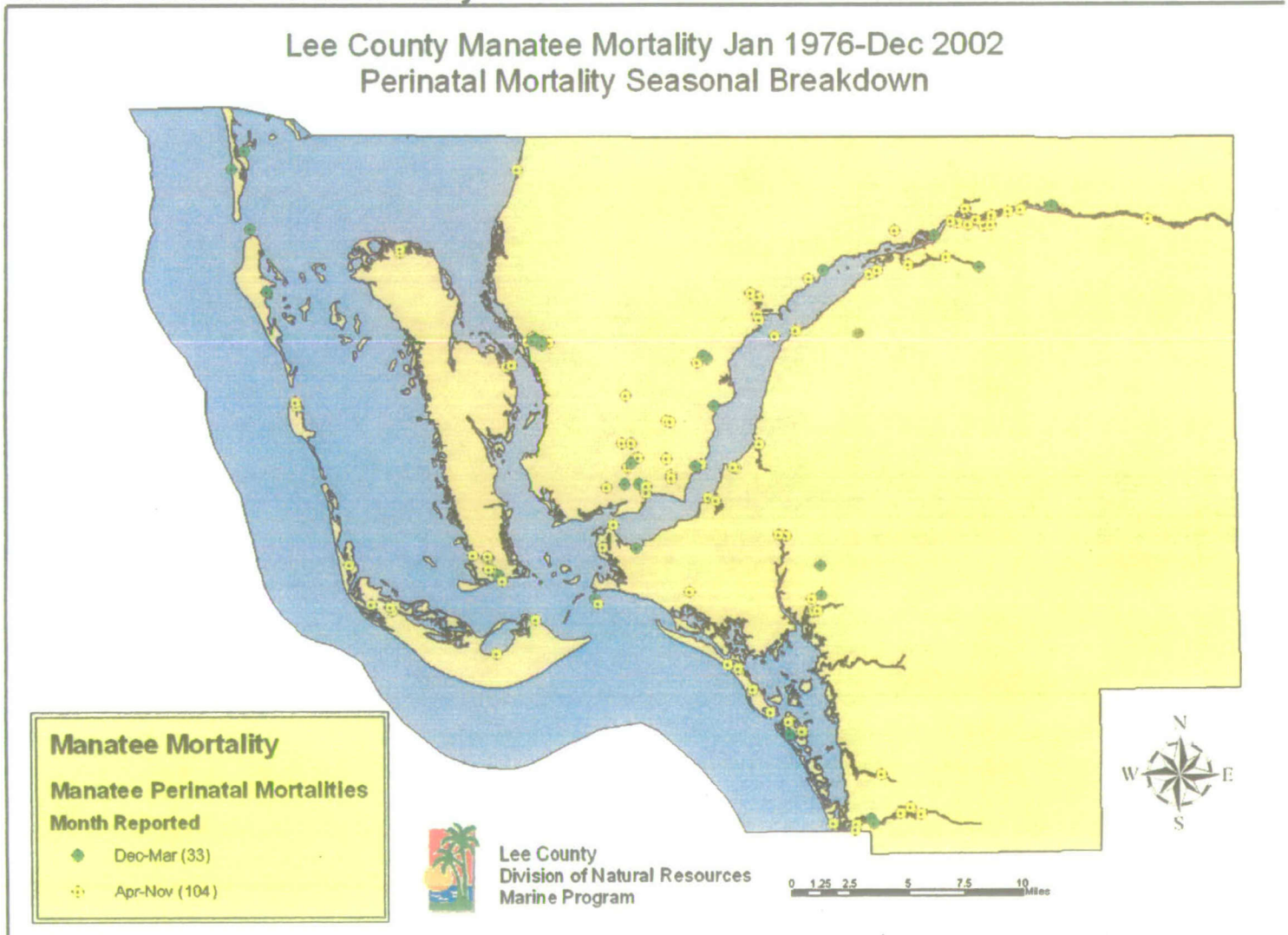


Figure 8. Seasonal Manatee Natural Mortality

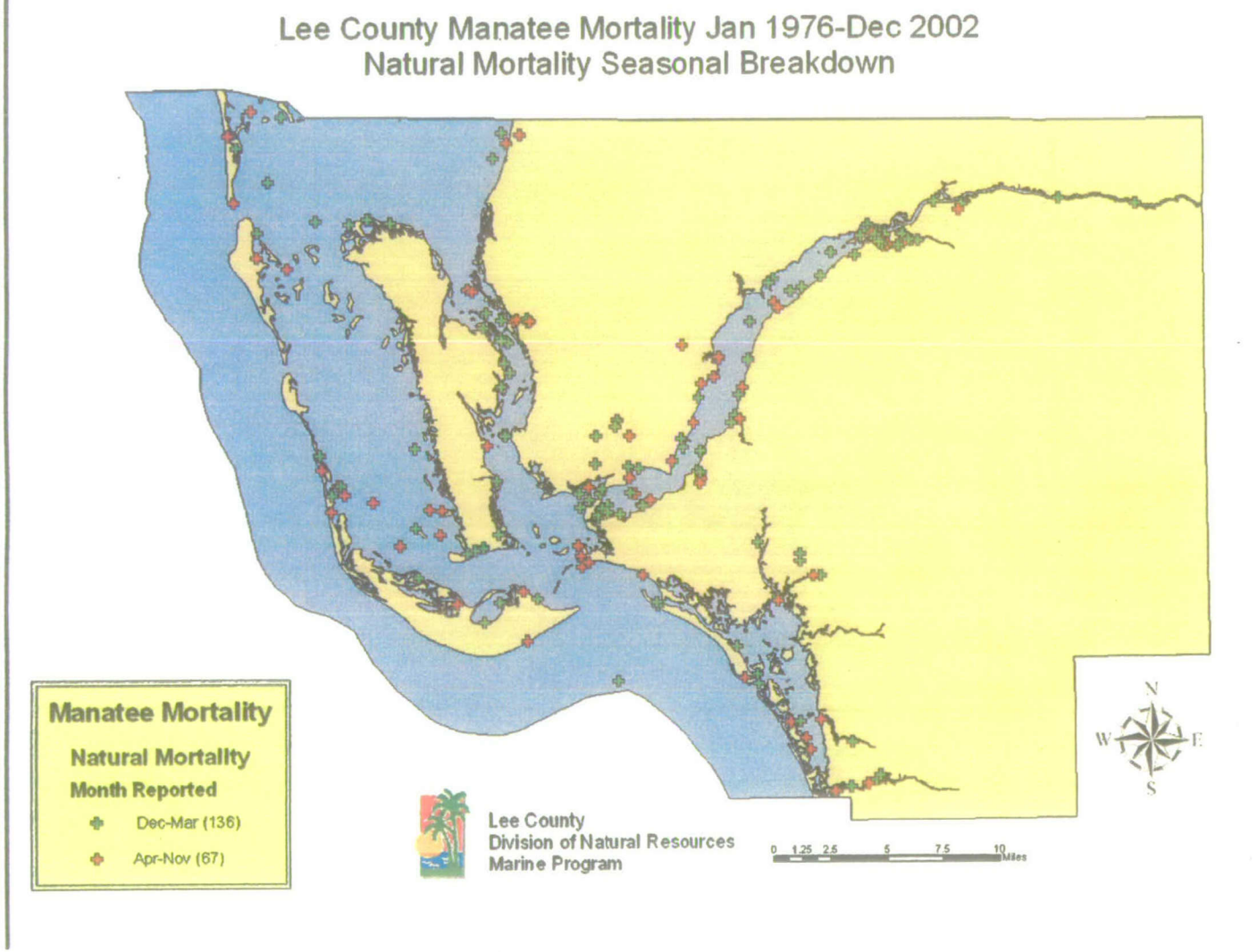


Figure 9. Seasonal Manatee Undetermined Mortality

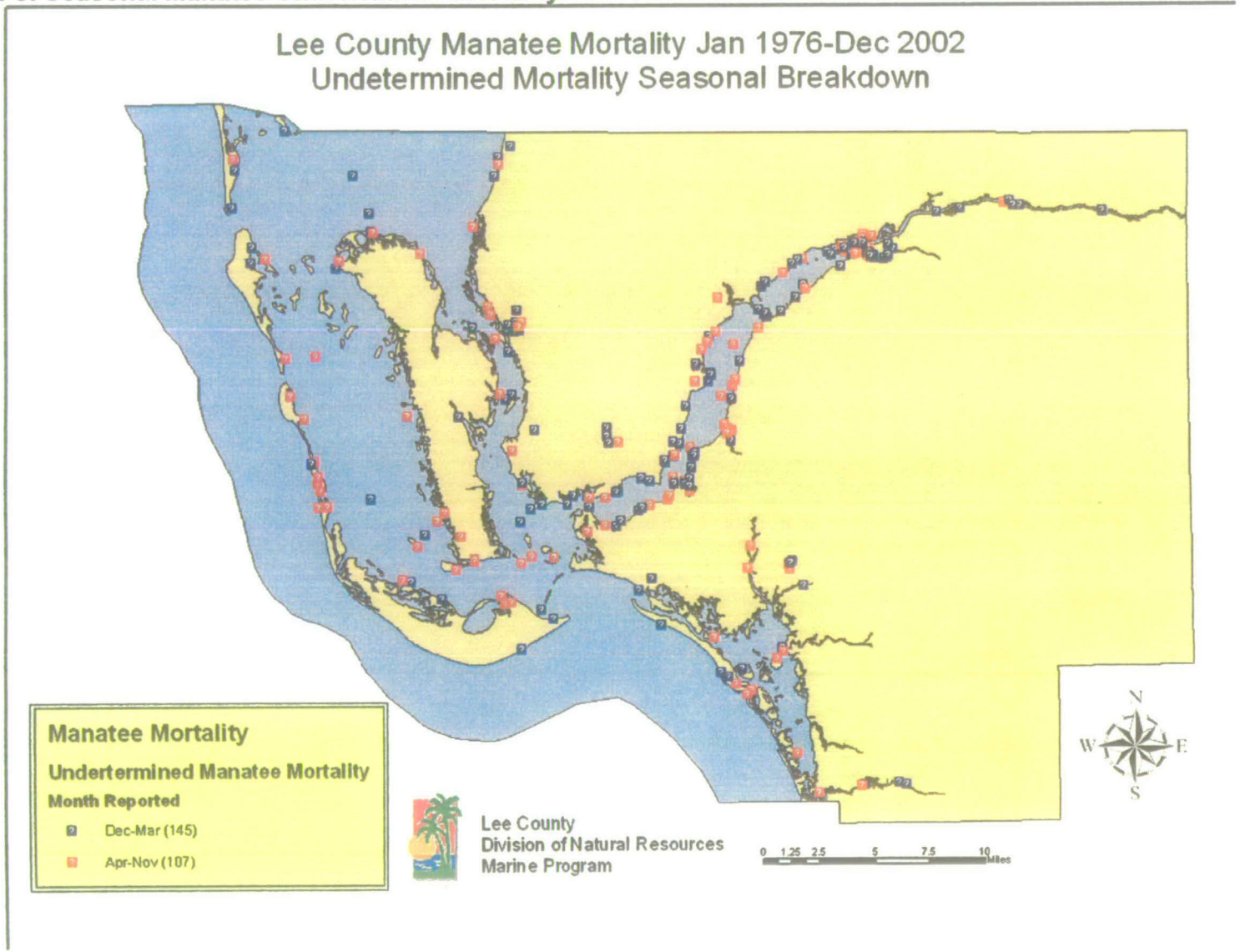


Figure 10. Inventory of Marinas and Boat Ramps

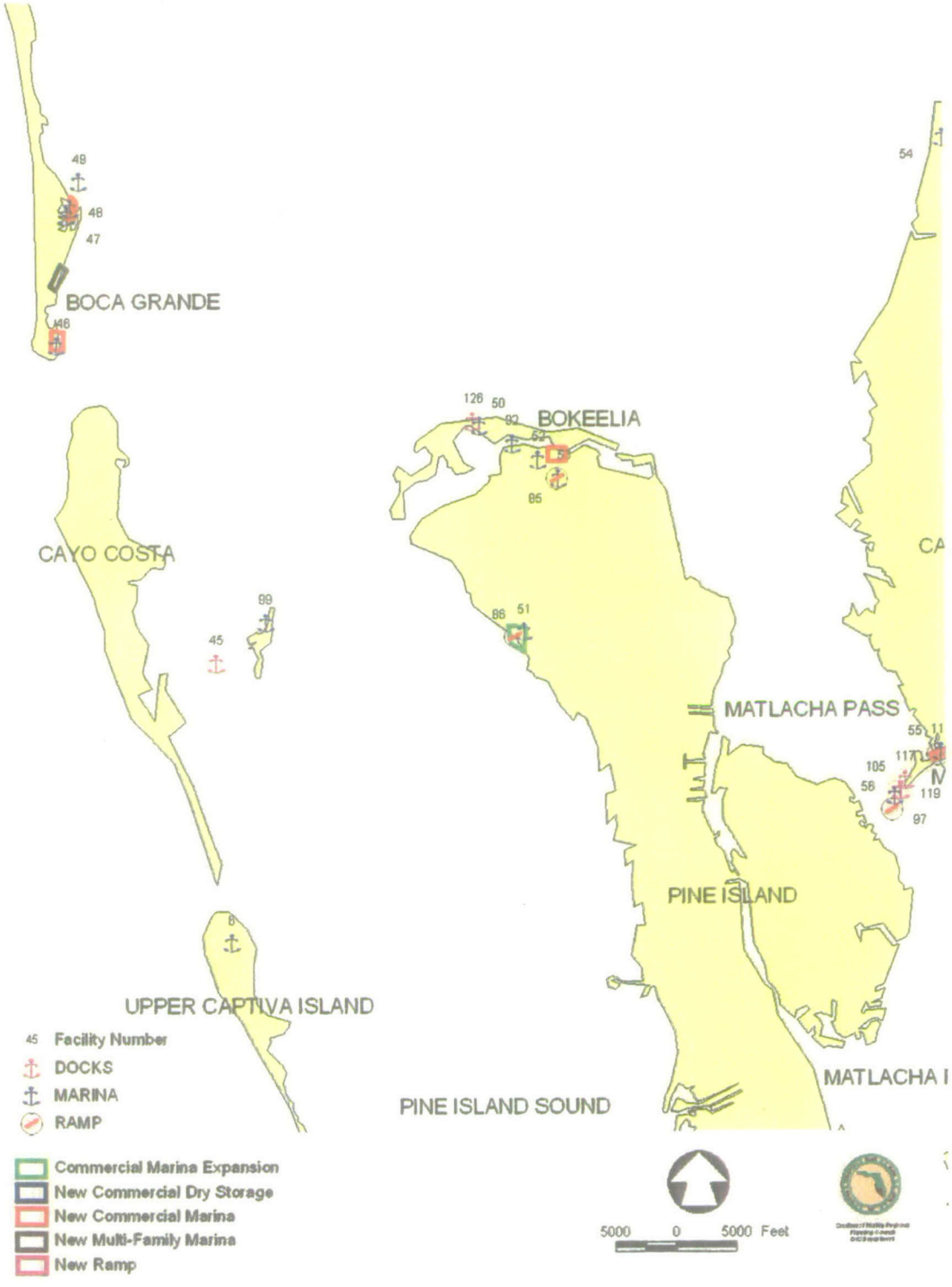


Figure 10. Inventory of Marinas and Boat Ramps Continued

Figure 10. Inventory of Marinas and Boat Ramps Continued

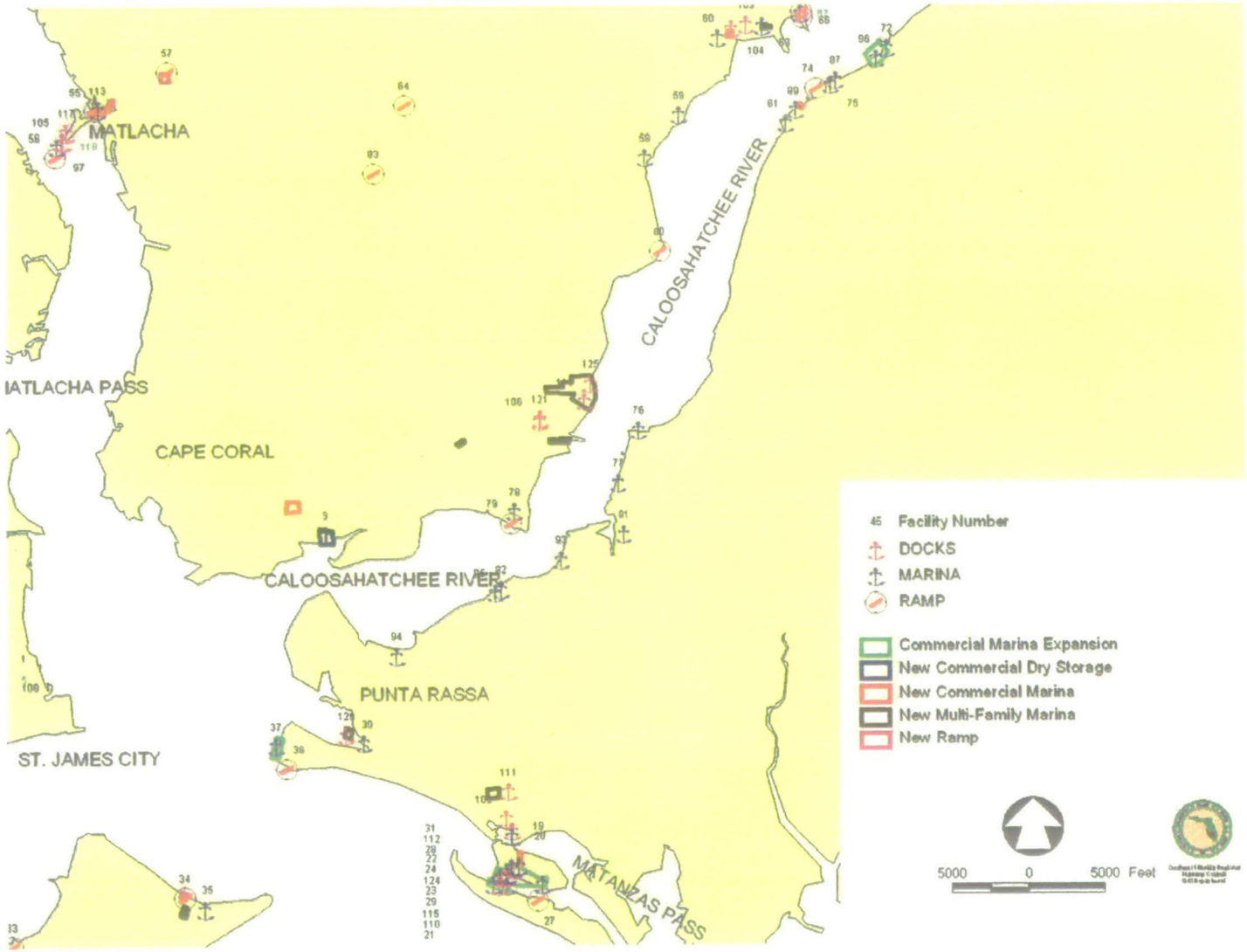


Figure 10. Inventory of Marinas and Boat Ramps Continued

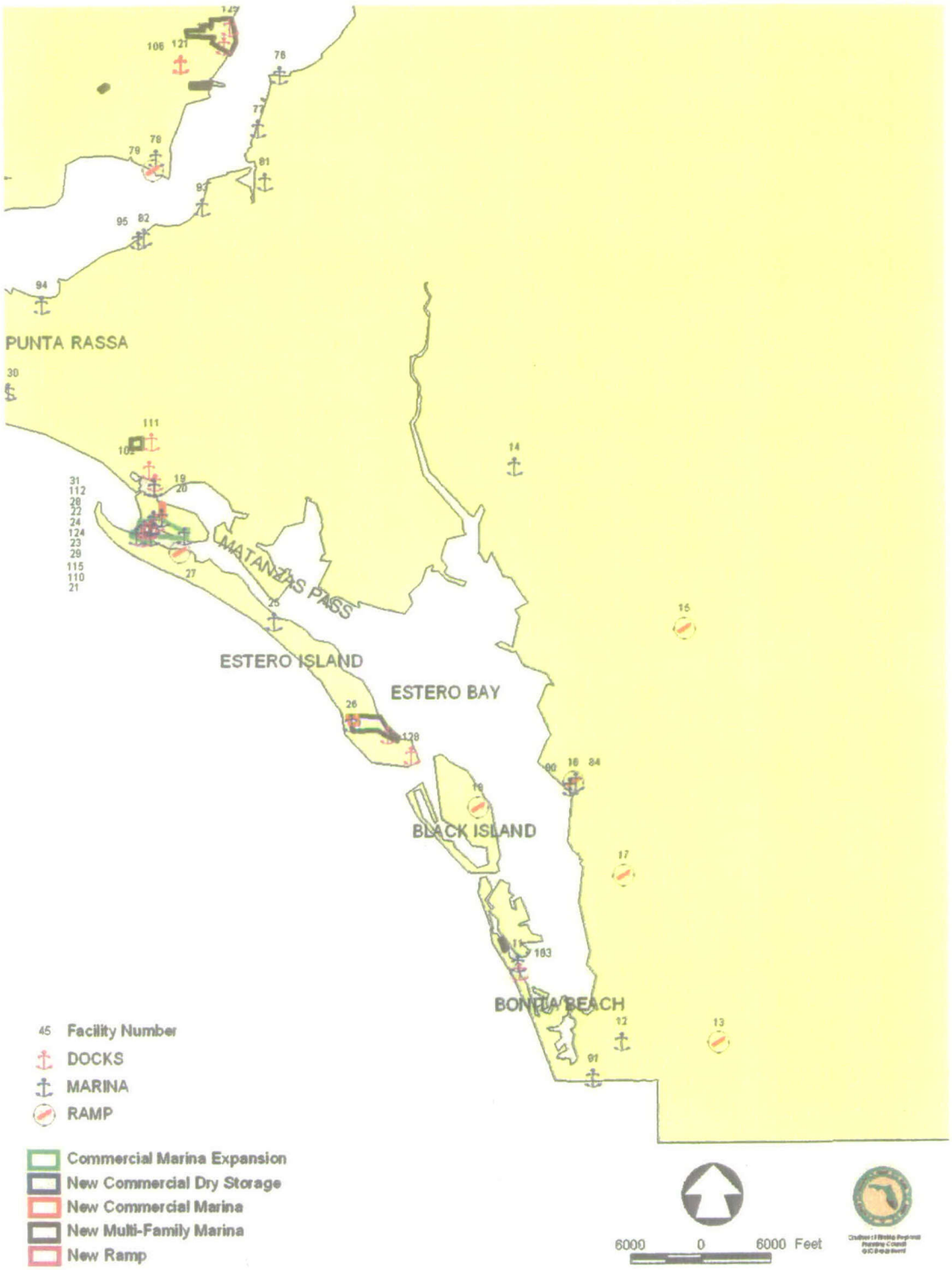


Figure 10. Inventory of Marinas and Boat Ramps Continued

Figure 11. Density Maps- Mooring Density

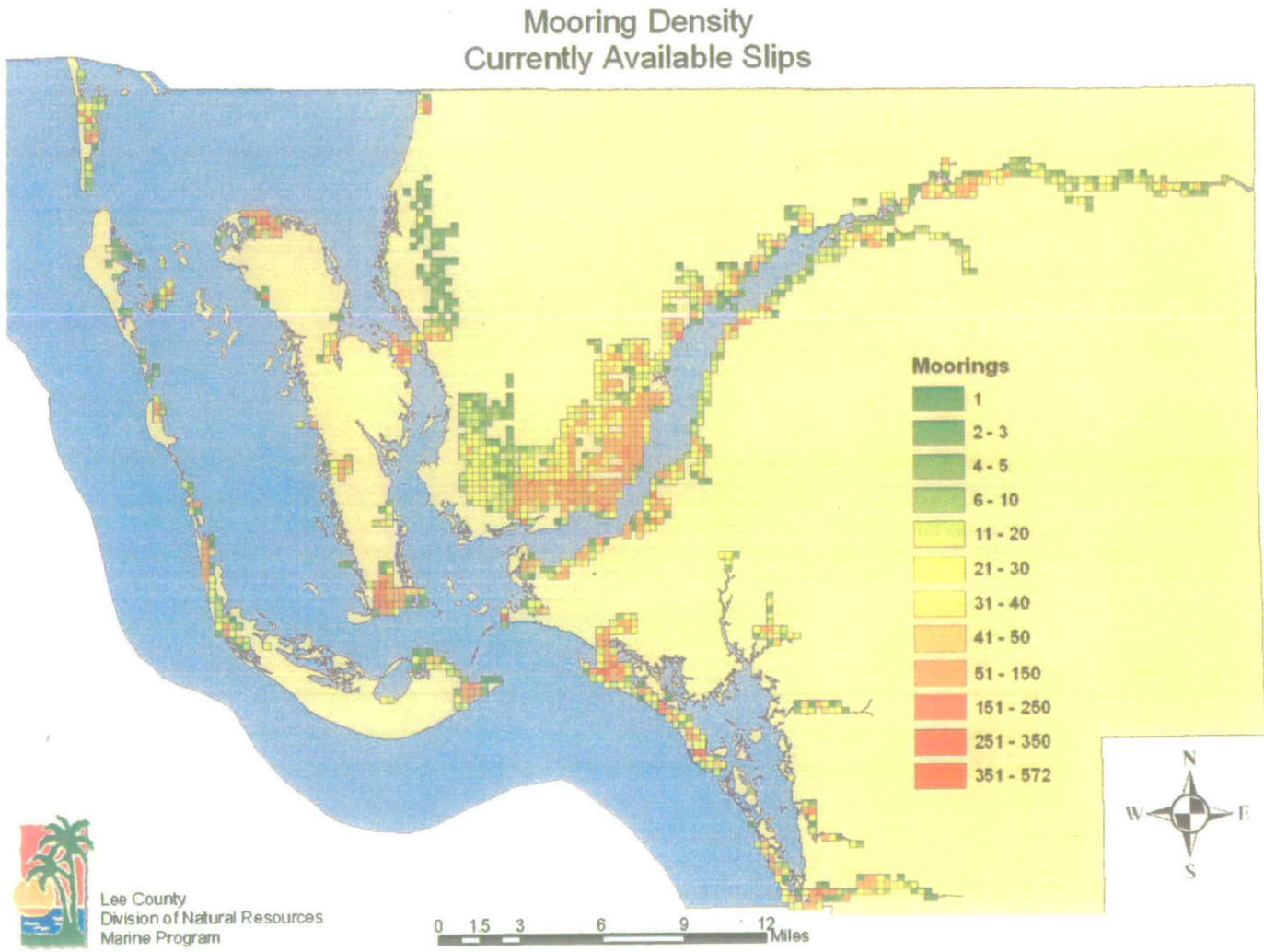


Figure 11. Density Maps- Excess Capacity

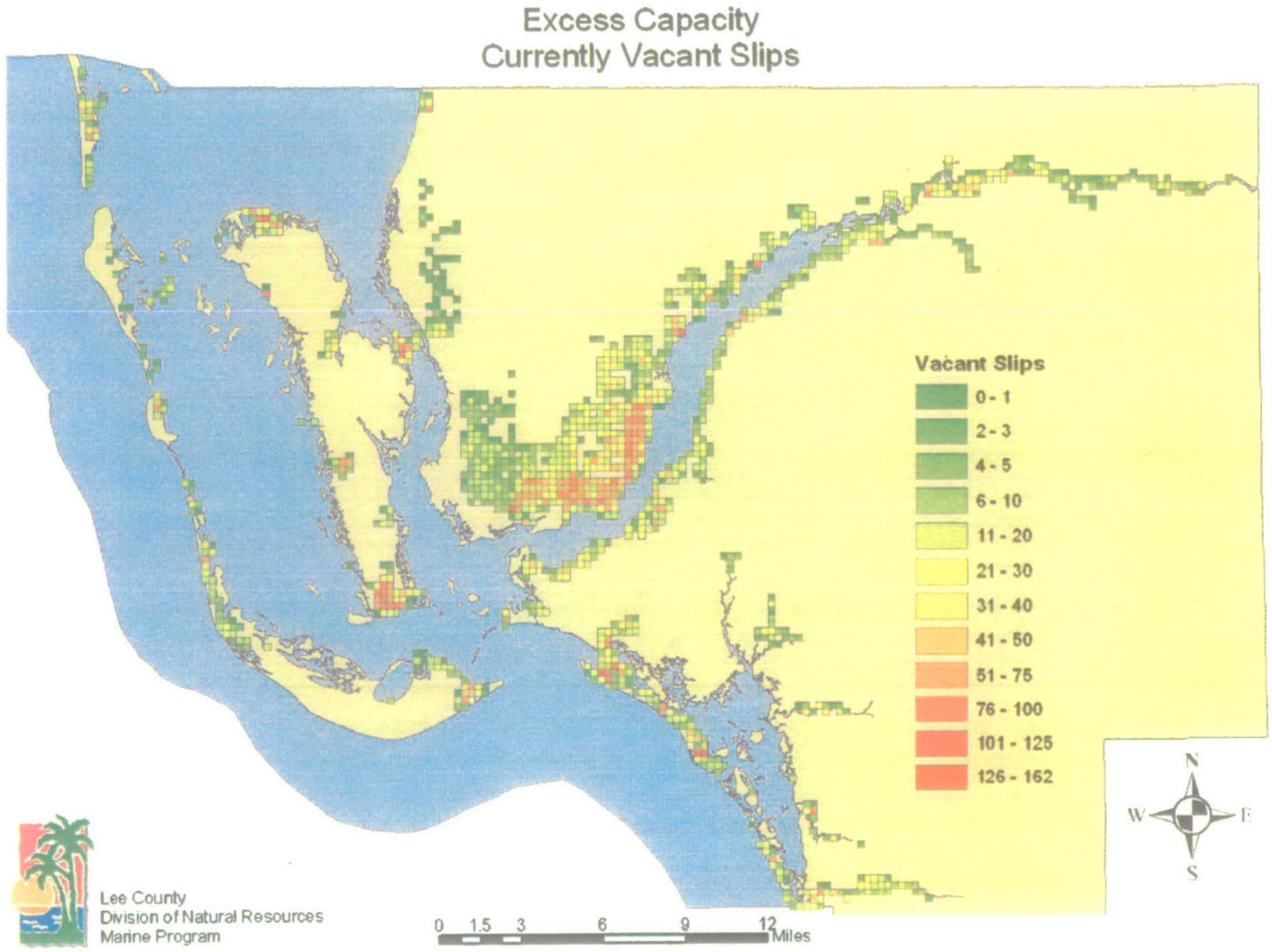


Figure 11. Density Maps- Vessel Density

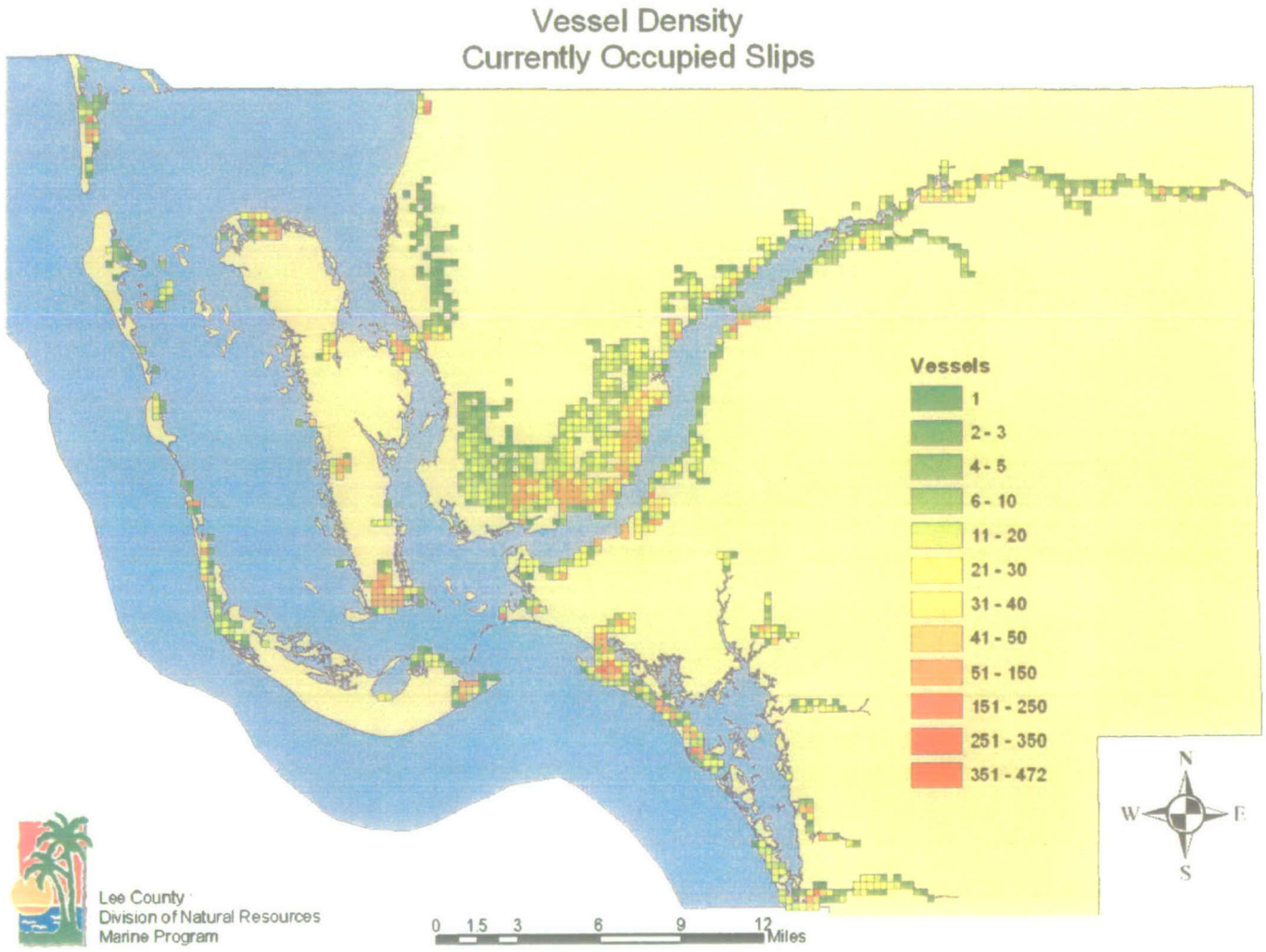


Figure 12. Increase In Law Enforcement Funding from WCIND

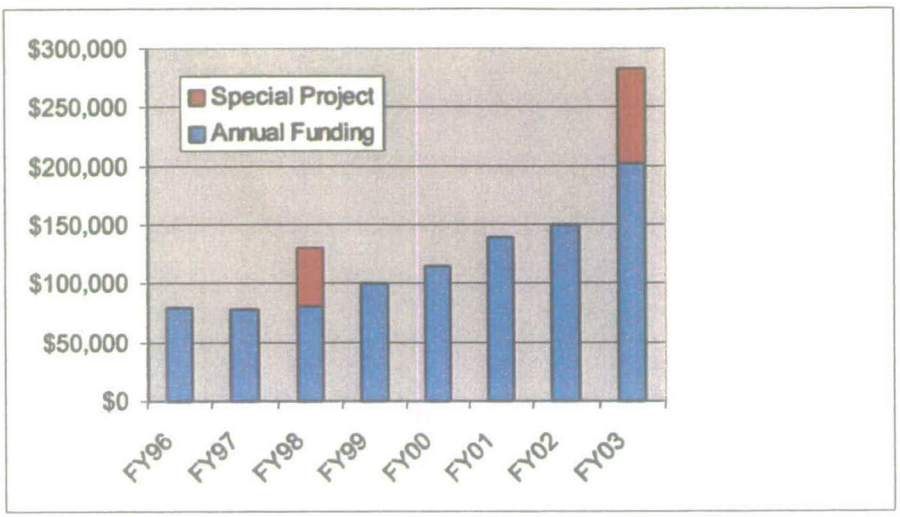


Figure 13. Lee County Manatee Enforcement Zones

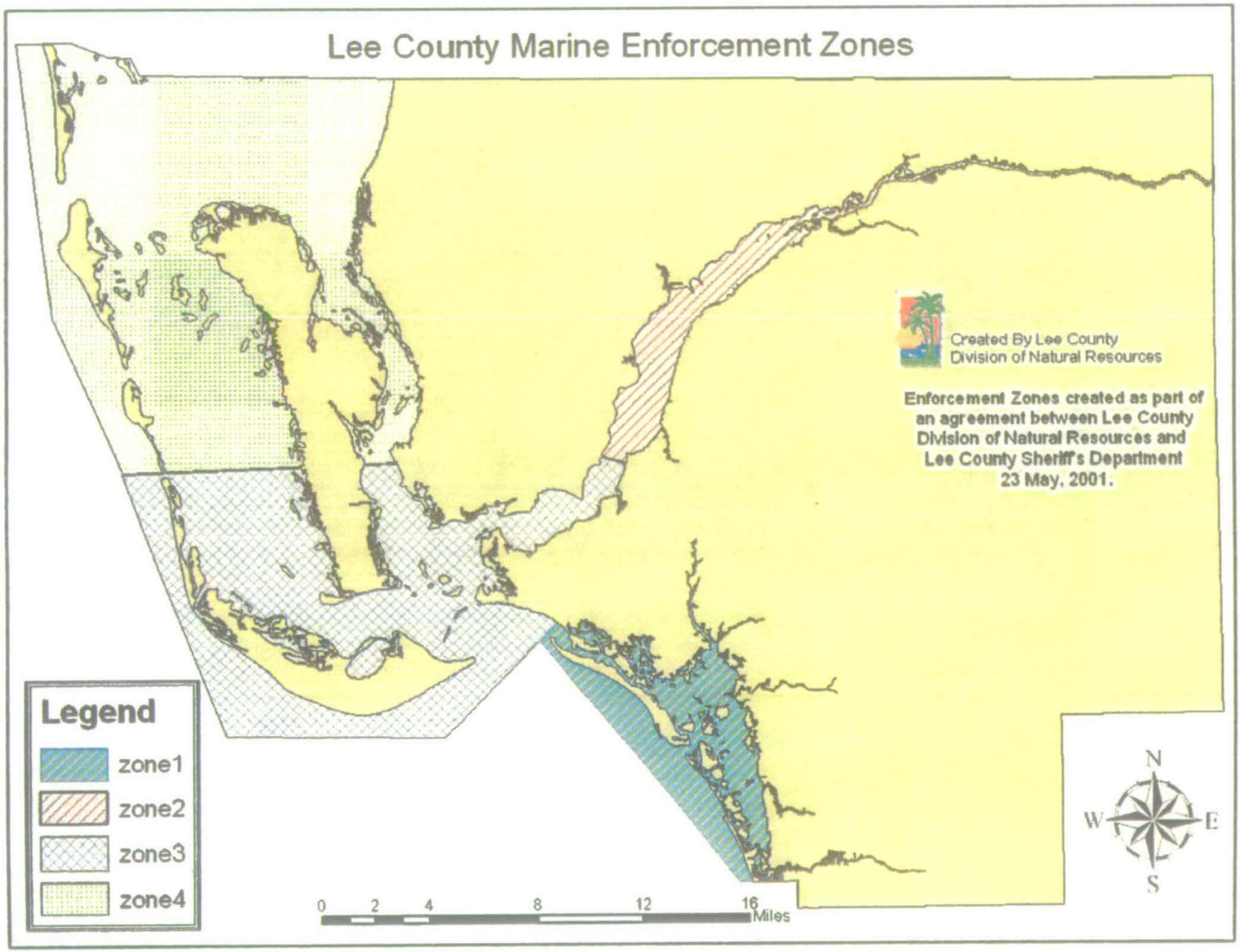


Figure 14. STATE Boat Speed Zones

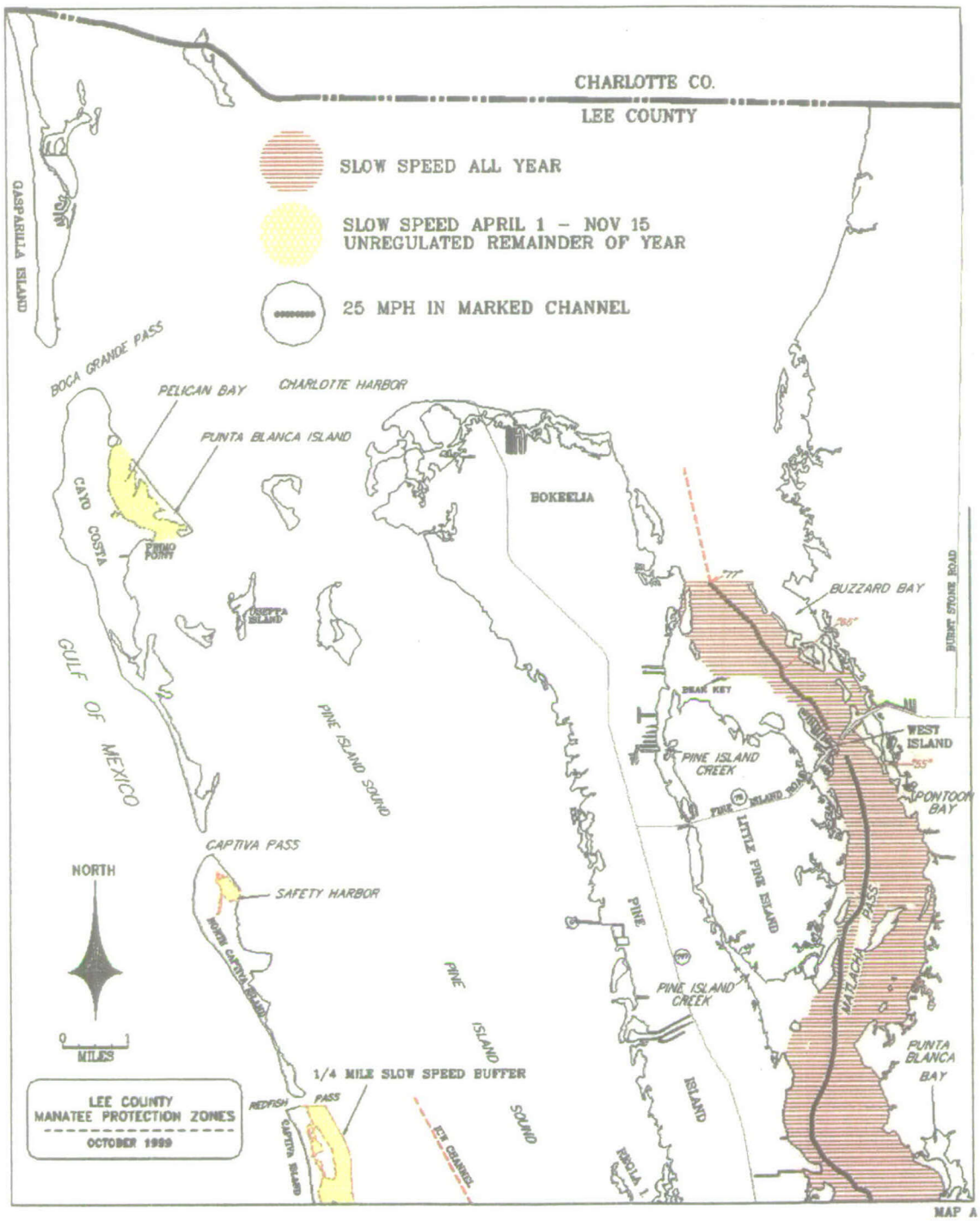


Figure 14. STATE Boat Speed Zones –Continued

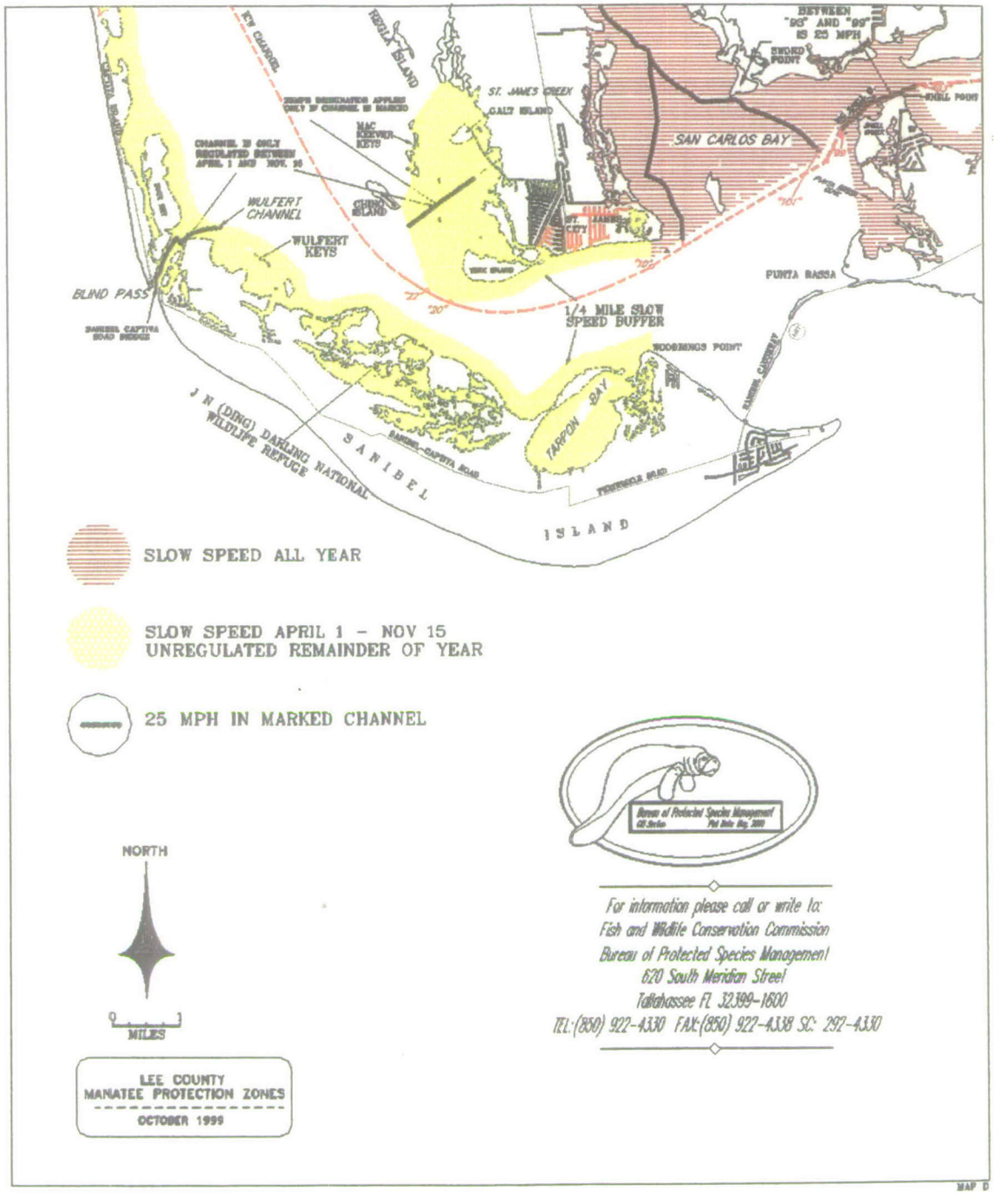


Figure 14. STATE Boat Speed Zones –Continued

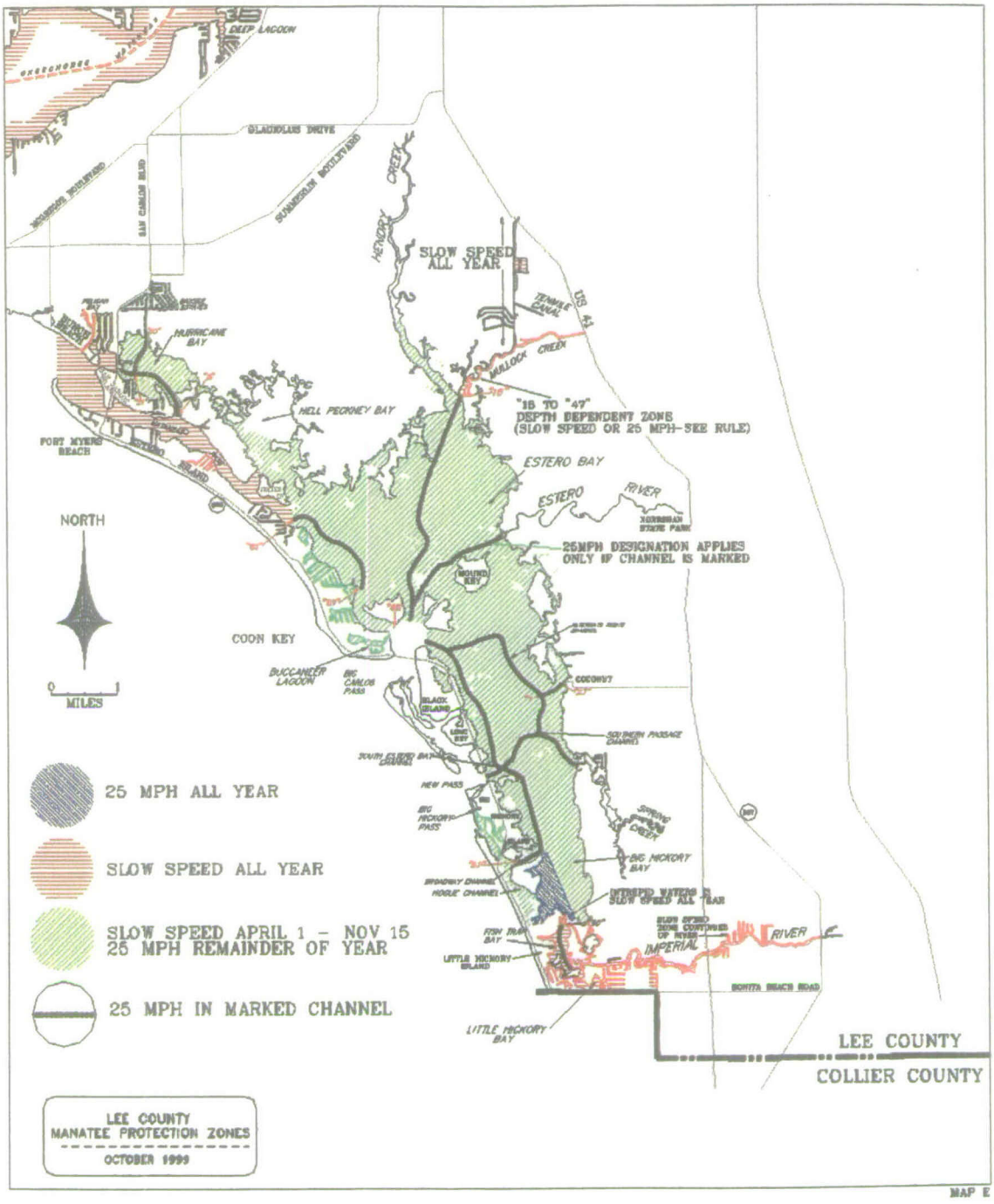


Figure 14. STATE Boat Speed Zones –Continued

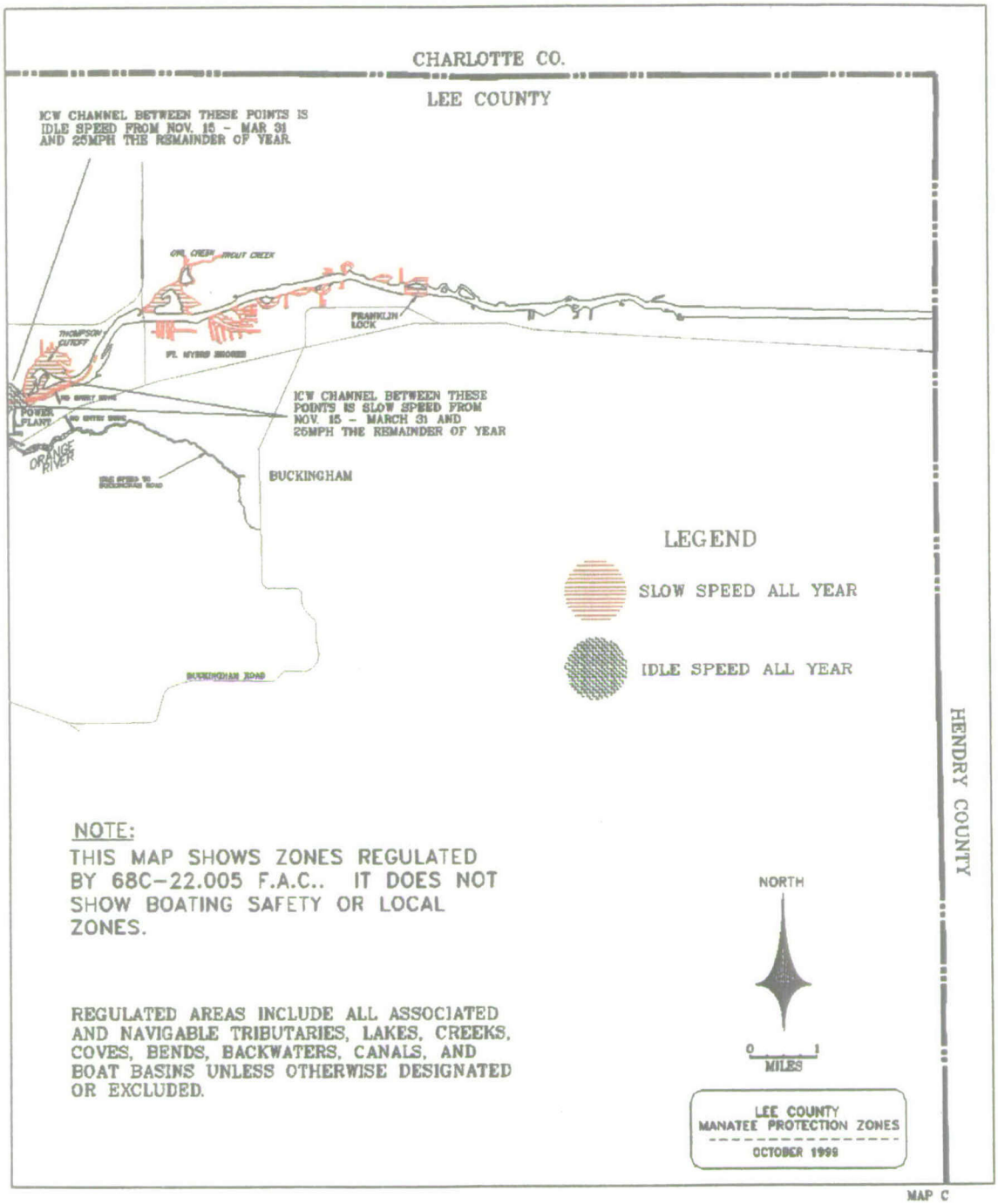


Figure 14. STATE Boat Speed Zones –Continued

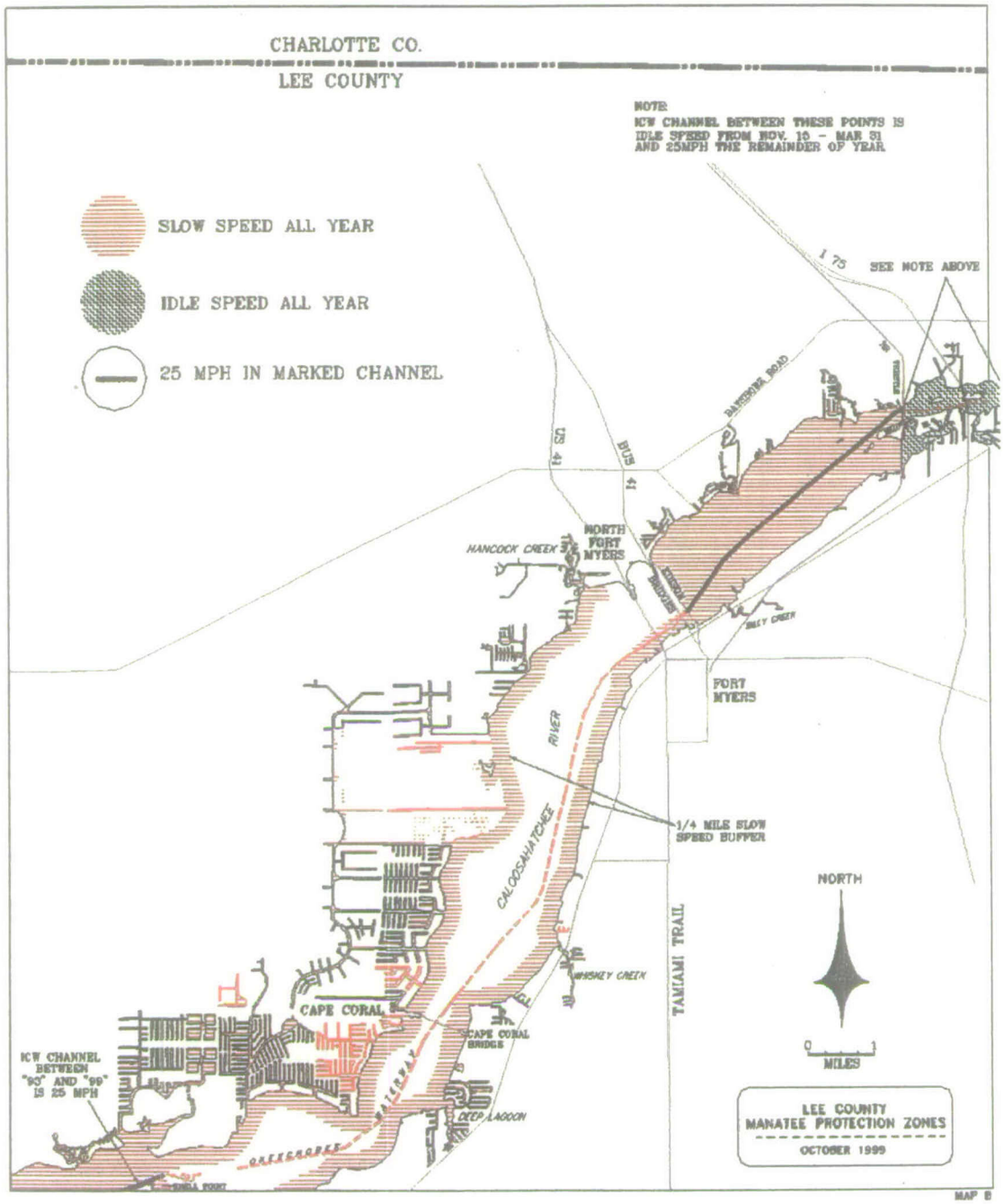
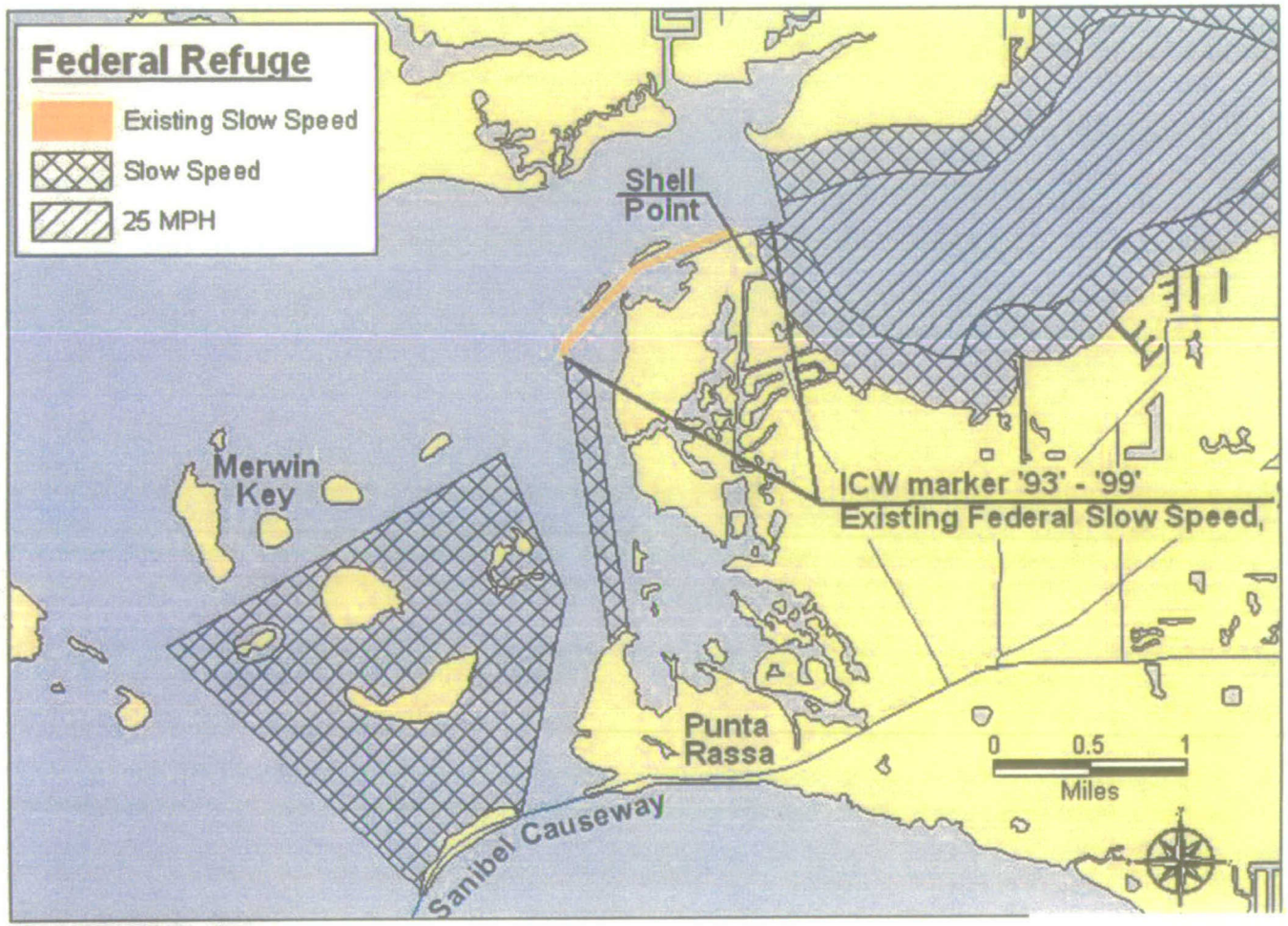
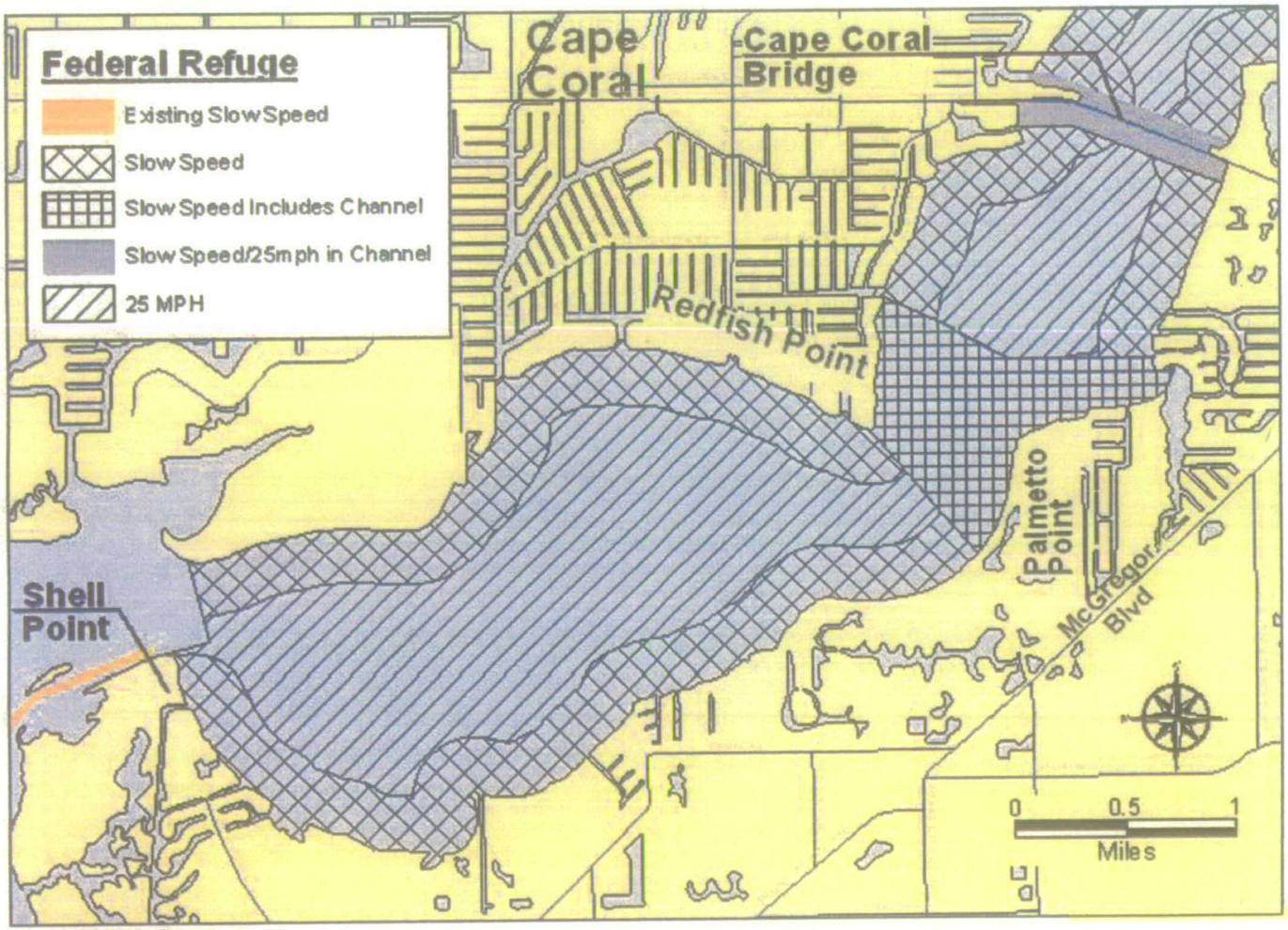


Figure 15. Federal Boat Speed Zones



Source: FWC

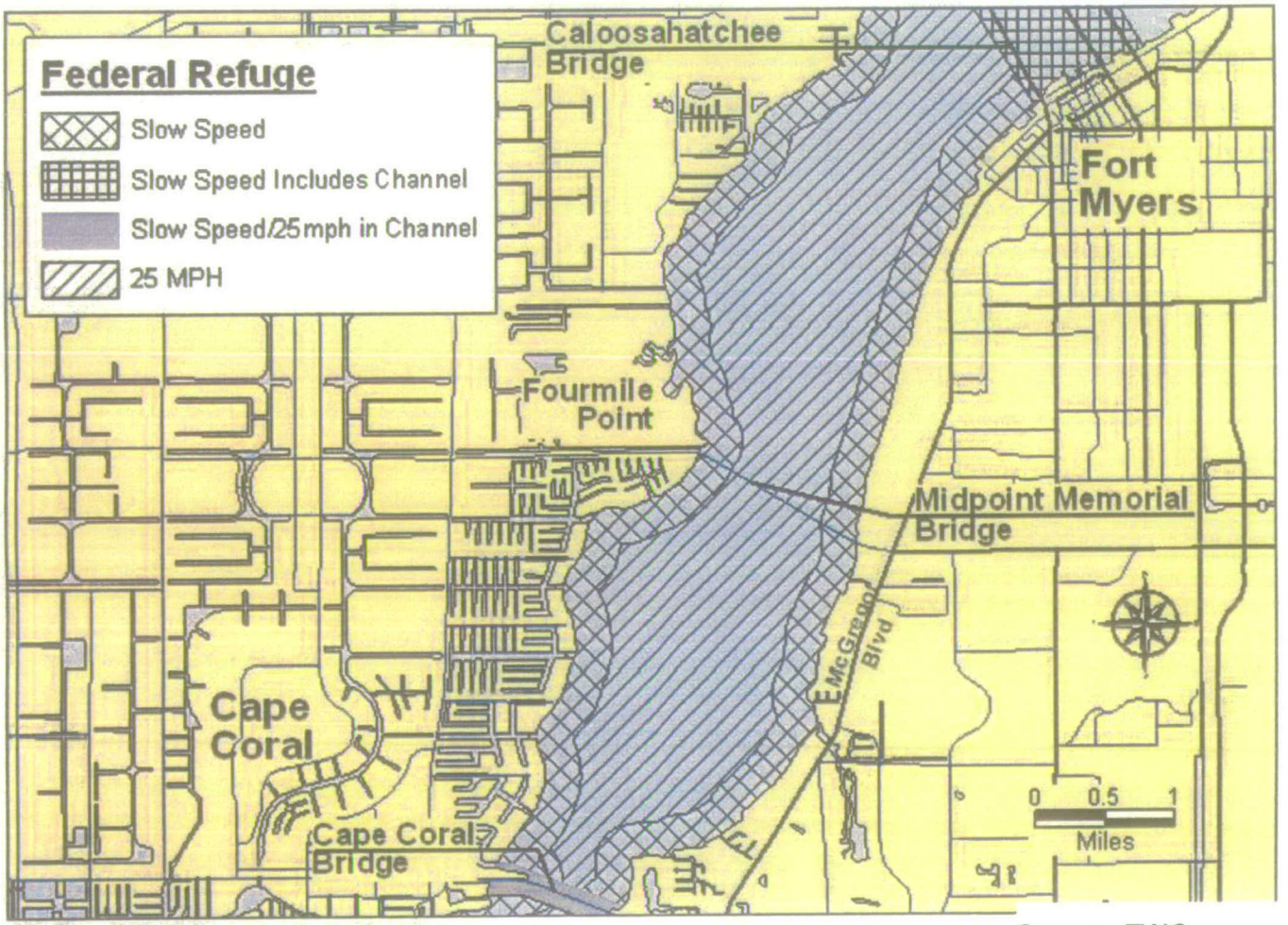
Figure 15. Federal Boat Speed Zones - Continued



Redfish Point Federal Refuge

Source: FWC

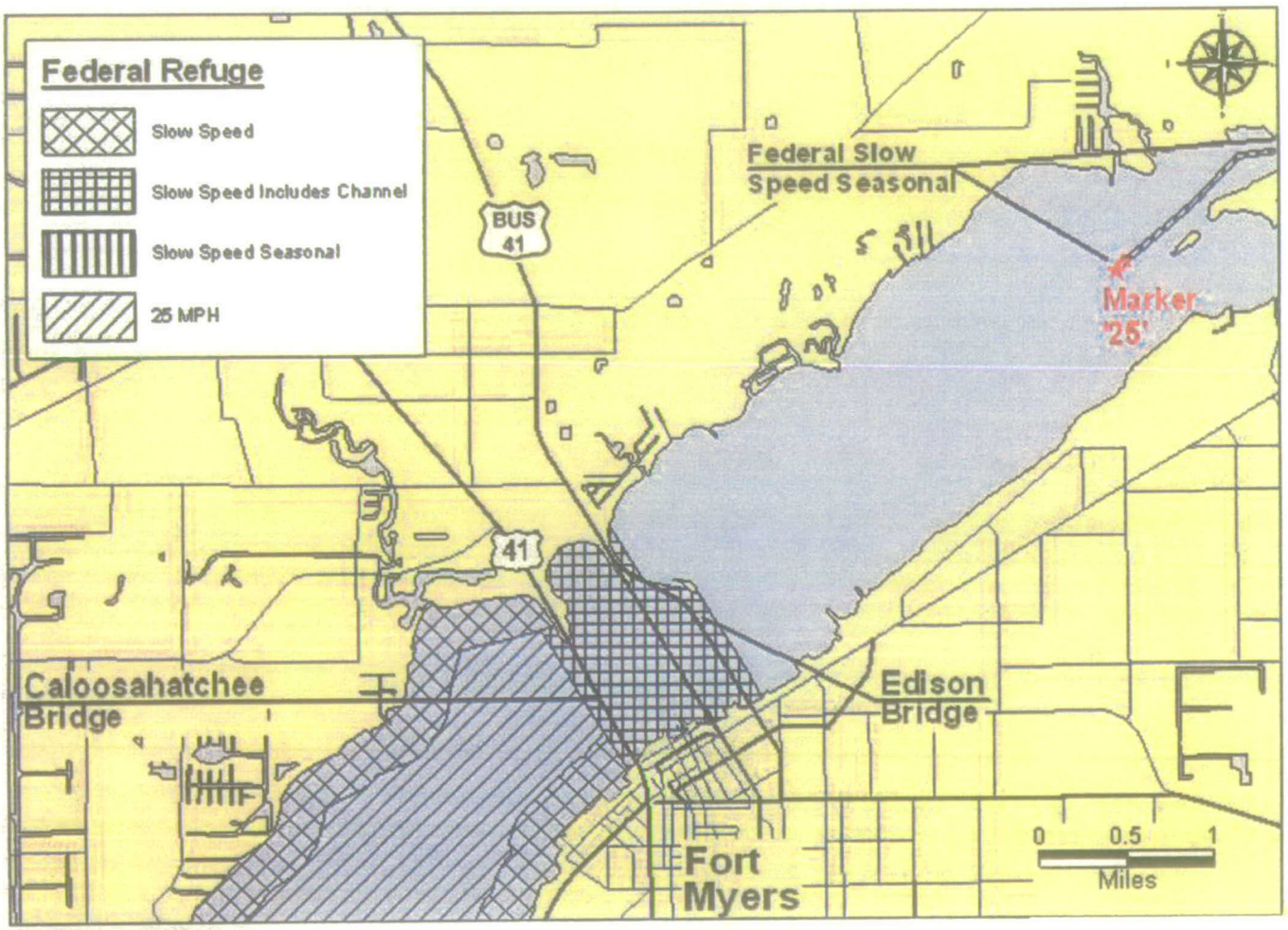
FIGURE 15. FEDERAL BOAT SPEED ZONES - CONTINUED



Midpoint Memorial Bridge Federal Refuge

Source: FWC

FIGURE 15. FEDERAL BOAT SPEED ZONES - CONTINUED



Edison Bridge Federal Refuge

Source: FWC

Figure 16. Lands acquired by Lee County Conservation 2020 program

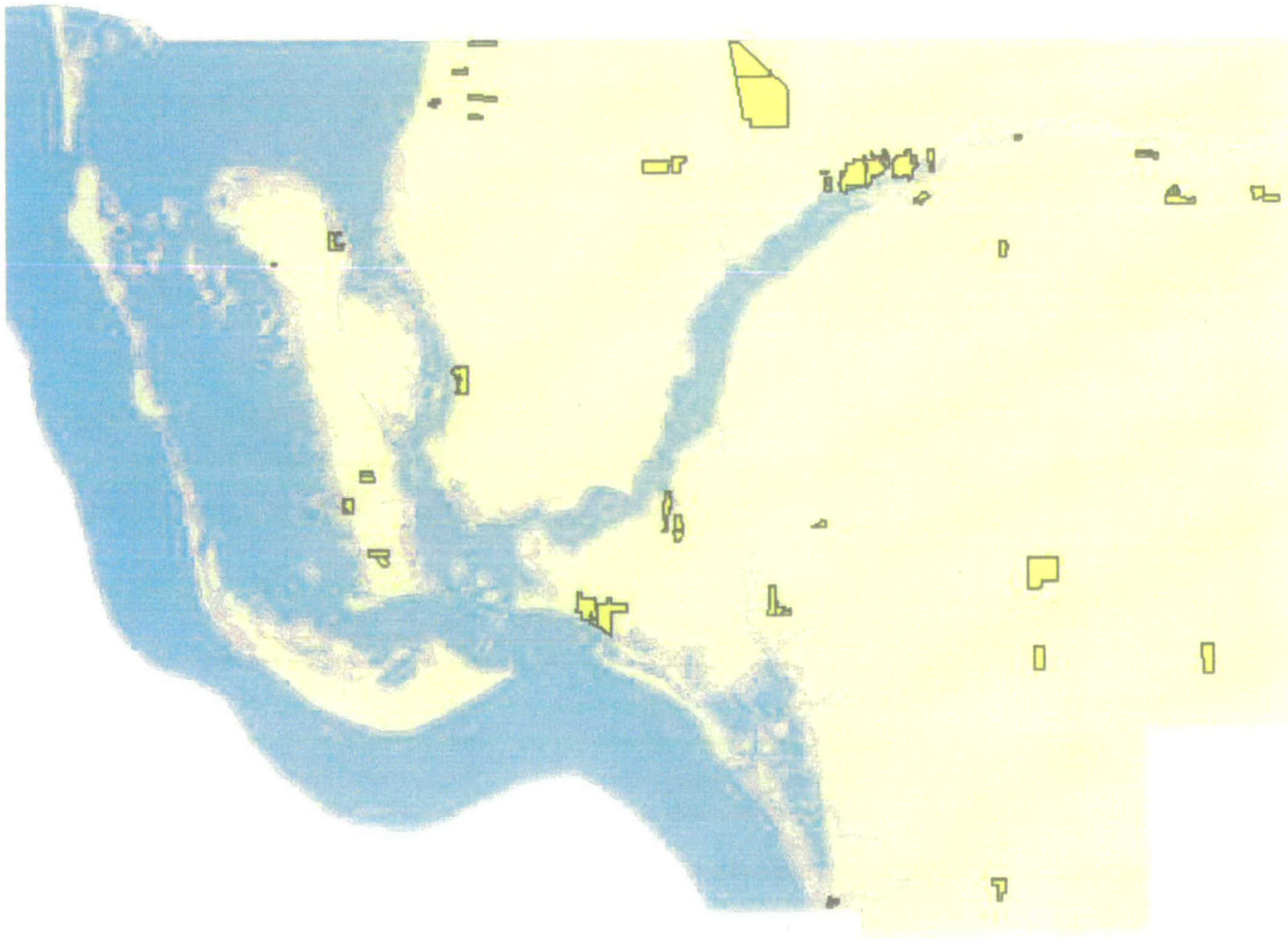


Figure 17. Caloosahatchee Creeks Preserve. Main parcel acquired by Lee County on December 2000.

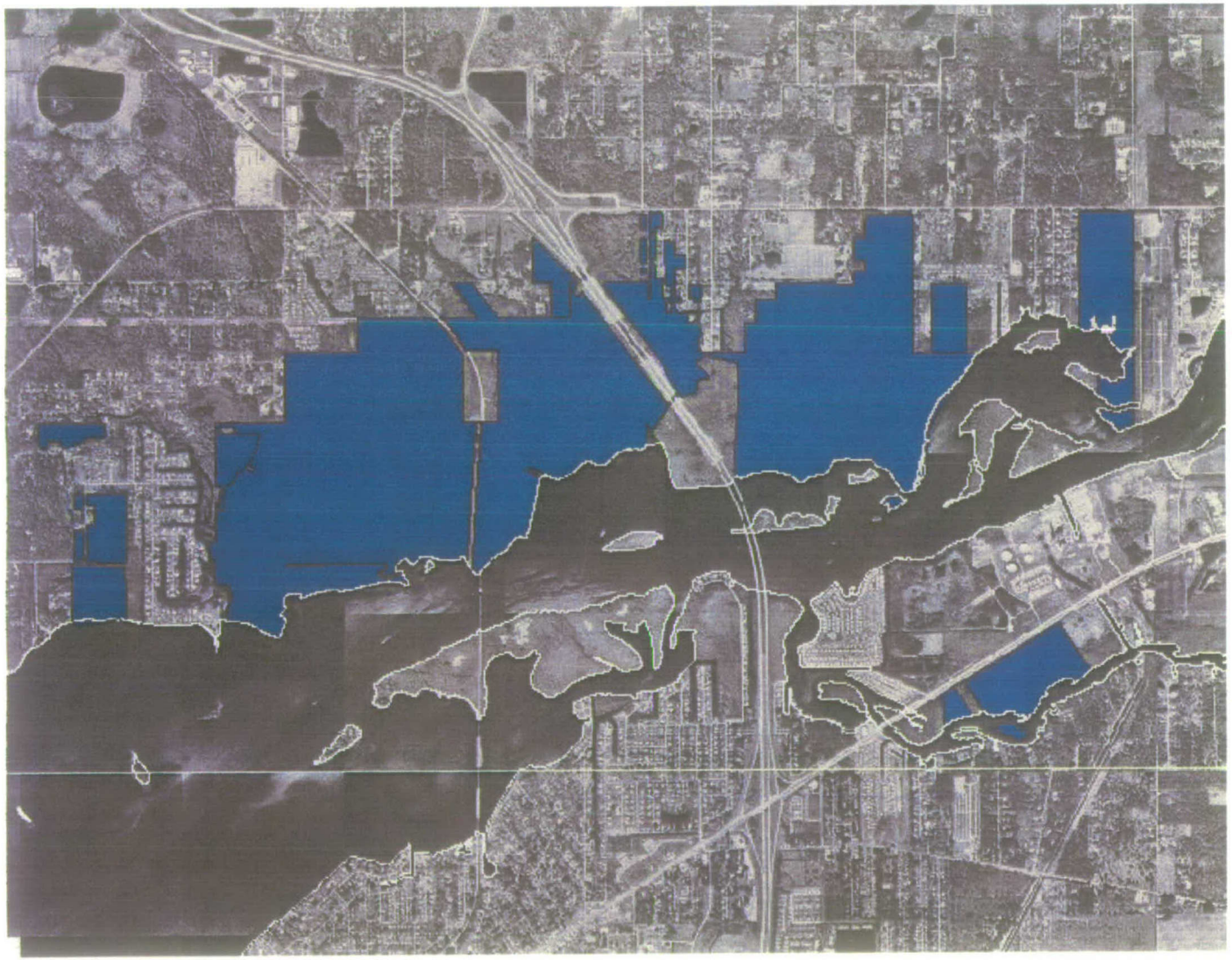


Figure 18. Conservation land holdings in Lee County as of August 2002.

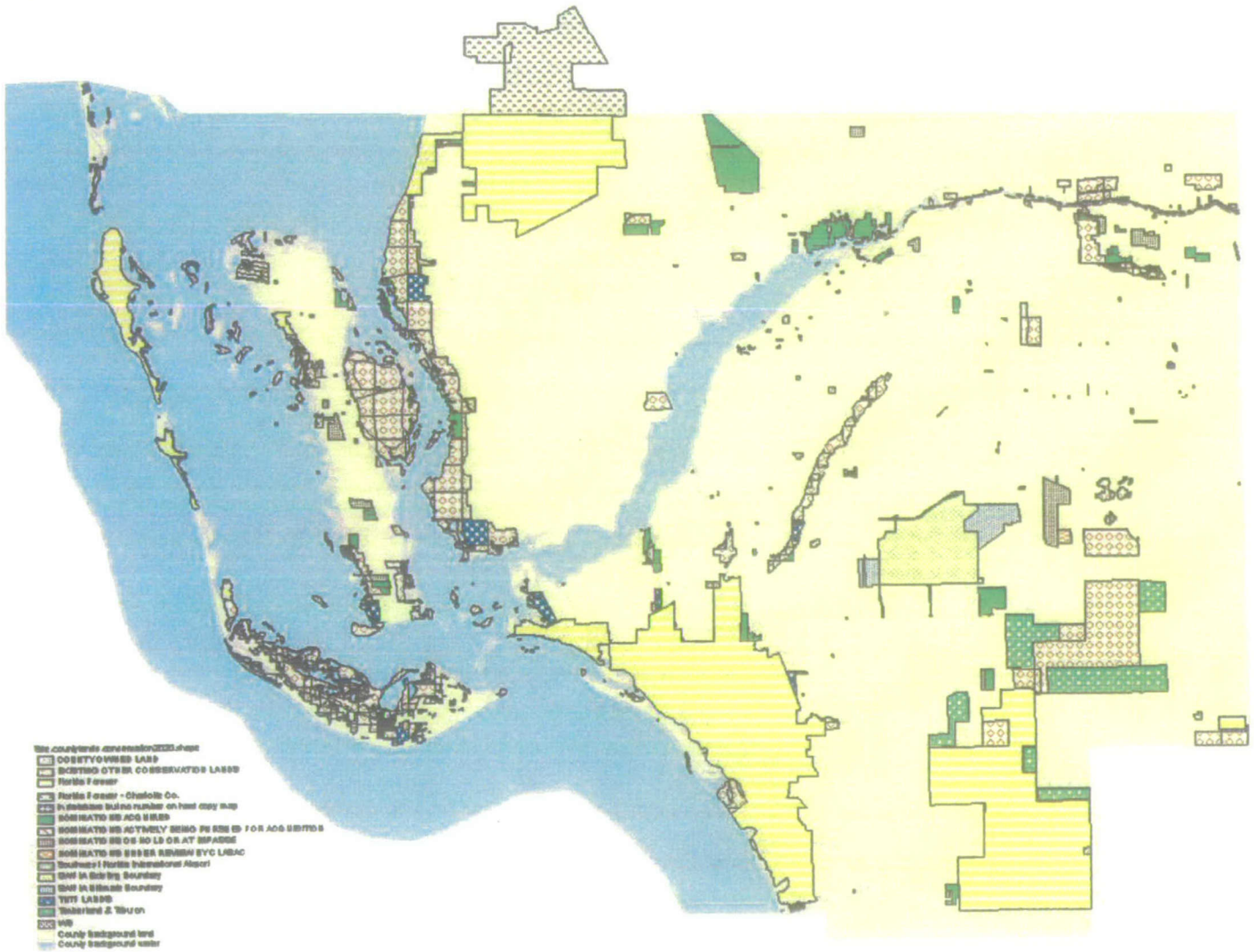


Figure 19. Regionally Significant Natural Resources

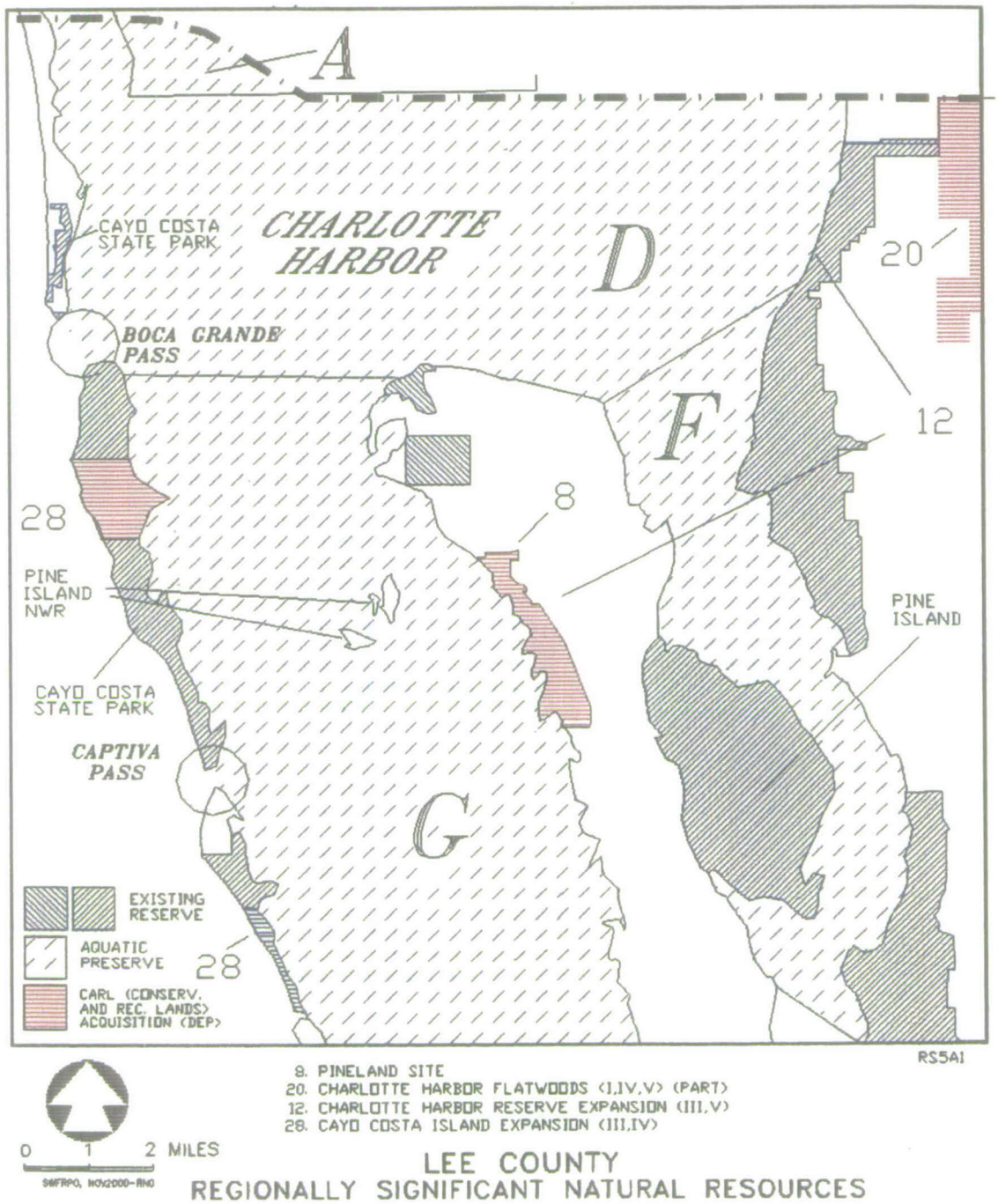
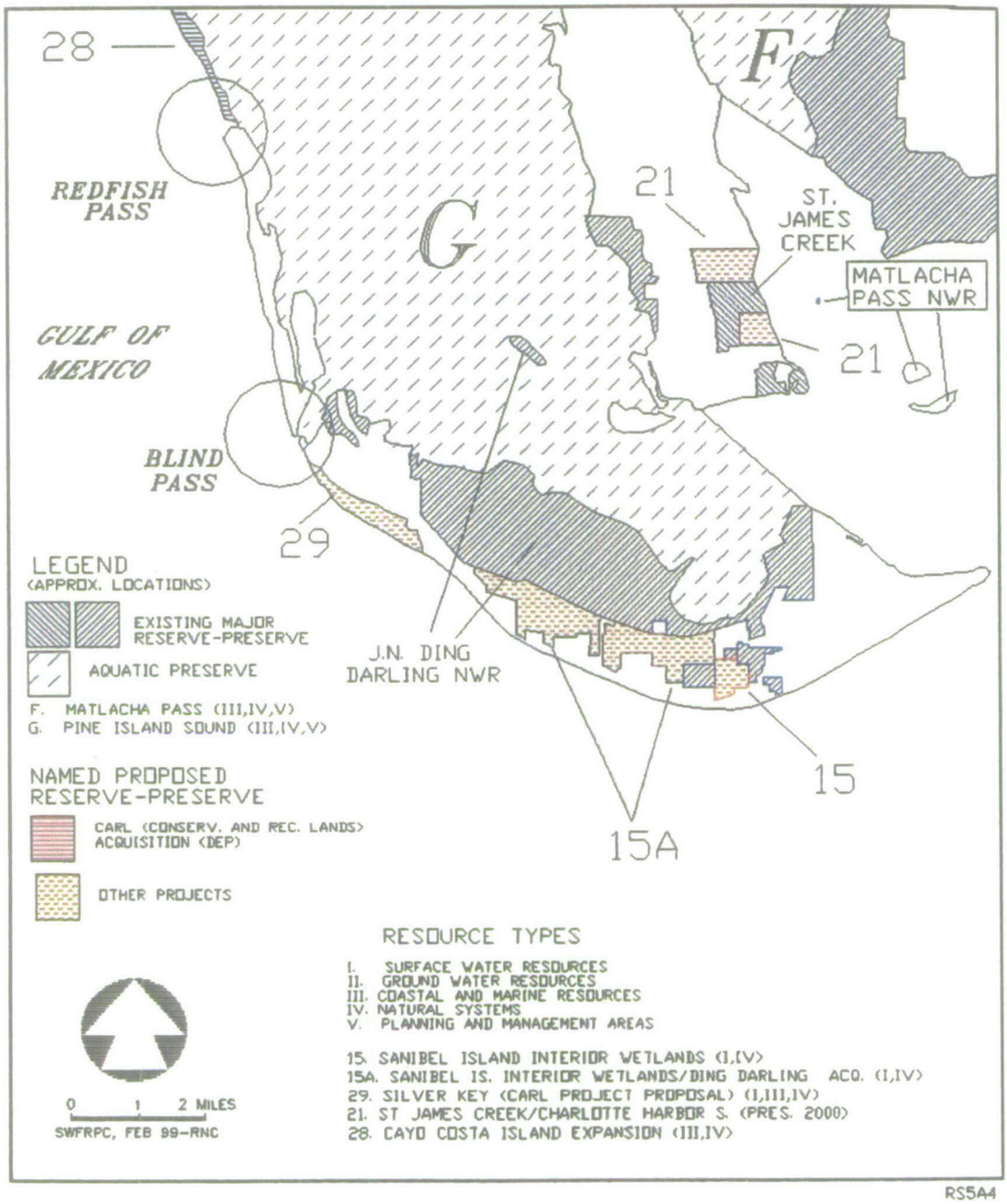
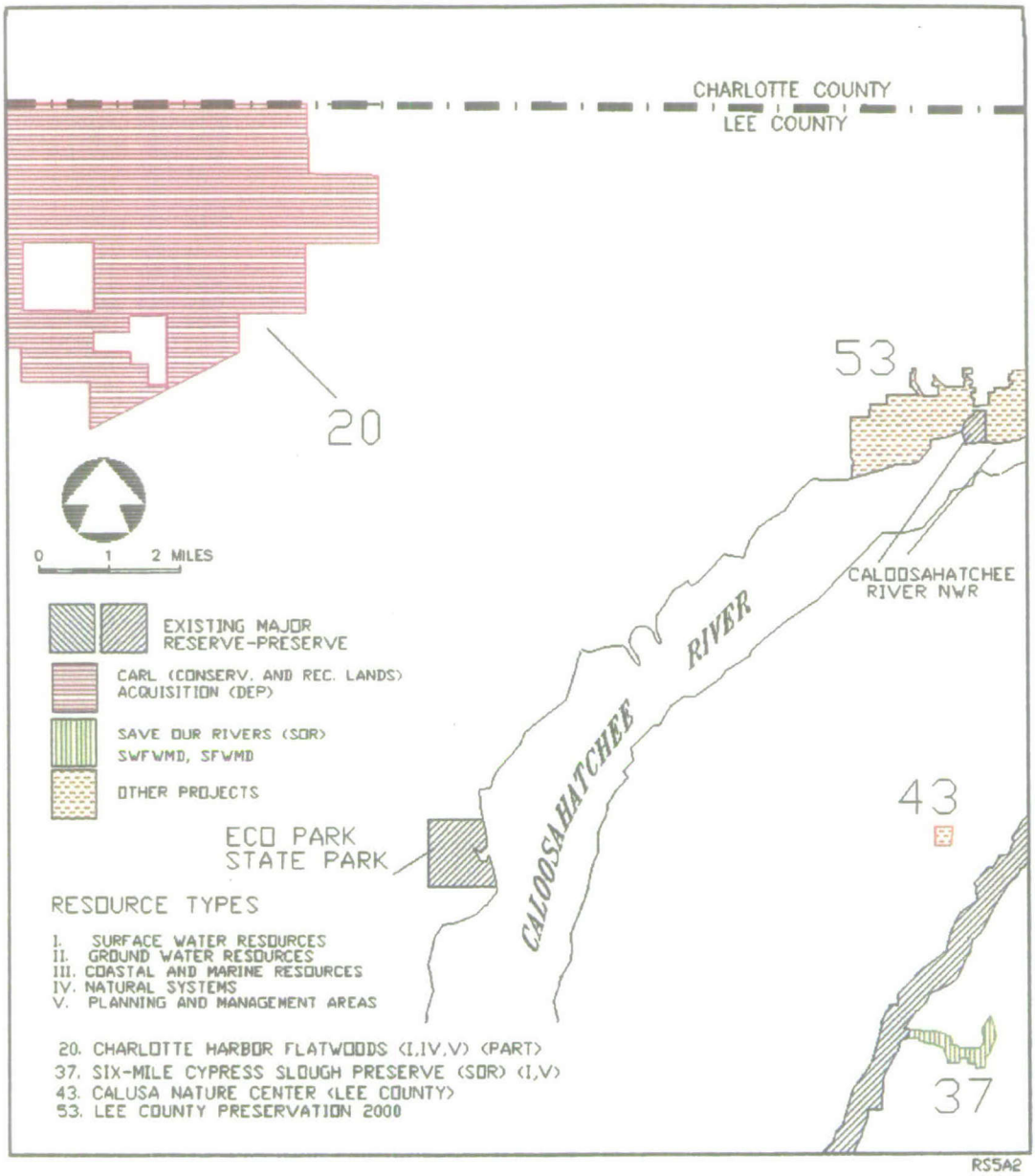


Figure 19. Regionally Significant Natural Resources Continued



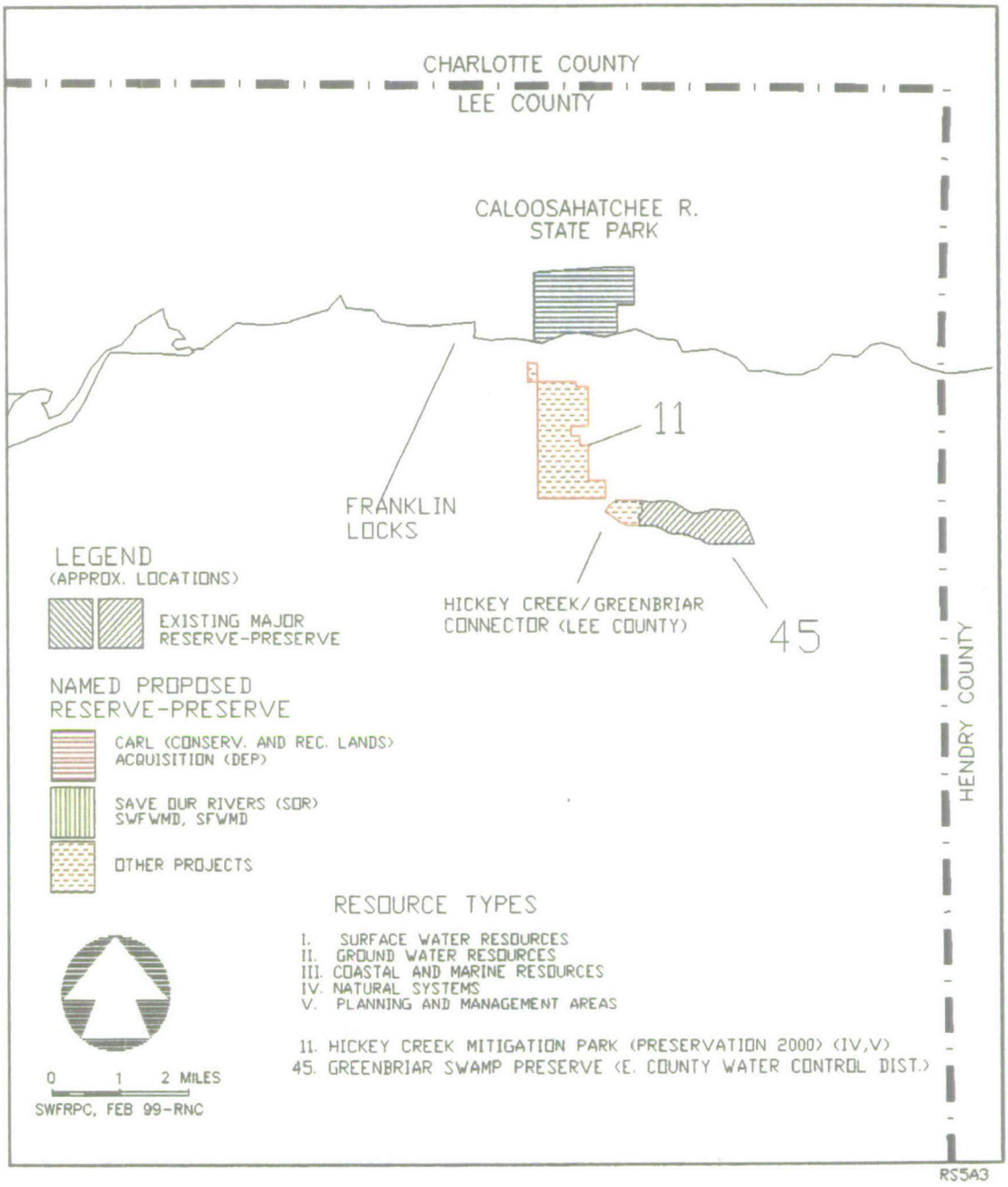
LEE COUNTY
REGIONALLY SIGNIFICANT NATURAL RESOURCES

Figure 19. Regionally Significant Natural Resources Continued



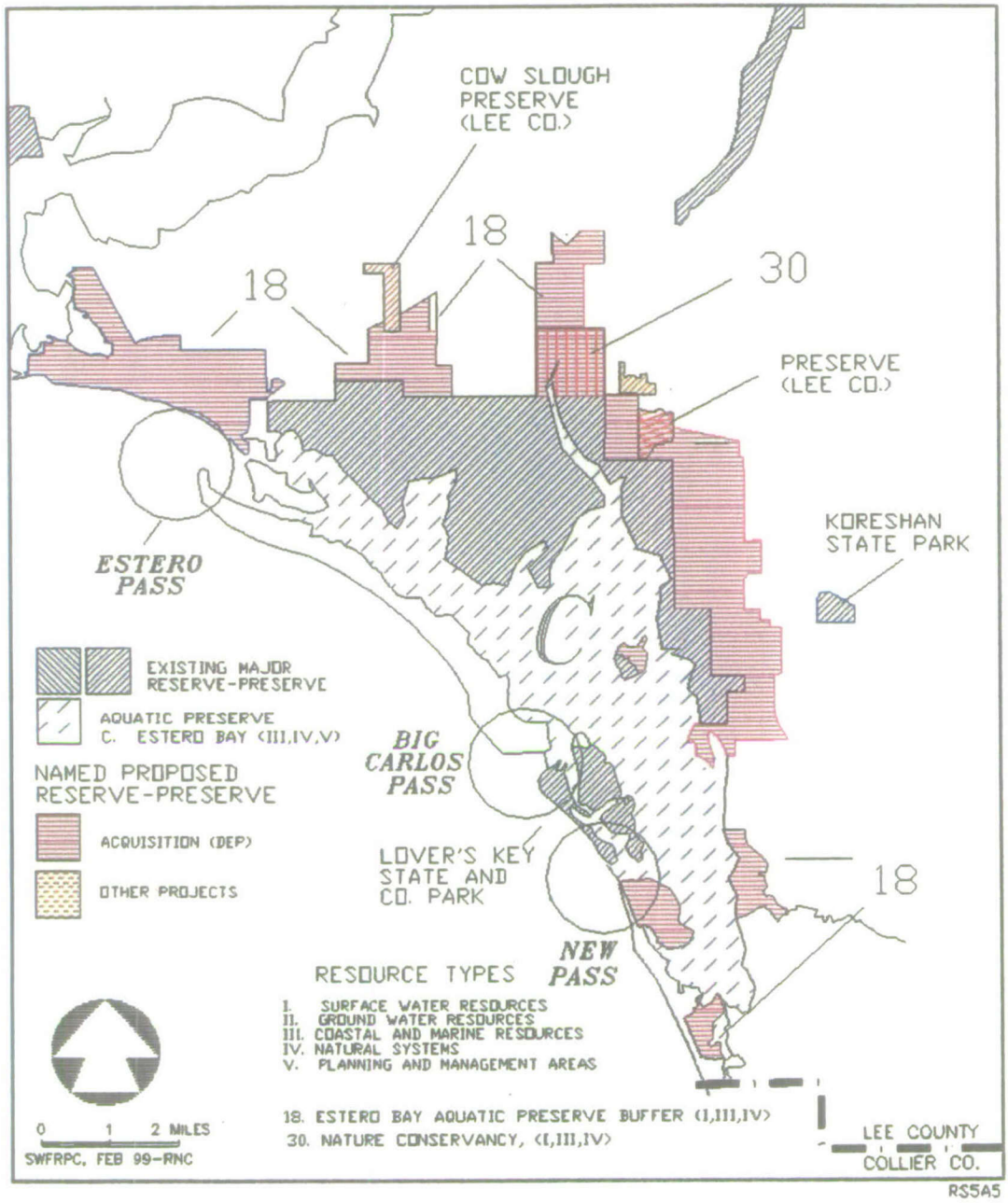
LEE COUNTY
REGIONALLY SIGNIFICANT NATURAL RESOURCES

Figure 19. Regionally Significant Natural Resources Continued



LEE COUNTY
REGIONALLY SIGNIFICANT NATURAL RESOURCES

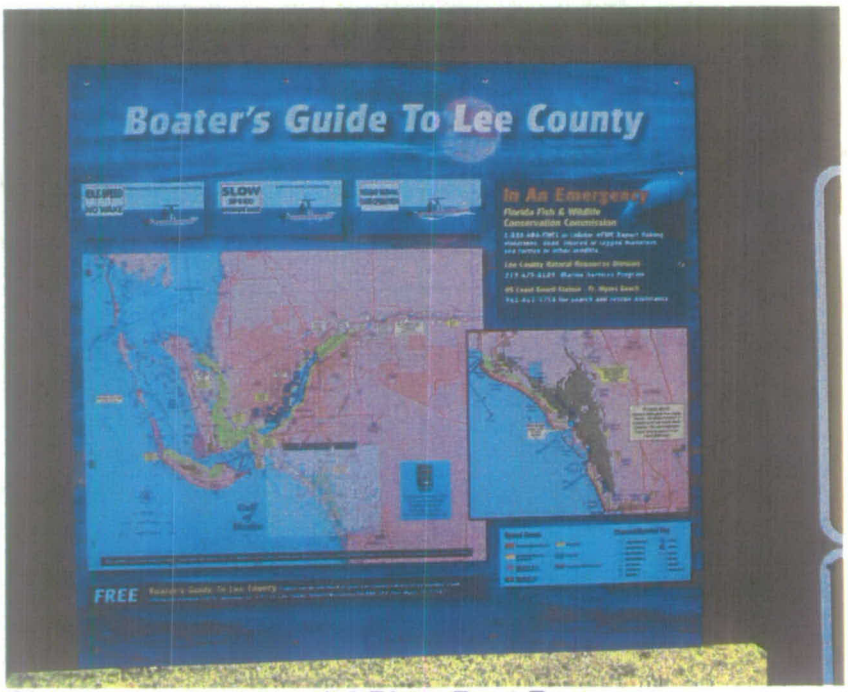
Figure 19. Regionally Significant Natural Resources Continued



LEE COUNTY
REGIONALLY SIGNIFICANT NATURAL RESOURCES

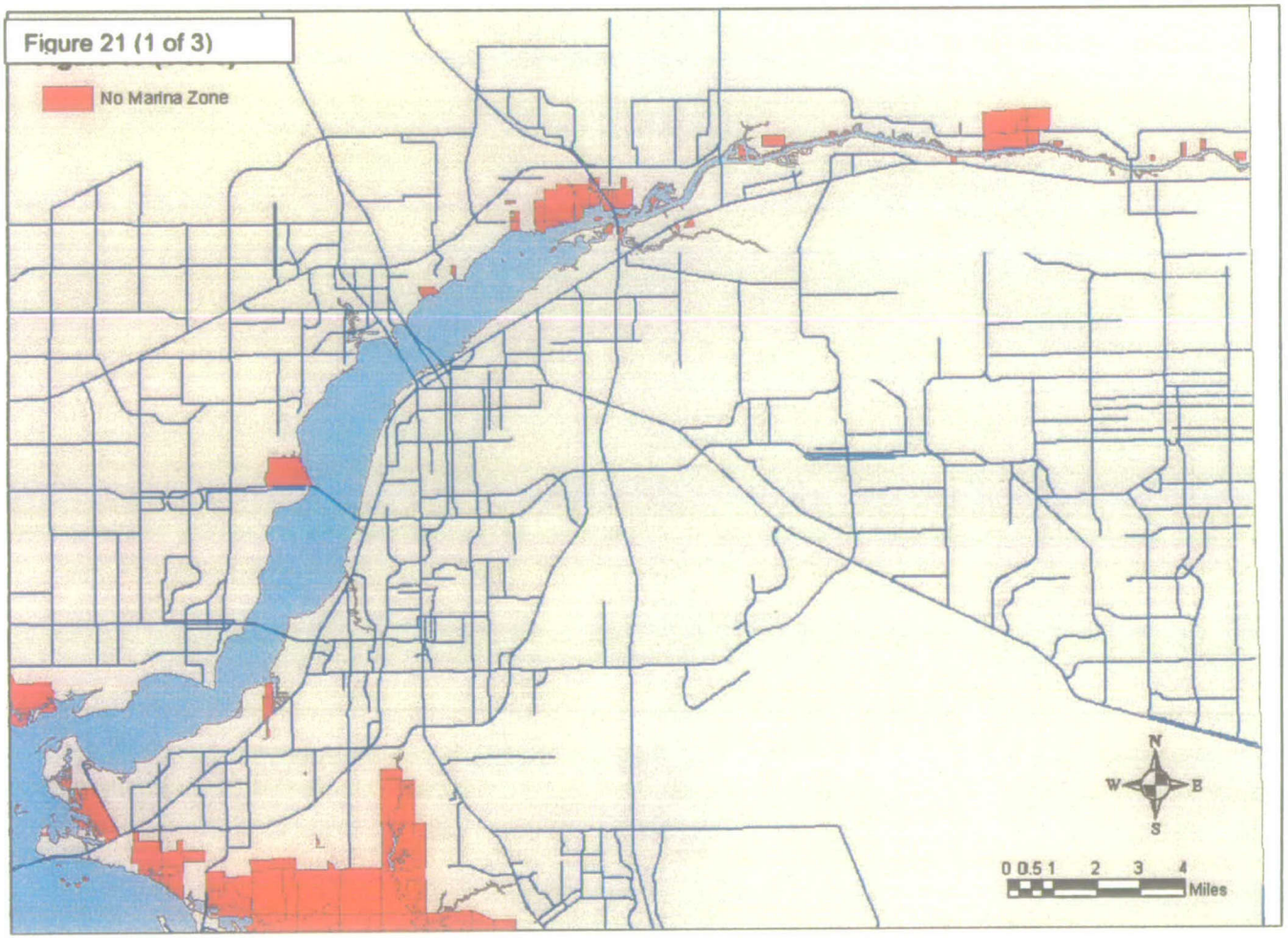
Figure 20. Boat Ramp Signage

Sign located at Centennial Park Boat Ramp.



Sign Located at Imperial River Boat Ramp

Figure 21. No Marina Areas



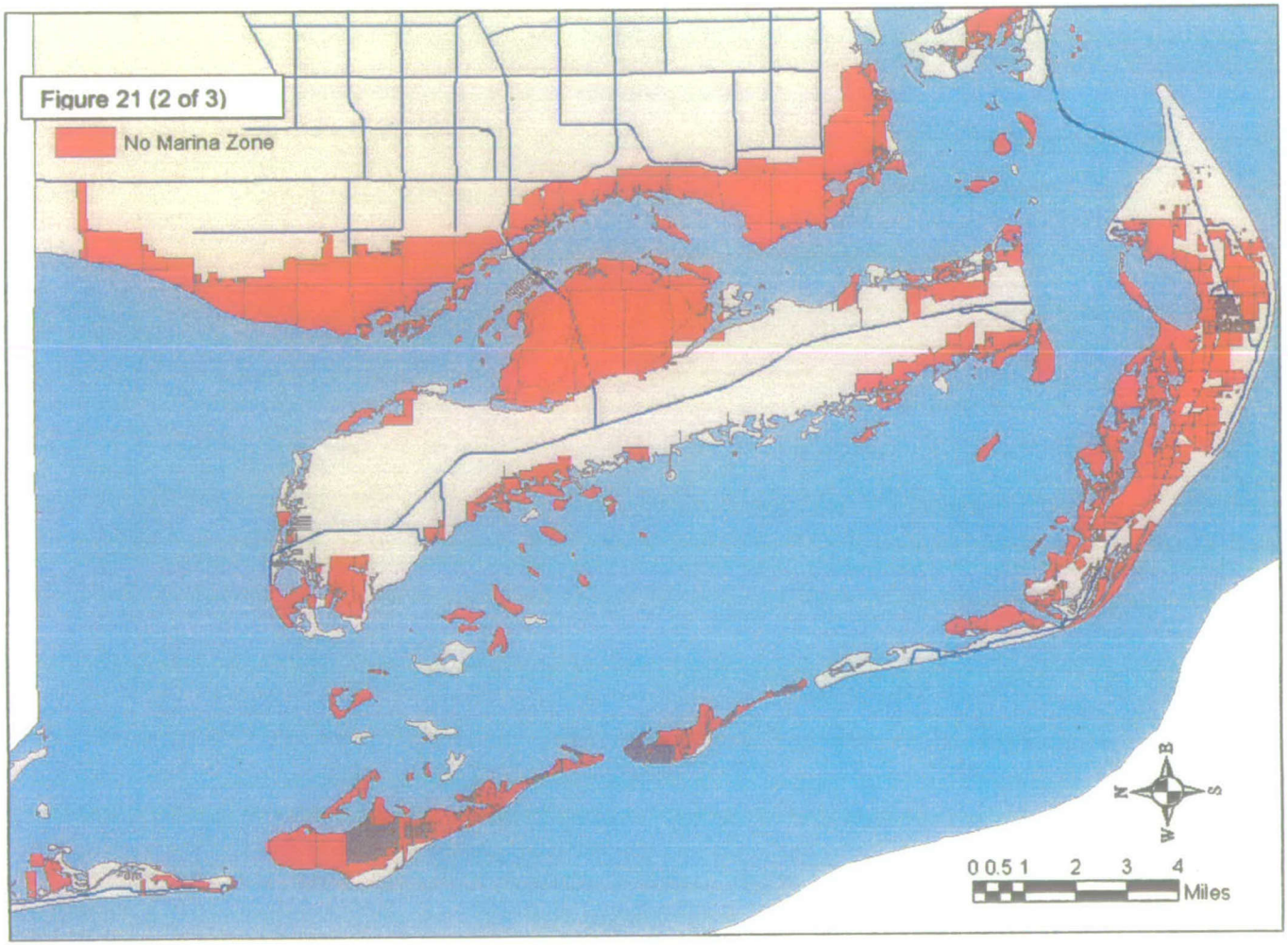


Figure 21 (2 of 3)
No Marina Zone
W
E
N
S
0 0.5 1 2 3 4
Miles

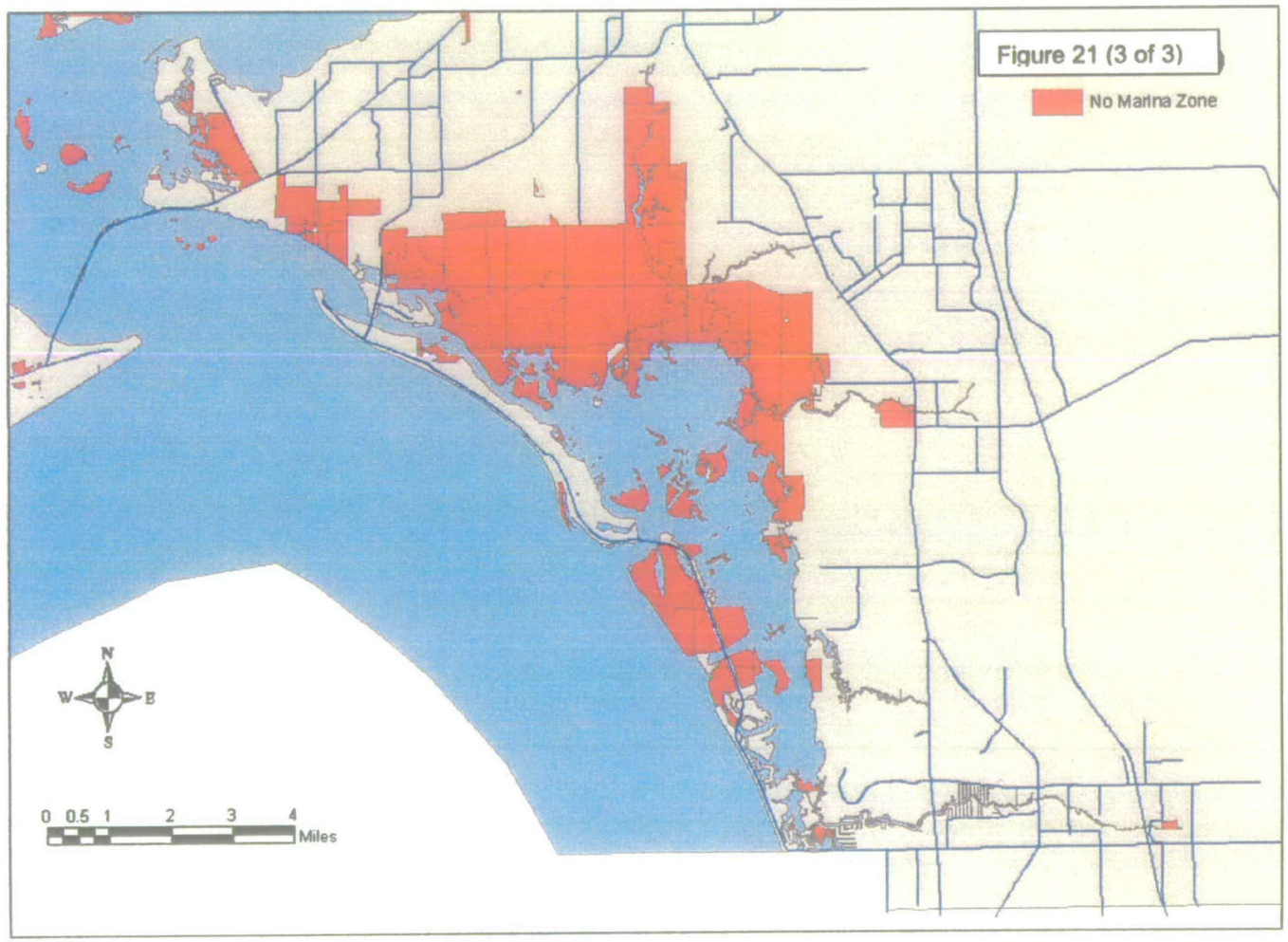
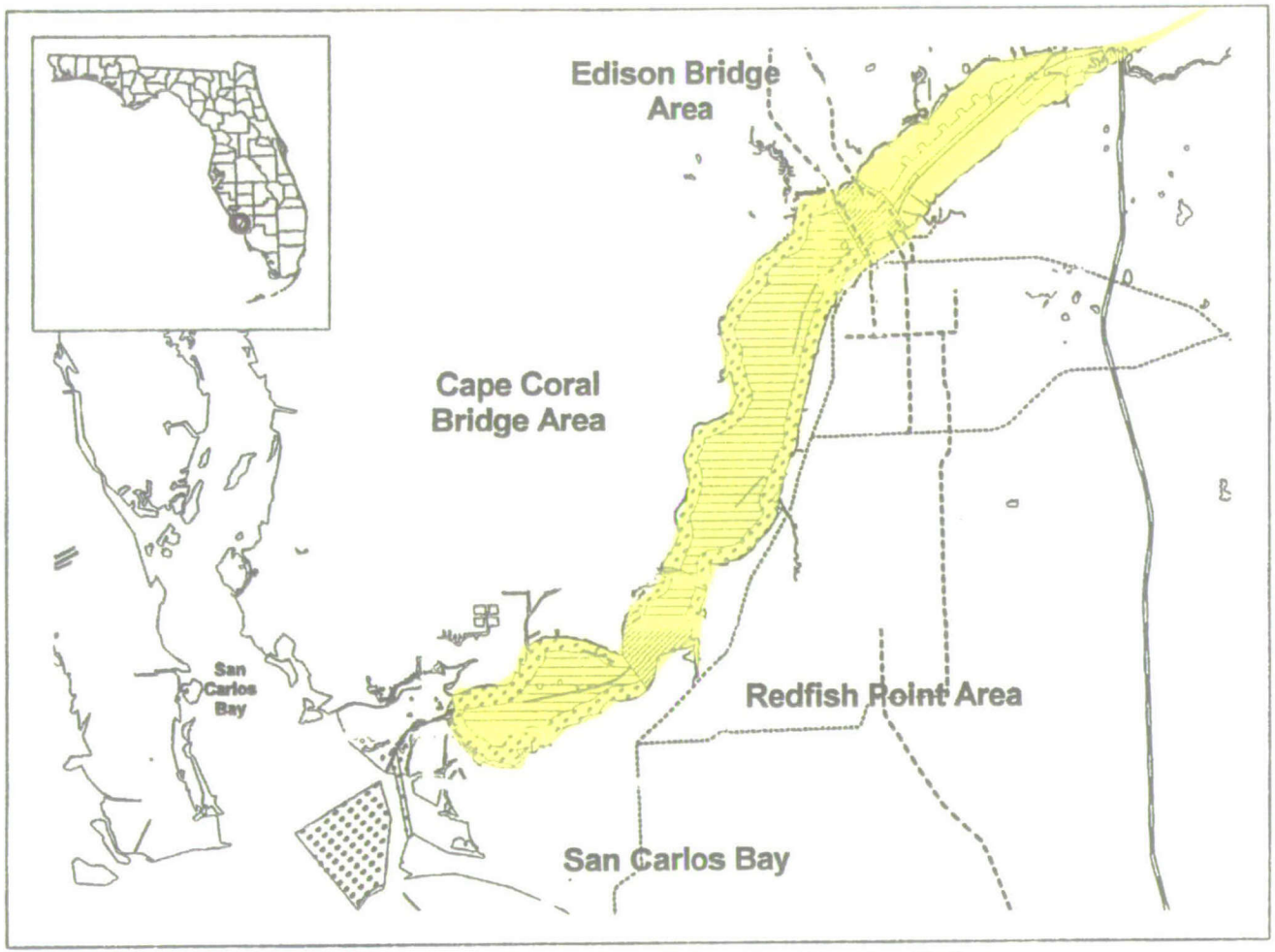


Figure 21 (3 of 3)
No Marina Zone
N
W
E
S
0 0.5 1 2 3 4
Miles

Figure 22. Areas of Special Concern



Caloosahatchee River - San Carlos Bay Manatee Refuge

Figure 22. Areas of Special Concern

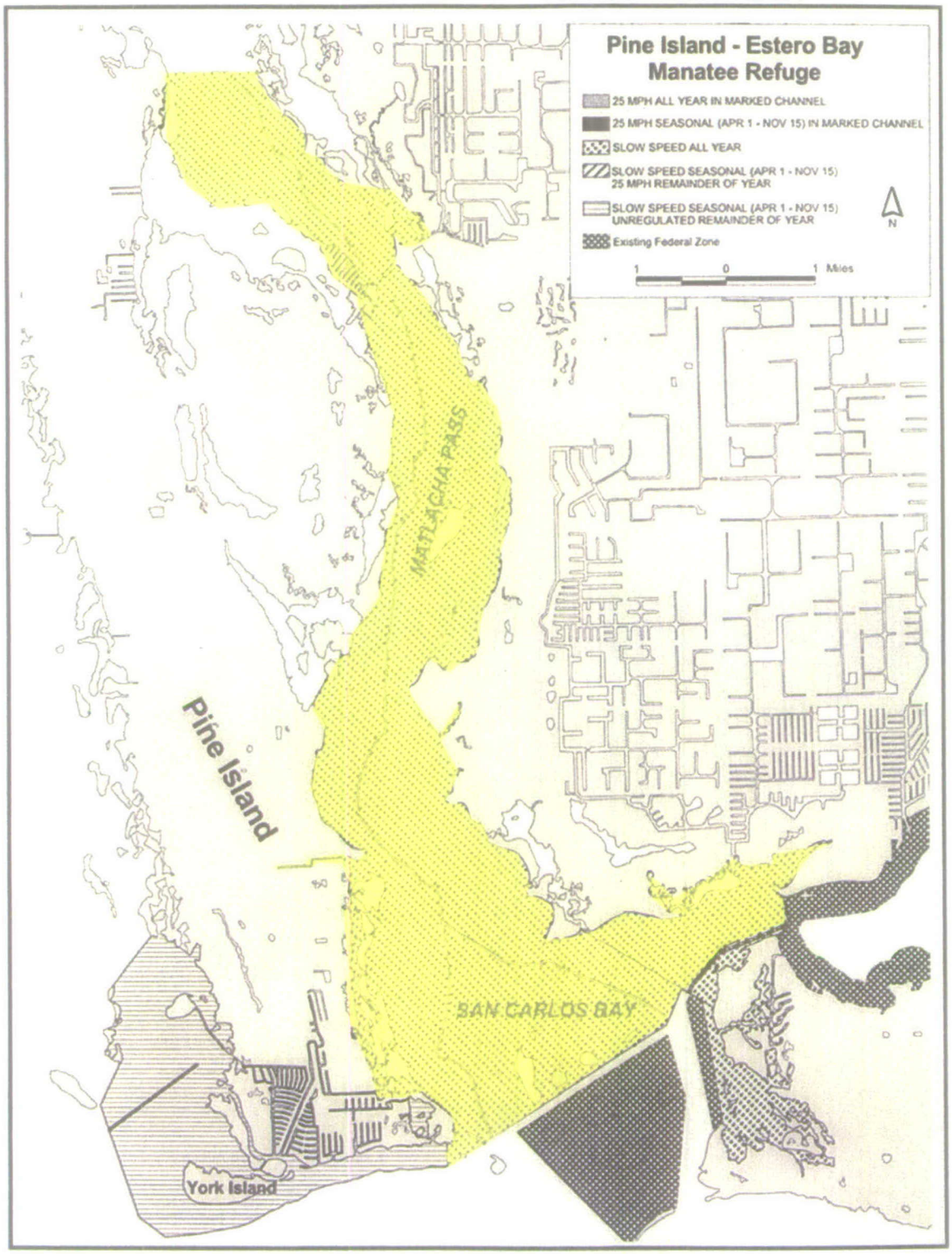


TABLE 1. LEE COUNTY MANATEE MORTALITY BY TYPE, 1976 – 2002

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
76	4	1			2			1
77	11	2			2			7
78	9	2					2	5
79	4			1	1		1	1
80	7	2			2		1	2
81	19	4		1	3		4	7
82	48	3			1		38	6
83	15	1		1	4		3	6
84	19	1			6		2	10
85	16	5			4		3	4
86	15	3			2	1		9
87	10	3			2		1	4
88	19	8			5	1	1	4
89	16				5		2	9
90	27	5			6	2	4	10
91	18	7			6		2	3
92	19	2		1	4		3	9
93	17	5		1	5		3	3
94	33	10		1	9		4	9
95	31	8		1	9		6	7
96	145	14			7	5	45	74
97	43	9			7	1	14	12
98	31	9	0	3	8	1	5	5
99	33	10	1	1	6		6	9
00	44	13	0	1	8	1	11	10
01	51	23	0	0	6	5	4	13
02	58	13	0	2	9	5	16	16
Totals:	**762**	**163**	**1**	**14**	**129**	**22**	**181**	**252**

Source: Florida Fish and Wildlife Conservation Commission, Florida Marine Research Institute (FMRI)

TABLE 2. MANATEE MORTALITY BY COUNTY, 1976 – 2002

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bay	3			1		2		
Brevard	869	207	14	14	233	50	100	250
Broward	134	48	6	5	32	4	4	35
Charlotte	170	42	0	1	21	4	45	57
Citrus	130	31	1	5	56	0	17	20
Clay	42	11	0	1	9	8	1	12
Collier	409	114	0	6	57	19	62	151
Dade	214	42	69	29	15	1	12	46
DeSoto	9	0	0	1	5	0	1	2
Dixie	16	4	0	0	4	0	2	6
Duval	270	92	0	8	28	25	23	94
Flagler	40	6	0	1	21	2	5	5
Franklin	6	0	0	1	0	1	0	4
Gilchrist	2	0	0	0	2	0	0	0
Glades	86	27	28	5	3	0	6	17
Gulf	3	0	0	0	0	1	1	1
Hendry	6	3	0	0	0	0	1	2
Hernando	5	2	0	0	3	0	0	0
Hillsborough	134	39	2	5	34	2	16	36
Indian River	91	27	0	0	30	4	10	20
Lake	12	6	0	1	4	0	0	1
Lee	762	163	1	14	129	22	181	252
Levy	50	3	2	1	30	1	2	11
Manatee	82	17	0	0	27	6	10	22
Martin	144	41	27	2	28	2	12	32
Monroe	146	26	0	1	10	2	11	96
Nassau	29	4	0	0	1	2	4	18
Okaloosa	2	0	0	0	0	1	0	1
Okeechobee	16	0	12	0	3	0	0	1
Palm Beach	129	50	1	8	17	3	21	29
Pasco	16	3	0	2	5	0	2	4
Pinellas	84	16	0	0	24	7	14	23
Putnam	58	10	10	2	4	3	2	27
Santa Rosa	1	0	0	0	0	1	0	0
Sarasota	127	31	0	0	28	2	35	31

Seminole	5	0	0	0	3	0	0	2
St. Johns	55	10	0	0	4	5	6	30
St. Lucie	64	17	0	2	8	3	11	23
Taylor	6	2	0	0	0	0	0	4
Volusia	205	60	0	5	80	6	7	49
Wakulla	3	1	0	0	1	1	0	0
Totals:	**4635**	**1155**	**173**	**122**	**959**	**190**	**624**	**1412**

Source: Florida Fish and Wildlife Conservation Commission, Florida Marine Research Institute (FMRI)

TABLE 3. COMPARISON OF PERCENTAGE OF MORTALITIES IN LEE COUNTY AND THE STATE

January 1976 through December 2002

Mortality Type	Lee County	Statewide
Watercraft Related	21.4%	24.9%
Flood Gate/Control Lock	<1%	3.7%
Other Human	<1%	2.6%
Perinatal	16.9%	20.7%
Cold Stress	2.9%	4.1%
Other Natural	23.8%	13.5%
Undetermined	33.1%	30.5%

Source: Florida Fish and Wildlife Conservation Commission, Florida Marine Research Institute (FMRI)

TABLE 4. COMPARISON OF GENERAL MORTALITIES FOR LEE COUNTY AND STATEWIDE

January 1976 through December 2002

General Type	Lee County	Statewide
Human Related	23.4%	31.3%
Natural*	43.6%	38.3%
Undetermined	33.1%	30.5%

*Perinatal deaths are included in the Natural General Type category.

SOURCE: FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, FLORIDA MARINE RESEARCH INSTITUTE (FMRI)

TABLE 5. POPULATION TRENDS IN LEE COUNTY

Total Population of Lee County 1990 to 2000 (estimates)	
1990	335,113
1991	334,032
1992	350,809
1993	357,550
1994	367,410
1995	376,702
1996	383,706
1997	394,958
1998	404,000
1999	412,976
2000	440,888
2001	454,918
2002	475,073
2005 projection	507,346
2010 projection	565,703
2015 projection	621,573

SOURCE: LEE COUNTY HEALTH DEPARTMENT, 1990-1999; LEE COUNTY ECONOMIC DEVELOPMENT DEPARTMENT, 2000-2015.

TABLE 6. INVENTORY OF MARINAS AND RAMPS

Map Number	Name/Type	Wet Slips	Dry Slips	Car Parking	Trailer Parking	Launch Lanes
100	Admiralty Yacht Club	Y	N	Y	Y	0
30	Adventures in Paradise Port Sanibel Marina	Y	Y	Y	Y	1
101	Alva Supply & Marina	Y	Y	Y	N	0
	Back Bay Marina of SW Florida	Y	Y	Y	N	0
88	Bay Pointe Yacht & Racquet Club	Y	N	Y	N	0
11	Big Hickory Fishing Nook Marina	Y	N	N	N	0
102	Boardwalk Caper Community Services	Y	N	N	N	0
50	Bocilla Island Club	Y	N	Y	Y	1
54	Burnt Store Marina					
45	Cabbage Key, Inc.	Y	N	N	N	0
	Cape Coral Yacht & Racket Club	Y	N	Y	Y	2
	Cape Harbour Marina	Y	Y	Y	N	2
32	Castaway's Marina	Y	N	N	Y	1
89	Centennial Harbor	Y	N	Y	N	0
28	Compass Rose Marina	Y	Y	Y	N	0
	D & D Marina	Y	N	Y	Y	1
19	Deebold's Marina	Y	N	Y	N	0
81	Deep Lagoon Boat Club Ltd.	Y	Y	Y	N	0
106	Dolphin Marina	N	Y	N	N	0
	Dumont Marine	Y	Y	Y	N	0
	Everest Marina	N	Y	Y	N	0
59	Fish Tail @ Caloosa Isle Marina	Y	Y	Y	N	0
92	Four Wind Marina	Y	Y	Y	N	0
23	Ft. Myers Beach Marina	Y	Y	Y	N	0
20	Getaway Marina	Y	N	Y	N	0
9	Green Flash	Y	N	N/A	N	0
93	Gulf Harbor Yacht & Country Club	Y	N	Y	N	0
81	Gulfwind-Deep Lagoon Marina	Y	Y	Y	Y	5
71	Hansen Marina Ways	Y	Y	Y	Y	1
53	Harbor Hideway	Y	Y	Y	Y	1
95	Harbour Isles Yacht & Racquet Club	Y	N	Y	N	0
49	Inn Marina	Y	Y	Y	N	0
21	Island Bay Marina	Y	N	Y	N	0

5	Island Hardware & Marine Supply	Y	Y	Y	N	0
41	jack's Marina South	Y	Y	Y	N	0
8	Jensen's Twin Palms Resort & Marina	Y	N	Y	N	0
52	Jug Creek Marina	Y	N	Y	N	1 Not In Use
77	Landings Yacht & Golf Club	Y	Y	Y	N	1
70	Manatee World Inc DBA Coastal Marine Mart	Y	N	Y	N	1
63	Marinatown Marina	Y	N	Y	N	0
110	Marine Fisherman's Supply Inc.	Y	N	N/A	N	0
111	Mariner's Lodge & Marina	Y	N	N	N	0
25	Mid Island Marina	Y	N	Y	N	0
48	Miller's Marina, Inc.	Y	N	Y	N	0
24	Moss Marine of Ft. Myers Beach	Y	Y	Y	N	0
14	Mullock Creek	Y	Y	Y	Y	1
6	North Captiva Island Club	Y	N	N	N	0
97	Olde Fish House Marina	Y	N	Y	Y	1
29	Olsen Marine Service	N	N	Y	N	0
39	Owl Creek Boat Works & Storage	Y	Y	Y	N	0
58	Paradise Yacht Club	Y	N	Y	N	0
82	Peppertree Pointe Marina	Y	Y	Y	Y	1
51	Pineland Marina	Y	Y	Y	Y	2
	Port Sanibel Marina	Y	Y	N	Y	1
98	Rialto Harbor	Y	N	Y	N	0
61	Royal Palm Yacht Club	Y	N	Y	N	1
31	Salty Sam's Marina	Y	Y	Y	Y	1
37	Sanibel Harbour Marina	N	Y	Y	N	0
35	Sanibel Marina	Y	N	Y	Y	1
62	Scotties North Bay Marina	Y	N	Y	N	0
7	South Seas Plantation & Yacht Harbour	Y	N	Y	N	1
94	St. Charles Harbour & Yacht Club	Y	N	Y	N	0
69	Sweetwater Landing (former Marina 31)	Y	Y	Y	Y	1
3	Tarpon Point	Y	N	Y	N	0
10	Tween Waters Marina	Y	N	Y	N	1
99	Useppa Island Club	Y	N	N	N	0
	Viking Marina	N	Y	Y	Y	2
47	Whidden's Marina	Y	N	Y	N	0
4	York Road Marina	Y	Y	Y	N	0

	PUBLIC BOAT RAMPS					
38	Alva	0	0	0	20	1
	Burnt Store	0	0	n/a grass	20	2
	Cape Coral Yatch Club	0	0	56+	10/ 24trailer	2
18	Carl Johnson	0	0	n/a grass	38+	4
	Centennial Park	0	0	34	10	2
	Chantry Canal					
	Davis Blvd	0	0	2	11	1
44	Franklin Locks -N	0	0	0	19	2
43	Franklin Locks -S	0	0	40+	33	1
	Horton Park	0	0	0	32	2
13	Imperial River	0	0	10	41	4
65	Judd Park	0	0	39	1	1
56	Matlacha Park	0	0	55	33	2
36	Punta Rassa	0	0	21	37	4
34	Sanibel Island	0	0	7	37	2

TABLE 7. SUMMARY OF BOAT FACILITIES

LEE COUNTY MOORING INVENTORY		
Table 7a: SINGLE FAMILY		
Sea Grant Data 1/29/99-11/8/2001		
SINGLE FAMILY	Anchorage	3
SINGLE FAMILY	Beached/Blocked	2,615
SINGLE FAMILY	Davits	4,052
SINGLE FAMILY	Dry Stack	18
SINGLE FAMILY	Float/Ramp	362
SINGLE FAMILY	Hoist	10,783
SINGLE FAMILY	Mooring	72
SINGLE FAMILY	None	3
SINGLE FAMILY	Other	4
SINGLE FAMILY	Ramp	358
SINGLE FAMILY	Seawall	1,233
SINGLE FAMILY	Trailer	1,442
SINGLE FAMILY	Wet Slip	16,323
Total		37,268

LEE COUNTY MOORING INVENTORY			
Table 7b: FACILITIES OTHER THAN SINGLE FAMILY			
Sea Grant Data 1/29/99-11/8/2001			
3301 DEL PRADO ASSOCIATES	Restaurant/Shop	Wet Slip	1
46 DOCKSIDE CONDO ASSOC	Multi-Family	Wet Slip	6
A C L RR CO	Multi-Family	Beached/Blocked	1
A C L RR CO	Multi-Family	Ramp	1
ADMIRALS QUARTERS CONDO	Multi-Family	Wet Slip	3
ADMIRALS WALK CONDO	Multi-Family	Wet Slip	4
ADMIRALS WALK CONDO ASSOC	Multi-Family	Hoist	1
ADMIRALS WALK CONDO ASSOC	Multi-Family	Wet Slip	5
ADMIRALTY YACHT CLUB II PT 1+2	Multi-Family	Wet Slip	39
AGARDY BEVERLY TR	Multi-Family	Wet Slip	28
ALBANESE JOSEPH	Multi-Family	Seawall	1
ALBANESE JOSEPH	Multi-Family	Wet Slip	3
ALCORN TERRY F + LOUISE	Multi-Family	Wet Slip	3
ALEXANDER CLIFF R TR	Multi-Family	Hoist	2
AMTEL GROUP OF FL INC	Multi-Family	Wet Slip	2
AMTEL GROUP OF FLORIDA INC	Club	Float/Ramp	2
AMTEL GROUP OF FLORIDA INC	Club	Wet Slip	2
ANCHORAGE CONDO	Multi-Family	Wet Slip	24
ANDERSEN LEIGH ANNE	Restaurant/Shop	Trailer	1
ANDERSEN LEIGH ANNE	Restaurant/Shop	Wet Slip	1
ANGLERS PARADISE OF	Multi-Family	Ramp	1
ANGLERS PARADISE OF	Multi-Family	Trailer	1
ANGLERS PARADISE OF	Multi-Family	Wet Slip	52
ANIRON CONDOMINIUM	Multi-Family	Wet Slip	2
ANNA MARIA CONDO PH I	Multi-Family	Wet Slip	9
ANNA MARIA CONDO PH II	Multi-Family	Wet Slip	1
ANTLITZ W + ERIKA E	Industrial	Trailer	15
ANTLITZ W + ERIKA E	Industrial	Wet Slip	1
ANTONI RICHARD + SANDRA	Multi-Family	Hoist	1
ANULLI ETTORE C + PATRICE A	Multi-Family	Wet Slip	1
AQUA VISTA CONDOMINIUM	Multi-Family	Wet Slip	4
ARMSTRONG ROY E + DIANA L	Multi-Family	Wet Slip	1
AVALON PLACE CONDO ASSOC	Multi-Family	Hoist	1
AVALON PLACE CONDO ASSOC	Multi-Family	Wet Slip	4
AVATAR PROPERTIES INC	Other	Hoist	1
BAGGOT DANIEL J +	Multi-Family	Wet Slip	1
BAKER ROBERT R + CARLA J	Multi-Family	Wet Slip	1

BALLARD INC	Marina	Wet Slip	4
BALLYNAHINCH CONDO ASSOC INC	Multi-Family	Seawall	2
BALLYNAHINCH CONDO ASSOC INC	Multi-Family	Wet Slip	3
BARCLAY BAY CONDO	Multi-Family	Wet Slip	13
BARNES JOHN F	Multi-Family	Seawall	2
BARNES JOHN F	Multi-Family	Wet Slip	1
BARR STANTON + MARY THERESA	Hotel/Motel	Seawall	1
BARR STANTON + MARY THERESA	Hotel/Motel	Wet Slip	3
BARUNA BAY CONDO ASSOC	Multi-Family	Float/Ramp	1
BARUNA BAY CONDO ASSOC	Multi-Family	Wet Slip	5
BATIKI WEST CONDO	Multi-Family	Hoist	1
BATIKI WEST CONDO	Multi-Family	Wet Slip	5
BAUTISTA GERMAN	Multi-Family	Wet Slip	1
BAY CREEK COMMUNITY	Multi-Family	Wet Slip	12
BAY HARBOR CLUB CONDO PH I+II	Multi-Family	Wet Slip	48
BAY POINT CONDO PH 1 + 2	Multi-Family	Hoist	2
BAY POINT CONDO PH 1 + 2	Multi-Family	Trailer	1
BAY POINT CONDO PH 1 + 2	Multi-Family	Wet Slip	2
BAYPOINTE YACHT + RACQUET	Multi-Family	Float/Ramp	2
BAYPOINTE YACHT + RACQUET	Multi-Family	Wet Slip	53
BAYSCAPE CONDO ASSOC	Multi-Family	Beached/Blocked	1
BAYSCAPE CONDO ASSOC	Multi-Family	Wet Slip	1
BAYSHORE CONDO ASSOC	Multi-Family	Wet Slip	6
BAYSIDE VILLAGE OF SANIBEL	Multi-Family	Wet Slip	5
BEACH + TENNIS CLUB CONDO	Multi-Family	Trailer	9
BEACH + TENNIS CLUB CONDO	Multi-Family	Wet Slip	2
BEACH HARBOUR CONDO	Multi-Family	Beached/Blocked	1
BEACH HARBOUR CONDO	Multi-Family	Hoist	7
BEACH HARBOUR CONDO	Multi-Family	Wet Slip	5
BEACH PARKWAY CONDO	Multi-Family	Wet Slip	14
BEACH VILLA I CONDO ASSOC	Multi-Family	Beached/Blocked	2
BEACH VILLA I CONDO ASSOC	Multi-Family	Hoist	3
BEACH VILLA I CONDO ASSOC	Multi-Family	Wet Slip	8
BEACH VILLA II CONDO ASSOC	Multi-Family	Beached/Blocked	1
BEACH VILLA II CONDO ASSOC	Multi-Family	Wet Slip	8
BEACHGATE CONDO	Multi-Family	Hoist	1
BEACHGATE CONDO	Multi-Family	Wet Slip	5
BEACHWOOD ON THE BAY CONDO	Hotel/Motel	Hoist	1
BEACHWOOD ON THE BAY CONDO	Hotel/Motel	Wet Slip	1
BEADLE JAMES R	Marina	Beached/Blocked	24
BEADLE JAMES R	Marina	Dry Stack	18
BEADLE JAMES R	Marina	None	2
BEADLE JAMES R	Marina	Trailer	11
BEADLE JAMES R	Marina	Wet Slip	8
BEATO VITO + PINA	Multi-Family	Wet Slip	5

BECKER GEORGE 1/2 INT +	Marina	Beached/Blocked	4
BECKER GEORGE 1/2 INT +	Marina	Hoist	1
BECKER GEORGE 1/2 INT +	Marina	Ramp	1
BECKER GEORGE 1/2 INT +	Marina	Trailer	19
BECKER GEORGE 1/2 INT +	Marina	Wet Slip	6
BEESON HAROLD L + PHYLIS D	Hotel/Motel	Wet Slip	1
BELENO ALBERTO + JOVITA	Restaurant/Shop	Seawall	2
BELLA VISTA CONDO	Multi-Family	Wet Slip	5
BEYSTER BARBARA B TR	Multi-Family	Hoist	1
BIDDLE LAWRENCE + CONSTANCE D	Multi-Family	Wet Slip	2
BIERI ANDREAS	Restaurant/Shop	Wet Slip	18
BIKINI PLACE CONDO ASSOC	Multi-Family	Hoist	1
BIKINI PLACE CONDO ASSOC	Multi-Family	Wet Slip	5
BILLY BOB INC	Marina	Beached/Blocked	22
BILLY BOB INC	Marina	Hoist	1
BILLY BOB INC	Marina	Trailer	27
BILLY BOB INC	Marina	Wet Slip	11
BIMINI PLACE CONDO	Multi-Family	Wet Slip	7
BIMINI VIEW CONDO	Multi-Family	Hoist	4
BIMINI VIEW CONDO	Multi-Family	Wet Slip	14
BIRCH COURT CONDOMINIUM	Multi-Family	Wet Slip	2
BIRMINGHAM ERIC B + JOAN L	Multi-Family	Hoist	1
BISHOP DALE S + HELEN D	Multi-Family	Hoist	1
BISHOP DALE S + HELEN D	Multi-Family	Wet Slip	1
BLOMBERG PATRICK + DOROTHY	Multi-Family	Beached/Blocked	2
BLOMBERG PATRICK + DOROTHY	Multi-Family	Hoist	1
BLUE CRAB KEY CONDO	Multi-Family	Beached/Blocked	10
BLUE CRAB KEY CONDO	Multi-Family	Ramp	1
BLUE CRAB KEY CONDO	Multi-Family	Trailer	12
BLUE CRAB KEY CONDO	Multi-Family	Wet Slip	50
BLUE WATER VILLAS CONDO ASSOC	Multi-Family	Hoist	2
BLUE WATER VILLAS CONDO ASSOC	Multi-Family	Wet Slip	4
BOARDWALK CAPER BOATING	Multi-Family	Wet Slip	130
BOARDWALK CAPER BOATING ASSOC	Multi-Family	Wet Slip	117
BOARDWALK CAPER III CONDO	Multi-Family	Wet Slip	3
BOARDWALK CONDO	Multi-Family	Hoist	1
BOARDWALK CONDO	Multi-Family	Wet Slip	3
BOCILLA ISLAND CLUB	Multi-Family	Beached/Blocked	1
BOCILLA ISLAND CLUB	Multi-Family	Ramp	1
BOCILLA ISLAND CLUB	Multi-Family	Wet Slip	82
BODE EDITH B TR	Restaurant/Shop	Wet Slip	21
BONITA BAY PROPERTIES INC	Marina	Beached/Blocked	16
BONITA BAY PROPERTIES INC	Marina	Dry Stack	339
BONITA BAY PROPERTIES INC	Marina	Hoist	6
BONITA BAY PROPERTIES INC	Marina	Trailer	2

BONITA BAY PROPERTIES INC	Marina	Wet Slip	118
BONITA BAY PROPERTIES INC	Multi-Family	Beached/Blocked	71
BONITA BAY PROPERTIES INC	Multi-Family	Ramp	1
BONITA BAY PROPERTIES INC	Multi-Family	Wet Slip	1
BONITA BEACH CLUB CONDO	Multi-Family	Hoist	19
BONITA BEACH CLUB CONDO	Multi-Family	Wet Slip	15
BONITA BEACH MOBILE HOME	Multi-Family	Hoist	3
BONITA BEACH MOBILE HOME	Multi-Family	Wet Slip	24
BONITA BEACH PLANTATION HOUSE	Multi-Family	Hoist	6
BONITA BEACH PLANTATION HOUSE	Multi-Family	Wet Slip	13
BONITA BEACH RESORT MOTEL INC	Hotel/Motel	Ramp	1
BONITA BEACH RESORT MOTEL INC	Hotel/Motel	Wet Slip	5
BONITA HARBOR INC	Marina	Beached/Blocked	4
BONITA HARBOR INC	Marina	Wet Slip	10
BONITA RESORT + CLUB CONDO	Multi-Family	Wet Slip	4
BOYKIN HOTEL PROPERTIES L P	Hotel/Motel	Wet Slip	27
BOZICH ROBERT A + JEAN A	Multi-Family	Wet Slip	1
BRENNAN JAMES R + SUSAN D	Other	Wet Slip	1
BRENSON MAR CONDO	Multi-Family	Wet Slip	3
BRIGGS E A + PAULINE	Marina	Wet Slip	1
BRINSON DONALD TR	Multi-Family	Beached/Blocked	1
BRINSON DONALD TR	Multi-Family	Hoist	22
BRINSON DONALD TR	Multi-Family	Wet Slip	18
BROWN CHARLES R + LOUISE	Multi-Family	Beached/Blocked	1
BROWN CHARLES R + LOUISE	Multi-Family	Hoist	1
BROWN SANDRA K	Hotel/Motel	Hoist	1
BROWN SANDRA K	Hotel/Motel	Wet Slip	13
BROWN SANDRA K	Multi-Family	Wet Slip	1
BROWN STEVEN D + DEBORAH H	Restaurant/Shop	Wet Slip	1
BUCHMAN JOHN E TR	Multi-Family	Beached/Blocked	2
BUCHMAN JOHN E TR	Multi-Family	Wet Slip	3
BURUN JOSEPH E + MARY H	Hotel/Motel	Hoist	1
BURUN JOSEPH E + MARY H	Hotel/Motel	Wet Slip	2
BUSALACCHI JOSEPH + IRENE	Multi-Family	Davits	1
BUSALACCHI JOSEPH + IRENE	Multi-Family	Wet Slip	1
BUTLER HARRY J 1/2 INT +	Industrial	Seawall	1
BUTTONWOOD HARBOR PROPERTY	Multi-Family	Hoist	2
BUTTONWOOD HARBOR PROPERTY	Multi-Family	None	1
BUTTONWOOD HARBOR PROPERTY	Multi-Family	Wet Slip	37
CAANGAY D + A ELIZABETH	Multi-Family	Trailer	8
CAANGAY D + A ELIZABETH	Multi-Family	Wet Slip	2
CABBAGE KEY INC	Restaurant/Shop	Hoist	1
CABBAGE KEY INC	Restaurant/Shop	Wet Slip	61
CADA ROBERT G	Multi-Family	Davits	1
CADA ROBERT G	Multi-Family	Wet Slip	3

CALLOCCHIO JANET +	Multi-Family	Wet Slip	1
CALOMERIS YVONNE LINDA +	Marina	Trailer	27
CALOMERIS YVONNE LINDA +	Marina	Wet Slip	3
CALYPSO COVE CONDO	Multi-Family	Wet Slip	5
CAMELOT CONDO ASSOC INC	Multi-Family	Seawall	1
CAMELOT CONDO ASSOC INC	Multi-Family	Wet Slip	4
CAMP JOHN + JOY	Multi-Family	Hoist	1
CAMPBELL MA JR + ELIZABETH	Multi-Family	Wet Slip	1
CAP N MACS M/H OWNERS INC	Multi-Family	Ramp	1
CAP N MACS M/H OWNERS INC	Multi-Family	Seawall	1
CAP N MACS M/H OWNERS INC	Multi-Family	Wet Slip	20
CAPE BELLE CONDO	Multi-Family	Wet Slip	3
CAPE COLONY CONDO	Multi-Family	Hoist	1
CAPE COLONY CONDO	Multi-Family	Wet Slip	6
CAPE CORAL CARISSA CONDO	Multi-Family	Wet Slip	4
CAPE CORAL HOLDINGS INC	Other	Wet Slip	3
CAPE CORAL VILLAS CONDO	Multi-Family	Wet Slip	4
CAPE COURRANA CONDO	Multi-Family	Hoist	1
CAPE COURRANA CONDO	Multi-Family	Wet Slip	2
CAPE PALMS CONDO	Multi-Family	Hoist	1
CAPE PALMS CONDO	Multi-Family	Wet Slip	5
CAPE PARADISE INC	Other	Wet Slip	1
CAPE REGATTA CONDO	Multi-Family	Wet Slip	12
CAPE ROYALE CONDO	Multi-Family	Beached/Blocked	1
CAPE ROYALE CONDO	Multi-Family	Hoist	7
CAPE ROYALE CONDO	Multi-Family	Wet Slip	5
CAPE SHORE CONDOMINIUM	Multi-Family	Wet Slip	4
CAPE VILLANOVA CONDO	Multi-Family	Beached/Blocked	1
CAPE VILLANOVA CONDO	Multi-Family	Hoist	3
CAPE VILLANOVA CONDO	Multi-Family	Wet Slip	4
CAPSTAN CONDO ASSOCIATION	Multi-Family	Hoist	20
CAPSTAN CONDO ASSOCIATION	Multi-Family	Wet Slip	2
CAPSTAN II CONDO ASSOC	Multi-Family	Hoist	8
CAPSTAN II CONDO ASSOC	Multi-Family	Wet Slip	2
CAPTAINS COVE CONDO PH 1-5	Multi-Family	Trailer	3
CAPTAINS COVE CONDO PH 1-5	Multi-Family	Wet Slip	18
CAPTAINS COVE HOMEOWNERS	Multi-Family	Ramp	1
CAPTAINS COVE HOMEOWNERS	Multi-Family	Wet Slip	1
CAPTAINS HARBOR CONDO PH 1-6	Multi-Family	Beached/Blocked	1
CAPTAINS HARBOR CONDO PH 1-6	Multi-Family	Trailer	11
CAPTAINS HARBOR CONDO PH 1-6	Multi-Family	Wet Slip	61
CAPTAINS HARBOUR CONDO ASSOC	Multi-Family	Hoist	2
CAPTAINS HARBOUR CONDO ASSOC	Multi-Family	Wet Slip	2
CAPTIVA BEACH VILLAS	Multi-Family	Hoist	3
CAPTIVA BEACH VILLAS	Multi-Family	Wet Slip	2

CAPTIVA COVE CONDO ASSOC	Multi-Family	Beached/Blocked	2
CAPTIVA COVE CONDO ASSOC	Multi-Family	Wet Slip	7
CAPTIVA HIDE-A-WAY CONDO ASSOC	Multi-Family	Wet Slip	14
CAPTIVA ISLAND YACHT CLUB	Club	Wet Slip	5
CAPTIVA SHORES CONDO ASSOC	Multi-Family	Beached/Blocked	5
CAPTIVA SHORES CONDO ASSOC	Multi-Family	Wet Slip	11
CARABANA ISLE CONDO	Multi-Family	Hoist	1
CARABANA ISLE CONDO	Multi-Family	Wet Slip	6
CARINI PAUL R + SHARON B	Multi-Family	Hoist	1
CARSLAKE MURRAY	Restaurant/Shop	Wet Slip	10
CARUNCHIA RUTH M	Multi-Family	Wet Slip	4
CASA BONITA CONDOASSOC	Multi-Family	Hoist	2
CASA BONITA CONDOASSOC	Multi-Family	Wet Slip	12
CASA BONITA PLAZA L C	Multi-Family	Wet Slip	3
CASA BONITA ROYALE CONDO	Multi-Family	Hoist	6
CASA BONITA ROYALE CONDO	Multi-Family	Wet Slip	15
CASA DE RUBICAN CONDO	Multi-Family	Wet Slip	1
CASA MARINA I + II CONDO	Multi-Family	Hoist	19
CASA MARINA I + II CONDO	Multi-Family	Trailer	10
CASA MARINA I + II CONDO	Multi-Family	Wet Slip	21
CASEY CARLYN T	Multi-Family	Wet Slip	2
CASTILLO LANTHIER CAPE CORAL	Other	Wet Slip	1
CASTLE CONDO	Multi-Family	Beached/Blocked	1
CASTLE CONDO	Multi-Family	Hoist	1
CASTLE CONDO	Multi-Family	Wet Slip	4
CATALPA COVE PROP OWNERS ASSOC	Multi-Family	Hoist	45
CATALPA COVE PROP OWNERS ASSOC	Multi-Family	Wet Slip	56
CEDAR ARMS CONDO ASSOC	Multi-Family	Hoist	2
CEDAR ARMS CONDO ASSOC	Multi-Family	Wet Slip	2
CHAMPLIN JAMES R + NANCY	Multi-Family	Hoist	1
CHAMPLIN JAMES R + NANCY	Multi-Family	Wet Slip	2
CHAN RICHARD S +	Industrial	Wet Slip	3
CHAPMAN MARY J 3/4 INT +	Hotel/Motel	Beached/Blocked	1
CHAPMAN MARY J 3/4 INT +	Hotel/Motel	Ramp	1
CHAPMAN MARY J 3/4 INT +	Hotel/Motel	Wet Slip	5
CHAPMAN WALTER H JR TR	Marina	Wet Slip	5
CHARLOTTE SHORES PROPERTY	Multi-Family	Ramp	1
CHARLOTTE SHORES PROPERTY	Multi-Family	Wet Slip	8
CHASTAIN J HAROLD + BARBARA M	Restaurant/Shop	Wet Slip	3
CHOWN ROBERT B	Multi-Family	Trailer	1
CHOWN ROBERT B	Multi-Family	Wet Slip	2
CHRISTIAN + MISSIONARY	Multi-Family	Beached/Blocked	1
CHRISTIAN + MISSIONARY	Multi-Family	Davits	3
CHRISTIAN + MISSIONARY	Multi-Family	Wet Slip	78
CHUDNOW DANIEL M COTR ETAL	Marina	Ramp	1

CHUDNOW DANIEL M COTR ETAL	Marina	Wet Slip	43
CIPRIANI JAMES J	Multi-Family	Davits	1
CIPRIANI JAMES J	Multi-Family	Wet Slip	1
CITTA JAMES N + BONNIE M	Multi-Family	Ramp	1
CITTA JAMES N + BONNIE M	Multi-Family	Wet Slip	38
CITY OF CAPE CORAL	Government	Float/Ramp	1
CITY OF CAPE CORAL	Government	Hoist	3
CITY OF CAPE CORAL	Government	None	1
CITY OF CAPE CORAL	Government	Ramp	6
CITY OF CAPE CORAL	Government	Seawall	2
CITY OF CAPE CORAL	Government	Wet Slip	33
CITY OF CAPE CORAL	Marina	Trailer	1
CITY OF CAPE CORAL	Marina	Wet Slip	91
CITY OF CAPE CORAL	Other	Ramp	2
CITY OF CAPE CORAL	Other	Trailer	3
CITY OF CAPE CORAL	Other	Wet Slip	2
CITY OF FT MYERS	Club	Beached/Blocked	125
CITY OF FT MYERS	Club	Mooring	2
CITY OF FT MYERS	Club	Trailer	23
CITY OF FT MYERS	Club	Wet Slip	3
CITY OF FT MYERS	Government	Float/Ramp	7
CITY OF FT MYERS	Government	Ramp	2
CITY OF FT MYERS	Government	Wet Slip	20
CITY OF FT MYERS	Industrial	Trailer	2
CITY OF FT MYERS	Marina	Anchorage	2
CITY OF FT MYERS	Marina	Float/Ramp	5
CITY OF FT MYERS	Marina	Wet Slip	244
CITY OF FT MYERS	Other	Wet Slip	2
CITY OF SANIBEL	Government	Ramp	2
CITY OF SANIBEL	Government	Wet Slip	3
CLARK NANCY J TR 1/2INT +	Multi-Family	Hoist	2
CLARK NANCY J TR 1/2INT +	Multi-Family	Wet Slip	1
CLAYTON DOUGLAS H	Multi-Family	Wet Slip	14
CLINTON JO TR	Multi-Family	Wet Slip	1
CLIPPER BAY CONDO PHASE I	Multi-Family	Hoist	6
CLIPPER BAY CONDO PHASE I	Multi-Family	Wet Slip	44
CLIPPER BAY CONDO PHASE III	Multi-Family	Wet Slip	4
CLIPPER BAY VERANDAS CONDO	Multi-Family	Hoist	13
CLIPPER BAY VERANDAS CONDO	Multi-Family	Wet Slip	24
CLIPPER CONDO ASSOC	Multi-Family	Wet Slip	1
CLOSE LARRY D	Other	Beached/Blocked	2
CLOSE LARRY D	Other	Davits	1
CLOSE LARRY D	Other	Hoist	1
CLOSE LARRY D	Other	Wet Slip	2
CLUB ABACO CONDO ASSOC	Multi-Family	Hoist	1

CLUB ABACO CONDO ASSOC	Multi-Family	Wet Slip	5
CLUB HARBOUR CONDO	Multi-Family	Wet Slip	7
CLUBHOUSE CONDO	Multi-Family	Wet Slip	3
COASTAL I CONDO	Multi-Family	Hoist	1
COASTAL I CONDO	Multi-Family	Wet Slip	4
COASTAL II CONDO	Multi-Family	Wet Slip	11
COCONUT BAY VILLAGE CONDO	Multi-Family	Beached/Blocked	1
COCONUT BAY VILLAGE CONDO	Multi-Family	Davits	2
COCONUT BAY VILLAGE CONDO	Multi-Family	Hoist	1
COCONUT BAY VILLAGE CONDO	Multi-Family	Wet Slip	9
COILE FRANCES A	Multi-Family	Beached/Blocked	2
COILE FRANCES A	Multi-Family	Hoist	1
COILE FRANCES A	Multi-Family	Wet Slip	1
COLE HARLEY J + BRENDA V	Other	Seawall	1
COLE HARLEY J + BRENDA V	Other	Trailer	1
COLE HARLEY J + BRENDA V	Other	Wet Slip	2
COMMODORE I CONDO	Multi-Family	Wet Slip	8
COMMODORE II CONDO	Multi-Family	Wet Slip	7
COMPASS ROSE MARINA INC	Marina	Beached/Blocked	14
COMPASS ROSE MARINA INC	Marina	Dry Stack	131
COMPASS ROSE MARINA INC	Marina	Hoist	2
COMPASS ROSE MARINA INC	Marina	Seawall	1
COMPASS ROSE MARINA INC	Marina	Trailer	4
COMPASS ROSE MARINA INC	Marina	Wet Slip	35
CONCEICAO MICHAEL D + NOELMA B	Multi-Family	Wet Slip	1
CONCEPT II SOUTH CONDO	Multi-Family	Wet Slip	8
CONOVER ROBERT L	Marina	Beached/Blocked	1
CONOVER ROBERT L	Marina	Ramp	1
CONOVER ROBERT L	Marina	Seawall	1
CONOVER ROBERT L	Marina	Trailer	7
CONOVER ROBERT L	Marina	Wet Slip	10
COOPER EDDIE + SHEILA +	Multi-Family	Hoist	1
COOPER EDDIE + SHEILA +	Multi-Family	Wet Slip	2
COR DEL CONDO	Multi-Family	Wet Slip	4
CORAL CAY CONDO APARTMENTS	Multi-Family	Wet Slip	6
CORAL DEL RIO CONDO	Multi-Family	Wet Slip	8
CORAL DEL RIO II CONDO	Multi-Family	Beached/Blocked	2
CORAL DEL RIO II CONDO	Multi-Family	Seawall	1
CORAL DEL RIO II CONDO	Multi-Family	Wet Slip	8
CORAL HARBOR CONDO	Multi-Family	Wet Slip	14
CORAL ISLE CONDO PH I-II-III	Multi-Family	Hoist	8
CORAL ISLE CONDO PH I-II-III	Multi-Family	Wet Slip	3
CORAL KEY CONDO	Multi-Family	Hoist	2
CORAL KEY CONDO	Multi-Family	Wet Slip	6
CORAL REEF CONDO	Multi-Family	Wet Slip	11

CORAL VILLAS CONDO	Multi-Family	Davits	1
CORAL VILLAS CONDO	Multi-Family	Hoist	1
CORAL VILLAS CONDO	Multi-Family	Wet Slip	4
CORAL WINDS CONDO	Multi-Family	Wet Slip	1
CORALAIR CONDO	Multi-Family	Wet Slip	5
COUNTRY CLUB PLACE CONDO	Multi-Family	Wet Slip	6
COX PACKING INC	Marina	Wet Slip	9
CRAWFORD GERALD R + ROSETTA F	Multi-Family	Trailer	10
CRAWFORD GERALD R + ROSETTA F	Multi-Family	Wet Slip	1
CREGER BRUCE E + CECILIA L	Multi-Family	Hoist	2
CREWS ROGER L	Multi-Family	Wet Slip	2
CROSBY GORDON E JR	Multi-Family	Wet Slip	1
CRYSTAL TERRACE CONDO	Multi-Family	Wet Slip	2
CSX REALTY DEVELOPMENT LLC	Multi-Family	Hoist	1
CSX REALTY DEVELOPMENT LLC	Multi-Family	Wet Slip	3
CSX TAX DEPARTMENT J910	Multi-Family	Wet Slip	4
CYRC MASTER ASSOCIATION	Multi-Family	Wet Slip	55
DALTON BRUCE B + VALERIE L	Multi-Family	Hoist	1
DANIELS KATHRYN ANN TR	Multi-Family	Wet Slip	5
DAVIS BARBARA LEE	Restaurant/Shop	Beached/Blocked	1
DAVIS BARBARA LEE	Restaurant/Shop	Wet Slip	6
DEEBOLD FRANK	Marina	Beached/Blocked	3
DEEBOLD FRANK	Marina	Wet Slip	15
DEEBOLD FRANK III	Marina	Seawall	1
DEEBOLD FRANK III	Marina	Trailer	5
DEEBOLD FRANK III	Marina	Wet Slip	5
DEEP LAGOON BOAT CLUB LTD	Marina	Beached/Blocked	94
DEEP LAGOON BOAT CLUB LTD	Marina	Dry Stack	155
DEEP LAGOON BOAT CLUB LTD	Marina	Float/Ramp	1
DEEP LAGOON BOAT CLUB LTD	Marina	Trailer	29
DEEP LAGOON BOAT CLUB LTD	Marina	Wet Slip	51
DEHAYS LARRY J	Industrial	Wet Slip	10
DEL PRADO INN INC	Hotel/Motel	Wet Slip	4
DEL PRADO INN INC	Multi-Family	Beached/Blocked	1
DEL PRADO INN INC	Multi-Family	Seawall	1
DEL PRADO INN INC	Multi-Family	Wet Slip	12
DEVITTO IRENE +	Other	Wet Slip	2
DI GIOVANNANTONIO JOHN TR	Multi-Family	Wet Slip	4
DIEFENTHALER WILLIAM A	Multi-Family	Wet Slip	4
D'IOR CONDO	Multi-Family	Wet Slip	3
DIPLOMAT CONDO	Multi-Family	Wet Slip	6
DISTELHORST CRAIG T	Multi-Family	Hoist	1
DIXON JOHN R JR FAMILY LIMITED	Multi-Family	Wet Slip	2
DOBBYS PLACE INC	Marina	Beached/Blocked	1
DOBBYS PLACE INC	Marina	Ramp	2

DOBBYS PLACE INC	Marina	Trailer	1
DOBBYS PLACE INC	Marina	Wet Slip	17
DOCK OF THE BAY INC	Multi-Family	Beached/Blocked	1
DOCK OF THE BAY INC	Multi-Family	Wet Slip	7
DOCKSIDE CONDO	Multi-Family	Wet Slip	5
DOCKSIDE CONDO OF CAPE CORAL	Multi-Family	Wet Slip	10
DOMINIC STEVEN 1/2 INT +	Other	Wet Slip	7
DONALDSON ALFRED JR + SANDRA L	Restaurant/Shop	Wet Slip	5
DONKERSLOOT ARIE JR 54.21% +	Hotel/Motel	Wet Slip	17
DOREMUS L WILLIAM + LORRAINE D	Multi-Family	Hoist	3
DOREMUS L WILLIAM + LORRAINE D	Multi-Family	Wet Slip	3
DOYLE P H + DEBORAH T	Industrial	Trailer	1
DRESSEL THOMAS L	Multi-Family	Wet Slip	1
DRIFTWOOD CONDO	Multi-Family	Wet Slip	2
DUGGER NANCY I	Industrial	Trailer	2
DUGGER NANCY I	Industrial	Wet Slip	1
DUNFORD LARRY W	Restaurant/Shop	Wet Slip	1
E E + J REAL ESTATE PTNR	Marina	Wet Slip	25
EASTWOOD LANDINGS LOT OWNERS	Multi-Family	Wet Slip	12
EDEN CONDO I	Multi-Family	Hoist	2
EDEN CONDO I	Multi-Family	Wet Slip	7
EDGEWATER CONDO	Multi-Family	Wet Slip	1
EDGEWATER OF CAPE CORAL	Multi-Family	Wet Slip	4
EDWARDS WILLIAM M ETAL	Hotel/Motel	Wet Slip	1
EL RIO II CONDO	Multi-Family	Hoist	1
EL RIO II CONDO	Multi-Family	Wet Slip	3
ELLENBERG KENNETH E + BARBARA	Multi-Family	Hoist	1
ENDRESS HERMANN + CLAUDIA +	Multi-Family	Davits	1
ENDRESS HERMANN + CLAUDIA +	Multi-Family	Hoist	1
EPOLITO ELSA	Multi-Family	Wet Slip	2
ESKIN HAROLD S + KATHY F	Multi-Family	Wet Slip	1
FAIRBROTHER KEVIN +	Multi-Family	Hoist	1
FAIRBROTHER KEVIN +	Multi-Family	Wet Slip	1
FAIRWAY MANORS CONDO	Multi-Family	Wet Slip	3
FALCETTA NICOLA PHILLIP TR 1/2	Multi-Family	Wet Slip	1
FALCON BAY CONDO	Multi-Family	Hoist	1
FALCON BAY CONDO	Multi-Family	Wet Slip	1
FARNADFAR COMMERCIAL CO LTD	Government	Ramp	1
FARROW JOHN A + RACHELLE K	Restaurant/Shop	Wet Slip	3
FEHRENBACH ALICE I	Multi-Family	Hoist	1
FELICE PHILLIP + JANET	Multi-Family	Wet Slip	1
FESSEL RICHARD C + JENNIFER J	Multi-Family	Wet Slip	4
FIBBE GUY A TR	Multi-Family	Wet Slip	1
FIGUERADO JAMES + DEBORAH	Marina	Ramp	1
FIGUERADO JAMES + DEBORAH	Marina	Wet Slip	55

FIGUERADO JAMES JR + DEBORAH	Marina	Beached/Blocked	65
FIGUERADO JAMES JR + DEBORAH	Marina	Dry Stack	266
FIGUERADO JAMES JR + DEBORAH	Marina	Ramp	1
FIGUERADO JAMES JR + DEBORAH	Marina	Trailer	35
FIGUERADO JAMES JR + DEBORAH	Marina	Wet Slip	100
FILECCIA NICHOLAS + JOSEPHINE	Multi-Family	Wet Slip	3
FISH TALE MARINA	Marina	Beached/Blocked	7
FISH TALE MARINA	Marina	Dry Stack	217
FISH TALE MARINA	Marina	Hoist	2
FISH TALE MARINA	Marina	Trailer	22
FISH TALE MARINA	Marina	Wet Slip	100
FISHER LEIGH M TR	Multi-Family	Wet Slip	1
FITZGERALD THOMAS J + BONITA B	Multi-Family	Hoist	1
FL DEPT OF TRANSPORTATION	Anchorage	Anchorage	1
FLAMINGO HARBOUR LAND CONDO	Multi-Family	Hoist	1
FLORIDA DESIGN COMMUNITIES	Marina	Davits	1
FLORIDA DESIGN COMMUNITIES	Marina	Dry Stack	224
FLORIDA DESIGN COMMUNITIES	Marina	Float/Ramp	2
FLORIDA DESIGN COMMUNITIES	Marina	Hoist	3
FLORIDA DESIGN COMMUNITIES	Marina	Seawall	19
FLORIDA DESIGN COMMUNITIES	Marina	Trailer	1
FLORIDA DESIGN COMMUNITIES	Marina	Wet Slip	482
FLORIDA DESIGN COMMUNITIES	Yard	Beached/Blocked	55
FLORIDA DESIGN COMMUNITIES	Yard	Dry Stack	20
FLORIDA DESIGN COMMUNITIES	Yard	Trailer	37
FLORIDA HOME VISIONS INC	Multi-Family	Davits	1
FLORIDA HOME VISIONS INC	Multi-Family	Wet Slip	1
FLORIDA POWER + LIGHT CO	Industrial	Mooring	3
FLORIDA POWER + LIGHT CO	Industrial	Wet Slip	9
FLORIDA SUN LODGING	Restaurant/Shop	Wet Slip	44
FORT MYERS WATERFRONT LLC	Hotel/Motel	Wet Slip	4
FOSTER WILBUR R 50% INT TR +	Restaurant/Shop	Wet Slip	4
FOUR WINDS MARINA INC	Marina	Beached/Blocked	18
FOUR WINDS MARINA INC	Marina	Dry Stack	252
FOUR WINDS MARINA INC	Marina	Trailer	23
FOUR WINDS MARINA INC	Marina	Wet Slip	70
FOUR WINDS MARINA INC	Multi-Family	Wet Slip	31
FOWLER ROBERT B + JO ANNE H	Multi-Family	Hoist	1
FOWLER ROBERT B + JO ANNE H	Multi-Family	Wet Slip	1
FOX VALLEY CONDO	Multi-Family	Wet Slip	1
FRANKLIN LARRY TR	Industrial	Hoist	2
FRANKLIN LARRY TR	Industrial	Wet Slip	4
FREELAND GEORGE T	Marina	Beached/Blocked	3
FREELAND GEORGE T	Marina	Dry Stack	199
FREELAND GEORGE T	Marina	Trailer	8

FREELAND GEORGE T	Marina	Wet Slip	60
FREEMAN JAMES	Multi-Family	Wet Slip	1
FRENCH HANS T TR	Multi-Family	Wet Slip	1
FRIZZELL KITTY M TR EST	Multi-Family	Beached/Blocked	1
FRIZZELL KITTY M TR EST	Multi-Family	Ramp	1
FRIZZELL KITTY M TR EST	Multi-Family	Wet Slip	37
FROIMSON AVRUM I + PHYLLIS P	Multi-Family	Wet Slip	2
FT MYERS BCH MOSQUITO CONTROL	Government	Ramp	1
FT MYERS BCH MOSQUITO CONTROL	Government	Seawall	1
GARCIA CHARLES E + ROBIN R	Industrial	Ramp	1
GARCIA CHARLES E + ROBIN R	Industrial	Trailer	2
GARCIA CHARLES E + ROBIN R	Industrial	Wet Slip	2
GARCIA RALPH + ELIZABETH TR OF	Multi-Family	Wet Slip	1
GARDO FRANK X + MILLICENT A	Multi-Family	Hoist	1
GARDO FRANK X + MILLICENT A	Multi-Family	Wet Slip	1
GARVER ERIC M	Multi-Family	Hoist	1
GASPARILLA INN INC	Marina	Beached/Blocked	10
GASPARILLA INN INC	Marina	Dry Stack	141
GASPARILLA INN INC	Marina	Trailer	4
GASPARILLA INN INC	Marina	Wet Slip	41
GASPARILLA INN INC	Multi-Family	Ramp	1
GASPARILLA INN INC	Multi-Family	Wet Slip	22
GASPARILLA INN INC	Restaurant/Shop	Hoist	1
GASPARILLA INN INC	Restaurant/Shop	Ramp	1
GASPARILLA INN INC	Restaurant/Shop	Wet Slip	16
GEIER SUYAKO	Multi-Family	Davits	1
GEIER SUYAKO	Multi-Family	Wet Slip	1
GELAKOSKA PATTY A NN TR 5/24%	Multi-Family	Beached/Blocked	2
GERRERO ROBERT D SR +ELAINE J+	Restaurant/Shop	Seawall	1
GEVERD ROBERT S	Restaurant/Shop	Trailer	2
GEVERD ROBERT S	Restaurant/Shop	Wet Slip	2
GILBERT LORETTA JUNE	Marina	Beached/Blocked	46
GILBERT LORETTA JUNE	Marina	Wet Slip	20
GILMOUR GEORGE W + SHARON R	Multi-Family	Beached/Blocked	1
GILMOUR GEORGE W + SHARON R	Multi-Family	Wet Slip	7
GMK CORP	Industrial	Trailer	1
GODAR ARTHUR R TR	Multi-Family	Hoist	3
GODAR ARTHUR R TR	Multi-Family	Wet Slip	2
GODWIN RODNEY +	Multi-Family	Trailer	2
GONDOLIER CONDO	Multi-Family	Wet Slip	6
GOODWIN JESSE L +	Other	Beached/Blocked	4
GOODWIN JESSE L +	Other	Trailer	2
GOODWIN JESSE L +	Other	Wet Slip	8
GORKA ROGER S	Restaurant/Shop	Seawall	1
GRAY CHARLES + LOUISE	Marina	Beached/Blocked	1

GRAY CHARLES + LOUISE	Marina	Trailer	4
GRAY LIONEL + KATHLEEN	Multi-Family	Davits	1
GRAY LIONEL + KATHLEEN	Multi-Family	Wet Slip	1
GRAY T JAMES + SHARON H	Multi-Family	Hoist	1
GRAY T JAMES + SHARON H	Multi-Family	Wet Slip	1
GREEN THOMAS L	Multi-Family	Wet Slip	1
GREENBRIAR CONDO	Multi-Family	Wet Slip	4
GREENE JAMES A III + DORIS H	Multi-Family	Wet Slip	2
GRIFFIN MARINE ASSOC INC	Restaurant/Shop	Beached/Blocked	1
GRIFFIN MARINE ASSOC INC	Restaurant/Shop	Davits	1
GRIFFIN MARINE ASSOC INC	Restaurant/Shop	Float/Ramp	2
GRIFFIN MARINE ASSOC INC	Restaurant/Shop	Wet Slip	4
GRIFFIN WILLIAM + DIANE	Multi-Family	Wet Slip	1
GROND ADALBERT	Multi-Family	Beached/Blocked	1
GULF BAY VIEW SUBD	Hotel/Motel	Beached/Blocked	1
GULF BAY VIEW SUBD	Hotel/Motel	Trailer	2
GULF COAST YACHT BROKERS INC	Marina	Wet Slip	1
GULF COVE TRLR PARK INC	Multi-Family	Hoist	2
GULF COVE TRLR PARK INC	Multi-Family	Wet Slip	6
GULF HARBOR GOLF +	Marina	Float/Ramp	12
GULF HARBOR GOLF +	Marina	Wet Slip	187
GULF MANOR CONDO	Multi-Family	Hoist	3
GULF MANOR CONDO	Multi-Family	Wet Slip	1
GULF MARINA WAYS + SUPPLY INC	Yard	Beached/Blocked	17
GULF MARINA WAYS + SUPPLY INC	Yard	Hoist	1
GULF MARINA WAYS + SUPPLY INC	Yard	Trailer	3
GULF MARINA WAYS + SUPPLY INC	Yard	Wet Slip	7
GULF STAR MARINA	Yard	Beached/Blocked	4
GULF STAR MARINA	Yard	Dry Stack	86
GULF STAR MARINA	Yard	Hoist	2
GULF STAR MARINA	Yard	Trailer	7
GULF STAR MARINA	Yard	Wet Slip	32
GULF WINDS CONDO	Multi-Family	Wet Slip	2
GULFHAVEN UNIT L	Multi-Family	Wet Slip	10
GULFHAVEN UNIT L	Restaurant/Shop	Wet Slip	4
GULFSTREAM PROPERTIES OF	Hotel/Motel	Wet Slip	6
GULLWING APARTMENT CONDO	Multi-Family	Wet Slip	19
GUTHRIE SUZANNE LEE	Industrial	Wet Slip	2
HALL RICHARD H + MARGARET L	Multi-Family	Hoist	1
HALL RICHARD H + MARGARET L	Multi-Family	Wet Slip	1
HAMEL RONALD J +	Multi-Family	Wet Slip	1
HAMILTON MILTON J III	Marina	Mooring	1
HAMILTON MILTON J III	Marina	Wet Slip	14
HAMMOND J R JR PER REP ETALS	Marina	Hoist	1
HAMMOND J R JR PER REP ETALS	Marina	Wet Slip	5

HANSEN A ERNEST TR 1/2 INT	Marina	Trailer	5
HANSEN A ERNEST TR 1/2 INT	Marina	Wet Slip	55
HANSEN BEVERLY JOY	Multi-Family	Beached/Blocked	1
HANSEN BEVERLY JOY	Multi-Family	Wet Slip	1
HAPPY LANDINGS CONDO	Multi-Family	Wet Slip	3
HARBOR HEIGHTS CONDO	Multi-Family	Hoist	2
HARBOR HEIGHTS CONDO	Multi-Family	Trailer	1
HARBOR HEIGHTS CONDO	Multi-Family	Wet Slip	7
HARBOR SOUTH CONDO	Multi-Family	Wet Slip	11
HARBORSIDE VILLAS	Multi-Family	Hoist	7
HARBORSIDE VILLAS	Multi-Family	Wet Slip	1
HARBOUR CASTLE CONDO	Multi-Family	Wet Slip	8
HARBOUR LIGHTS CONDO	Multi-Family	Hoist	7
HARBOUR LIGHTS CONDO	Multi-Family	Wet Slip	2
HARBOUR POINTE CONDO	Multi-Family	Hoist	53
HARBOUR POINTE CONDO	Multi-Family	Wet Slip	17
HARBOUR VISTA CONDO	Multi-Family	Hoist	1
HARBOUR VISTA CONDO	Multi-Family	Wet Slip	5
HARBOURTOWNE CONDO PH II	Multi-Family	Wet Slip	7
HARBOURTOWNE OF CAPE CORAL	Multi-Family	Wet Slip	9
HARDEE JAMES B JR + SARAH J	Multi-Family	Wet Slip	3
HARDEN NEIL	Restaurant/Shop	Wet Slip	1
HARRIS CHARLES B 1/2 INT +	Marina	Beached/Blocked	2
HARRIS CHARLES B 1/2 INT +	Marina	Ramp	1
HARRIS CHARLES B 1/2 INT +	Marina	Trailer	8
HARRIS CHARLES B 1/2 INT +	Marina	Wet Slip	9
HARTWIG BRIAN E	Multi-Family	Beached/Blocked	1
HARTWIG BRIAN E	Multi-Family	Davits	1
HARTWIG BRIAN E	Multi-Family	Wet Slip	1
HARVEY THOMAS J	Multi-Family	Seawall	2
HATLE HARLOWE G +	Multi-Family	Wet Slip	3
HAYES SUSAN G	Multi-Family	Wet Slip	2
HEATHERTON MANOR CONDO	Multi-Family	Wet Slip	6
HECHENBERGER CHARLES W + MABEL	Multi-Family	Seawall	1
HECHENBERGER CHARLES W + MABEL	Multi-Family	Wet Slip	3
HEGAN MARVIN J + FRANCES	Multi-Family	Hoist	6
HEGAN MARVIN J + FRANCES	Multi-Family	Wet Slip	3
HELGESON FAMILY LTD PRTNRSHP	Multi-Family	Wet Slip	2
HEMELGARN F J JR + REBECCA M	Hotel/Motel	Wet Slip	12
HIATT KEITH K + IRENE E COTRS	Multi-Family	Hoist	1
HIATT KEITH K + IRENE E COTRS	Multi-Family	Wet Slip	1
HIBISCUS POINTE CONDO ASSOC	Multi-Family	Hoist	76
HIBISCUS POINTE CONDO ASSOC	Multi-Family	Wet Slip	32
HIDDEN HARBOUR ONE CONDO SEC 3	Multi-Family	Wet Slip	23
HIRTREITER JAMES A + SHARRY J	Multi-Family	Wet Slip	1

HITE ROBERT H + BONNIE P H/W	Multi-Family	Beached/Blocked	3
HITE ROBERT H + BONNIE P H/W	Multi-Family	Hoist	1
HOGREFE C F + RUTH I	Multi-Family	Wet Slip	2
HOLLAWAY STEVEN N TR	Multi-Family	Hoist	2
HOLMES JOANNE M TR	Multi-Family	Wet Slip	3
HOLST SHIRLEY ETAL	Hotel/Motel	Wet Slip	1
HORIZON BAY CONDO	Multi-Family	Wet Slip	12
HOULE COMPANY LP	Multi-Family	Beached/Blocked	1
HOULE COMPANY LP	Multi-Family	Hoist	2
HOULE COMPANY LP	Multi-Family	Trailer	1
HRW INC	Marina	Wet Slip	12
HUBBELL CRAIG W + VICKI K	Multi-Family	Beached/Blocked	1
HUBBELL CRAIG W + VICKI K	Multi-Family	Hoist	1
HUBBELL CRAIG W + VICKI K	Multi-Family	Wet Slip	3
HUETHER CHARLES + VIRGINIA	Multi-Family	Wet Slip	1
HUFF WILLIAM A + SUSAN C	Multi-Family	Wet Slip	1
HURT GEORGE C JR	Restaurant/Shop	Beached/Blocked	1
HURT GEORGE C JR	Restaurant/Shop	Wet Slip	5
INTERNATIONAL SUPPORT INC	Industrial	Wet Slip	1
IONA VENTURE CORPORATION	Multi-Family	Hoist	22
IONA VENTURE CORPORATION	Multi-Family	Wet Slip	51
IRELAND JOHN F + LINDA K	Multi-Family	Wet Slip	1
IRELAND M W + DAPHNE L	Marina	Beached/Blocked	18
IRELAND M W + DAPHNE L	Marina	Ramp	1
IRELAND M W + DAPHNE L	Marina	Trailer	62
IRELAND M W + DAPHNE L	Marina	Wet Slip	86
ISLAND HARDWARE + MARINE INC	Marina	Davits	1
ISLAND HARDWARE + MARINE INC	Marina	Trailer	1
ISLAND HARDWARE + MARINE INC	Marina	Wet Slip	11
ISLANDERS LANDING INC	Multi-Family	Davits	1
ISLANDERS LANDING INC	Multi-Family	Seawall	7
ISLANDERS LANDING INC	Multi-Family	Trailer	1
ISLANDERS LANDING INC	Multi-Family	Wet Slip	10
ISTOCK PAUL H + CAROLE J	Multi-Family	Wet Slip	1
JANUS RONALD D + SHARON E	Hotel/Motel	Ramp	1
JANUS RONALD D + SHARON E	Hotel/Motel	Wet Slip	5
JENSEN RICHARD W TR EST	Marina	Davits	1
JENSEN RICHARD W TR EST	Marina	Float/Ramp	1
JENSEN RICHARD W TR EST	Marina	Ramp	2
JENSEN RICHARD W TR EST	Marina	Wet Slip	29
JENSEN RICHARD W TR EST	Multi-Family	Wet Slip	1
JJJT INC	Marina	Beached/Blocked	3
JJJT INC	Yard	Beached/Blocked	118
JJJT INC	Yard	Ramp	1
JJJT INC	Yard	Trailer	3

JJJT INC	Yard	Wet Slip	4
JOHANSEN ANNABELLE TR	Multi-Family	Hoist	1
JOHNSON CARRIE M TR	Multi-Family	Wet Slip	4
JOHNSON DON	Multi-Family	Trailer	1
JOHNSON DON	Multi-Family	Wet Slip	4
JOHNSON DON J	Multi-Family	Trailer	1
JOHNSON DON J	Multi-Family	Wet Slip	4
JOHNSON GINNY TR	Restaurant/Shop	Wet Slip	2
JOINER ISABELLE L 52 %	Marina	Beached/Blocked	6
JOINER ISABELLE L 52 %	Marina	Trailer	1
JOINER ISABELLE L 52 %	Marina	Wet Slip	23
JOINER ISABELLE L 52 %	Multi-Family	Wet Slip	1
JONATHAN HARBOUR COMMMUNITY	Multi-Family	Float/Ramp	1
JONATHAN HARBOUR COMMMUNITY	Multi-Family	Hoist	14
JONATHAN HARBOUR COMMMUNITY	Multi-Family	Wet Slip	13
JONES DENISON H TR +	Multi-Family	Hoist	1
JONES GARY E + THEO E	Multi-Family	Davits	1
JONES GARY E + THEO E	Multi-Family	Wet Slip	1
JORDAN GILBERT + BARBARA	Multi-Family	Wet Slip	1
KALATA ARLENE A	Hotel/Motel	Wet Slip	5
KALLAL E W + MARY L	Multi-Family	Wet Slip	3
KATOVA WINDS CONDO	Multi-Family	Wet Slip	5
KEENE WILLIAM T + JENNIFER H	Restaurant/Shop	Wet Slip	2
KELLER DAVID L + LYNN +	Multi-Family	Davits	1
KELLER DAVID L + LYNN +	Multi-Family	Wet Slip	1
KELLY PATRICIA	Multi-Family	Hoist	2
KELLY DANNY M +	Industrial	Beached/Blocked	2
KELLY DANNY M +	Industrial	Wet Slip	4
KEY HARBOUR CONDO	Multi-Family	Wet Slip	53
KEZER BONNIE B ETAL J/T	Multi-Family	Wet Slip	1
KFOURY EDWARD J + PATRICIA A	Multi-Family	Hoist	1
KIMBERLY BAY CONDO	Multi-Family	Wet Slip	4
KINZIE ISLAND S/D	Multi-Family	Wet Slip	8
KIRBY BRIAN TR	Multi-Family	Wet Slip	4
KIRBY DURWARD COTR+ MARY P +	Multi-Family	Hoist	1
KIRIC INVESTMENTS INC	Restaurant/Shop	Wet Slip	9
KIRKPATRICK ROBERT D TR 1/2INT	Multi-Family	Wet Slip	1
KLINE PROPERTIES INC	Multi-Family	Ramp	1
KLINE PROPERTIES INC	Multi-Family	Wet Slip	67
KLOSTERMAN JOHN M TR +	Multi-Family	Hoist	1
KNIGHT ROBERT V 1/3 INT ETAL	Marina	Beached/Blocked	13
KNIGHT ROBERT V 1/3 INT ETAL	Marina	Wet Slip	26
KOGLIN BERNICE M TR	Multi-Family	Wet Slip	1
KRAVER NITA L TR	Other	Wet Slip	1
KREUDER GARY +	Hotel/Motel	Trailer	1

KREUDER GARY +	Hotel/Motel	Wet Slip	7
KROENCKE JAMES E + DARLENE	Multi-Family	Hoist	1
KROSNICK ANDREW P COTR +	Multi-Family	Beached/Blocked	2
KROSNICK ANDREW P COTR +	Multi-Family	Wet Slip	2
KUNZMAN PHYLLIS	Multi-Family	Wet Slip	4
L + S LAND MANAGEMENT	Multi-Family	Wet Slip	4
LA BUENA VIDA CONDO	Multi-Family	Hoist	1
LA BUENA VIDA CONDO	Multi-Family	Wet Slip	3
LA PALAPA CONDO	Multi-Family	Wet Slip	7
LACHAPELLE KENNETH C + SYLVIA	Multi-Family	Hoist	2
LACHAPELLE KENNETH C + SYLVIA	Multi-Family	Trailer	1
LACHAPELLE KENNETH C + SYLVIA	Multi-Family	Wet Slip	1
LADY DOLPHIN CONDO	Multi-Family	Beached/Blocked	1
LADY DOLPHIN CONDO	Multi-Family	Wet Slip	5
LAFFREY SUSAN +	Multi-Family	Wet Slip	5
LAKE LOUISE CONDO	Multi-Family	Wet Slip	5
LANDMARK CONDO	Multi-Family	Wet Slip	1
LANE STEPHEN H + PATRICIA	Multi-Family	Beached/Blocked	4
LANE STEPHEN H + PATRICIA	Multi-Family	Trailer	6
LANI KAI BAY + BEACH RESORT	Multi-Family	Wet Slip	5
LASICK JOSEPH	Multi-Family	Wet Slip	4
LASICK JOSEPH	Restaurant/Shop	Ramp	1
LASICK JOSEPH	Restaurant/Shop	Wet Slip	2
LASTIC STEVEN N	Multi-Family	Wet Slip	2
LAW DUNCAN K + CONSTANCE K	Multi-Family	Hoist	1
LE GRAND MARQUIS CONDO	Multi-Family	Wet Slip	9
LEE COUNTY	Government	Ramp	13
LEE COUNTY	Government	Seawall	1
LEE COUNTY	Government	Trailer	7
LEE COUNTY	Government	Wet Slip	16
LEE COUNTY	Marina	Ramp	1
LEE COUNTY	Marina	Wet Slip	37
LEE COUNTY	Other	Mooring	1
LEE COUNTY FISHERMAN'S CO-OP	Marina	Beached/Blocked	4
LEE COUNTY FISHERMAN'S CO-OP	Marina	Davits	1
LEE COUNTY FISHERMAN'S CO-OP	Marina	Trailer	6
LEE COUNTY FISHERMAN'S CO-OP	Marina	Wet Slip	52
LEE MAC SOUTH LAND CONDO	Multi-Family	Hoist	1
LEE MAC SOUTH LAND CONDO	Multi-Family	Wet Slip	5
LEIGH WENDELL H + JULIA H H/W	Multi-Family	Beached/Blocked	1
LIBERTY/SANIBEL II LTD	Hotel/Motel	Beached/Blocked	4
LIBERTY/SANIBEL II LTD	Hotel/Motel	Float/Ramp	5
LIBERTY/SANIBEL II LTD	Hotel/Motel	Wet Slip	36
LISICH PETER + SUSAN	Hotel/Motel	Wet Slip	3
LOCKE RALPH J	Multi-Family	Wet Slip	1

LOERCH GERHARD & MARGA	Multi-Family	Hoist	1
LOERCH GERHARD & MARGA	Multi-Family	Wet Slip	1
LOGGERHEAD BARGE COMPANY	Industrial	Wet Slip	3
LOMBARDO ANTHONY	Multi-Family	Wet Slip	4
LONG BAY PARTNERSHIP LLC	Hotel/Motel	Wet Slip	5
LONG STEPHEN A + ANN M	Multi-Family	Wet Slip	1
LORD JAMES CONDO	Multi-Family	Wet Slip	1
LORD JAMES CONDO II	Multi-Family	Wet Slip	4
LOUTH R P + DOROTHY H	Multi-Family	Wet Slip	1
LOWELL HARRY M	Multi-Family	Wet Slip	2
LUCKEY R FLOYD JR + BARBARA A	Multi-Family	Beached/Blocked	1
LUCKEY R FLOYD JR + BARBARA A	Multi-Family	Wet Slip	7
LUCKY LANDING ASSOCIATES	Restaurant/Shop	Wet Slip	2
LYNCH JOHN E JR + NEENA M	Multi-Family	Wet Slip	4
LYONS JACK + SUZANNE J/T	Marina	Trailer	6
LYONS SUZANNE	Marina	Beached/Blocked	15
LYONS SUZANNE	Marina	Trailer	15
LYONS SUZANNE	Marina	Wet Slip	14
M-31 MARINA LLC	Marina	Beached/Blocked	23
M-31 MARINA LLC	Marina	Dry Stack	93
M-31 MARINA LLC	Marina	Float/Ramp	2
M-31 MARINA LLC	Marina	Ramp	1
M-31 MARINA LLC	Marina	Trailer	8
M-31 MARINA LLC	Marina	Wet Slip	90
MACDUFF THOMAS W + LENORA A	Multi-Family	Hoist	1
MACDUFF THOMAS W + LENORA A	Multi-Family	Wet Slip	3
MADALENA GERALD TR	Multi-Family	Wet Slip	1
MAHIEU HENRY M + CAROLYN I	Hotel/Motel	Wet Slip	1
MALLOUS JAMES ET AL	Restaurant/Shop	Wet Slip	1
MALLOUS JAMES H ETAL	Restaurant/Shop	Wet Slip	2
MANATEE BAY CONDO	Multi-Family	Wet Slip	9
MANATEE COVE CONDO	Multi-Family	Hoist	1
MANATEE COVE CONDO	Multi-Family	Seawall	2
MANATEE COVE CONDO	Multi-Family	Wet Slip	1
MANATEE WORLD INC	Marina	Beached/Blocked	9
MANATEE WORLD INC	Marina	Dry Stack	44
MANATEE WORLD INC	Marina	Float/Ramp	3
MANATEE WORLD INC	Marina	Ramp	1
MANATEE WORLD INC	Marina	Trailer	11
MANATEE WORLD INC	Marina	Wet Slip	28
MANCUSO JOHN D + LAURA L	Multi-Family	Wet Slip	1
MANGROVE BAY CONDOMINIUM	Multi-Family	Hoist	2
MANGROVE BAY CONDOMINIUM	Multi-Family	Wet Slip	4
MANN ROGER L + JANE L	Multi-Family	Wet Slip	2
MARINA 46 CONDOMINIUM	Multi-Family	Wet Slip	6

MARINA GARDENS CONDO	Multi-Family	Beached/Blocked	5
MARINA GARDENS CONDO	Multi-Family	Ramp	1
MARINA GARDENS CONDO	Multi-Family	Trailer	6
MARINA GARDENS CONDO	Multi-Family	Wet Slip	18
MARINA RESOURCES INC	Marina	Beached/Blocked	15
MARINA RESOURCES INC	Marina	Trailer	15
MARINA RESOURCES INC	Marina	Wet Slip	173
MARINA TERRACE CONDO	Multi-Family	Wet Slip	22
MARINA TOWERS + YACHT CLUB	Multi-Family	Hoist	13
MARINA TOWERS + YACHT CLUB	Multi-Family	Wet Slip	7
MARINA TOWN CONDO APTS 1	Marina	Wet Slip	1
MARINA TOWN CONDO APTS 1	Multi-Family	Wet Slip	11
MARINA VILLAGE AT SNUG	Restaurant/Shop	Wet Slip	7
MARINA VILLAS CONDO	Multi-Family	Hoist	12
MARINER POINTE CONDO I	Multi-Family	Wet Slip	9
MARINER POINTE CONDO II	Multi-Family	Wet Slip	9
MARINER POINTE CONDO IV A	Multi-Family	Wet Slip	13
MARK I CONDO	Multi-Family	Wet Slip	15
MARLOU VILLAS CONDO	Multi-Family	Wet Slip	4
MARTIN JOHN	Restaurant/Shop	Seawall	3
MARTIN JOHN	Restaurant/Shop	Wet Slip	4
MASTERS WILLIAM E + JEAN B	Multi-Family	Wet Slip	1
MASTROS PAUL N + PANA	Multi-Family	Wet Slip	1
MATLACHA PASS COOPERATIVE INC	Restaurant/Shop	Davits	1
MATLACHA PASS COOPERATIVE INC	Restaurant/Shop	Wet Slip	3
MATLACHA SHORES 1ST ADDN	Marina	Beached/Blocked	6
MATLACHA SHORES 1ST ADDN	Marina	Davits	1
MATLACHA SHORES 1ST ADDN	Marina	Ramp	1
MATLACHA SHORES 1ST ADDN	Marina	Trailer	49
MATLACHA SHORES 1ST ADDN	Marina	Wet Slip	15
MC COY JAMES A	Government	Ramp	1
MCCALLISTER JOHN B + ERIKA	Multi-Family	Wet Slip	1
MCCARNEY STEVE P	Hotel/Motel	Wet Slip	3
MCCARTHY BURTON J + MARY A	Other	Trailer	4
MCCARTHYS MARINA INC	Multi-Family	Hoist	5
MCCORMICK DAVID C + CONSTANCE	Multi-Family	Wet Slip	1
MCCOY DANIEL L TR	Multi-Family	Wet Slip	3
MCCUNE MICHAEL M + ROBERTA S	Restaurant/Shop	Trailer	4
MCCUNE MICHAEL M + ROBERTA S	Restaurant/Shop	Wet Slip	4
MCDANIEL BOBBY + ANITA	Multi-Family	Trailer	1
MCDANIEL BOBBY + ANITA	Multi-Family	Wet Slip	2
MCGREAL PATRICK J +	Multi-Family	Wet Slip	1
MCGUIGAN ROBERT L TR	Restaurant/Shop	Hoist	1
MCGUIGAN ROBERT L TR	Restaurant/Shop	Seawall	4
MCGUIGAN ROBERT L TR	Restaurant/Shop	Wet Slip	15

MCGUIRE JEANNE E	Multi-Family	Hoist	1
MCGUIRE JEANNE E	Multi-Family	Wet Slip	1
MCKAY EDWARD C SR TR	Multi-Family	Trailer	2
MCKAY EDWARD C SR TR	Multi-Family	Wet Slip	2
MCMILLAN MICHAEL H DMD	Other	Wet Slip	1
MELALEUCA CONNECTION	Multi-Family	Wet Slip	3
MEREDITH HARRY L +	Multi-Family	Beached/Blocked	1
MEREDITH HARRY L +	Multi-Family	Wet Slip	2
MERMAID CONDO	Multi-Family	Wet Slip	4
MESSICK ANDREW S + AUDREY G	Hotel/Motel	Beached/Blocked	1
MESSICK ANDREW S + AUDREY G	Hotel/Motel	Wet Slip	1
MEYER DAVID I + BARBARA E	Industrial	Wet Slip	2
MEYER DAVID I + BARBARA E	Marina	Wet Slip	1
MEYER H O + EVELYN	Restaurant/Shop	Beached/Blocked	1
MEYER H O + EVELYN	Restaurant/Shop	Wet Slip	3
MILLER DUANE L + CAROL A	Multi-Family	Davits	1
MILLER DUANE L + CAROL A	Multi-Family	Hoist	1
MILLER DUANE L + CAROL A	Multi-Family	Wet Slip	1
MILLER WILLIAM D + VIVIAN	Marina	Wet Slip	2
MILLER'S MARINA INC	Marina	Float/Ramp	1
MILLER'S MARINA INC	Marina	Hoist	1
MILLER'S MARINA INC	Marina	Wet Slip	19
MIRAMAR APARTMENTS CONDO	Multi-Family	Wet Slip	2
MOCKENSTURM CARL B TR	Other	Wet Slip	2
MONTE CARLO CONDO	Multi-Family	Wet Slip	4
MONTEREY CONDO	Multi-Family	Wet Slip	2
MOON JEANNE S	Marina	Beached/Blocked	1
MOON JEANNE S	Marina	Wet Slip	28
MOONLIGHT BAY CONDO	Multi-Family	Wet Slip	5
MOORE JOHN R III + JOAN I	Multi-Family	Wet Slip	1
MOORINGS OF CAPE CORAL CONDO	Multi-Family	Wet Slip	21
MOSIMANN ROBERT + EURIS	Multi-Family	Seawall	1
MOSIMANN ROBERT + EURIS	Multi-Family	Wet Slip	1
MULLAR DONALD R + RENEE D	Multi-Family	Seawall	1
MULLAR DONALD R + RENEE D	Multi-Family	Wet Slip	1
MULLAR DONALD R + RENEE D	Other	Seawall	1
MULLAR DONALD R + RENEE D	Other	Wet Slip	1
MURPHY GARY L TR	Multi-Family	Beached/Blocked	2
MURPHY GARY L TR	Multi-Family	Wet Slip	8
MURPHY WILLIAM R + PAMELA S	Multi-Family	Wet Slip	2
MURRAY DONALD E + CORALIE	Multi-Family	Wet Slip	1
MYERS THOMAS L +	Multi-Family	Wet Slip	1
NATIONAL EXCHANGE SERVICES	Restaurant/Shop	Wet Slip	17
NAUTIQUE CONDO	Multi-Family	Wet Slip	2
NELSON M J & EVELYN M	Multi-Family	Trailer	2

NELSON M J & EVELYN M	Multi-Family	Wet Slip	1
NEPTUNE CONDO	Multi-Family	Wet Slip	4
NEWMAN ROBERT A + RUTH	Marina	Ramp	1
NEWMAN ROBERT A + RUTH	Marina	Wet Slip	3
NEWMAN ROBERT A + RUTH	Other	Float/Ramp	1
NEWPORT MANORS CONDO	Multi-Family	Hoist	1
NEWPORT MANORS CONDO	Multi-Family	Wet Slip	5
NICHOLS DAVID J + NICOLE	Restaurant/Shop	Wet Slip	9
NOBBE MORRIS O III	Marina	Wet Slip	4
NOBBE O + BRENDA	Marina	Wet Slip	1
NU VIEW CONDO	Multi-Family	Hoist	1
NU VIEW CONDO	Multi-Family	Wet Slip	6
OAK PARK VILLAGE CO-OP INC	Multi-Family	Ramp	1
OAK PARK VILLAGE CO-OP INC	Multi-Family	Wet Slip	31
OCEAN HARBOR YACHT CLUB	Multi-Family	Hoist	27
OCEAN HARBOR YACHT CLUB	Multi-Family	Wet Slip	10
OCEAN ISLE RIVERVIEW CONDO	Multi-Family	Wet Slip	6
OCEAN ISLE RUBICAN CONDO	Multi-Family	Wet Slip	3
OCEAN ISLE RUBICAN II CONDO	Multi-Family	Wet Slip	3
OLD BRIDGE CORP	Multi-Family	Beached/Blocked	2
OLD BRIDGE CORP	Multi-Family	Hoist	12
OLD BRIDGE CORP	Multi-Family	Ramp	1
OLD BRIDGE CORP	Multi-Family	Wet Slip	150
OLD PELICAN BAY VILLAGE U-1	Multi-Family	Hoist	2
OLD PELICAN BAY VILLAGE U-1	Multi-Family	Wet Slip	1
OLD PELICAN BAY VILLAGE U-2	Multi-Family	Wet Slip	6
OLD PELICAN BAY VILLAGE U-3	Multi-Family	Beached/Blocked	2
OLD PELICAN BAY VILLAGE U-3	Multi-Family	Wet Slip	3
OLD PELICAN BAY VILLAGE U-6	Marina	Hoist	2
ONEILL KIMBERLY	Multi-Family	Wet Slip	1
ORCHID HARBOUR VILLAS	Multi-Family	Hoist	1
ORCHID HARBOUR VILLAS	Multi-Family	Wet Slip	11
ORNDAHL EVERT A +	Multi-Family	Wet Slip	1
ORR LOUIS H II	Multi-Family	Hoist	13
ORR LOUIS H II	Multi-Family	Wet Slip	1
OSPREY OF CAPE CORAL CONDO	Multi-Family	Hoist	6
OSPREY OF CAPE CORAL CONDO	Multi-Family	Wet Slip	5
OSTDIEK KURT D	Multi-Family	Wet Slip	1
OSTEGO BAY VILLAGE CONDO	Multi-Family	Hoist	14
OSTEGO BAY VILLAGE CONDO	Multi-Family	Wet Slip	10
OVERTON MARJORIE T TR	Industrial	Trailer	1
OVERVOLD CLIFTON	Multi-Family	Wet Slip	1
OWL CREEK BOAT WORKS +	Marina	Beached/Blocked	18
OWL CREEK BOAT WORKS +	Marina	Trailer	3
OWL CREEK BOAT WORKS +	Marina	Wet Slip	63

OYSTER BAY LAND COMPANY	Marina	Wet Slip	1
PADILLA VELMA TR	Marina	Beached/Blocked	4
PADILLA VELMA TR	Marina	Seawall	1
PADILLA VELMA TR	Marina	Trailer	1
PADILLA VELMA TR	Marina	Wet Slip	30
PALM BAY ESTATES CONDO	Multi-Family	Hoist	5
PALM BAY ESTATES CONDO	Multi-Family	Wet Slip	3
PALM IS HOME OWNERS ASSOC INC	Multi-Family	Ramp	1
PALM IS HOME OWNERS ASSOC INC	Multi-Family	Trailer	6
PALM IS HOME OWNERS ASSOC INC	Multi-Family	Wet Slip	8
PALM TREE HARBOR LOT OWNERS	Multi-Family	Hoist	2
PALM TREE HARBOR LOT OWNERS	Multi-Family	Wet Slip	8
PALM VIEW WATERS CONDO	Multi-Family	Wet Slip	3
PALMTATION CONDO	Multi-Family	Hoist	1
PALMTATION CONDO	Multi-Family	Wet Slip	5
PALMTATION ISLE CONDO	Multi-Family	Hoist	3
PALMTATION ISLE CONDO	Multi-Family	Wet Slip	2
PARADISE YACHT CLUB INC	Marina	Wet Slip	68
PARK PLACE CONDO	Multi-Family	Hoist	3
PARK PLACE CONDO	Multi-Family	Wet Slip	2
PARK VIEW I CONDO	Multi-Family	Wet Slip	7
PARK VIEW II CONDO	Multi-Family	Wet Slip	17
PARK VIEW III CONDO	Multi-Family	Wet Slip	10
PARK VIEW POINTE CONDO	Multi-Family	Wet Slip	15
PARKWAY CONDO	Multi-Family	Mooring	1
PARKWAY CONDO	Multi-Family	Seawall	2
PARKWAY CONDO	Multi-Family	Wet Slip	28
PARKWAY PLACE CONDO ASSOC INC	Multi-Family	Hoist	1
PARKWAY PLACE CONDO ASSOC INC	Multi-Family	Wet Slip	6
PATUNA CORPORATION	Multi-Family	Wet Slip	1
PEACOCK JOHN	Multi-Family	Wet Slip	1
PELICAN LANDING COMM ASSOC	Multi-Family	Beached/Blocked	18
PELICAN LANDING COMMUNITY	Multi-Family	Wet Slip	1
PELICAN POINT CONDO	Multi-Family	Wet Slip	8
PERLSTEIN ROBERT M	Multi-Family	Wet Slip	2
PETERSON DONALD E + CAROL J	Marina	Ramp	1
PETERSON DONALD E + CAROL J	Marina	Wet Slip	7
PETERSON ROBERT A JR ETAL	Restaurant/Shop	Wet Slip	1
PETRELLA ANGELO +	Multi-Family	Wet Slip	1
PETTYS R STANFORD + BERYL TR	Industrial	Wet Slip	3
PHILLIPS CHARLES R	Other	Trailer	1
PHILLIPS CHARLES R	Other	Wet Slip	1
PIER ONE CONDO	Multi-Family	Hoist	2
PIER ONE CONDO	Multi-Family	Wet Slip	4
PIERSCIONEK A + VERONICA	Industrial	Trailer	1

PINE IS COVE HOMEOWNERS ASSOC	Multi-Family	Boat Lift	1
PINE IS COVE HOMEOWNERS ASSOC	Multi-Family	Hoist	1
PINE IS COVE HOMEOWNERS ASSOC	Multi-Family	Trailer	45
PINE ISLAND RESORT CLUB	Multi-Family	Beached/Blocked	1
PINE ISLAND RESORT CLUB	Multi-Family	Trailer	1
PINE ISLAND RESORT CLUB	Multi-Family	Wet Slip	3
PINEBREEZE CONDO	Multi-Family	Wet Slip	2
PINELAND HOLDINGS INC	Marina	Beached/Blocked	11
PINELAND HOLDINGS INC	Marina	Dry Stack	134
PINELAND HOLDINGS INC	Marina	Ramp	1
PINELAND HOLDINGS INC	Marina	Trailer	23
PINELAND HOLDINGS INC	Marina	Wet Slip	68
PISANI DANIEL + MARIE 1/2 +	Restaurant/Shop	Wet Slip	2
PITTS ROBERT E + JUDY	Marina	Wet Slip	9
POINTE CORAL CONDO	Multi-Family	Wet Slip	5
POMERLEAU TERRY + JOANNE	Marina	Hoist	1
POPPELL JOHN PAUL	Industrial	Wet Slip	1
PORCELLI JULIE	Multi-Family	Wet Slip	1
PORTER CHRISTINA D	Multi-Family	Wet Slip	1
PORTFOLIO SEVEN OF FLORIDA LTD	Multi-Family	Beached/Blocked	2
PORTFOLIO SEVEN OF FLORIDA LTD	Multi-Family	Hoist	5
PORTFOLIO SEVEN OF FLORIDA LTD	Multi-Family	Ramp	1
PORTFOLIO SEVEN OF FLORIDA LTD	Multi-Family	Wet Slip	39
PORTO + GRAESSER CORP	Multi-Family	Hoist	1
POTISUK KENNETH J	Multi-Family	Wet Slip	1
POULIN RICHARD L TR	Multi-Family	Wet Slip	1
POWELL MARJORIE TR +	Multi-Family	Wet Slip	1
POWERS BARBARA A	Multi-Family	Hoist	1
PROFESSIONAL PLACE CONDO	Multi-Family	Wet Slip	6
PROP M CORP	Restaurant/Shop	Float/Ramp	2
PROP M CORP	Restaurant/Shop	Wet Slip	2
PRUDHOMME DELODDER FRANCOIS	Restaurant/Shop	Wet Slip	3
PUNTA RASSA CONDO PH 4	Multi-Family	Wet Slip	2
QUINN GERALD N	Multi-Family	Wet Slip	1
R + R PROFESSIONAL INC	Other	Wet Slip	1
RATLIFF ROBERT + VIRGINIA	Multi-Family	Wet Slip	2
RAVEN COVE CONDO	Multi-Family	Wet Slip	3
RAVILLE STEPHEN E	Multi-Family	Hoist	2
REAL VEST PROPERTIES INC ETAL	Industrial	Ramp	1
REAL VEST PROPERTIES INC ETAL	Industrial	Trailer	1
REAL VEST PROPERTIES INC ETAL	Industrial	Wet Slip	4
REALMARK CAPE MARINA LLC	Marina	Ramp	1
REALMARK CAPE MARINA LLC	Marina	Wet Slip	146
RECOSA ENGINEERING INC	Multi-Family	Beached/Blocked	1
RECOSA ENGINEERING INC	Multi-Family	Wet Slip	39

REDENIUS RICHARD P + NANCY G	Multi-Family	Wet Slip	1
REEFE EDWARD M + NORA LEA	Multi-Family	Hoist	2
REESE DANIEL L + CAROLE H/W	Multi-Family	Hoist	1
REGENCY COURT CONDO	Multi-Family	Wet Slip	3
REICH EUGENE E + DORIS F	Hotel/Motel	Wet Slip	1
REICHARDT MANFRED	Restaurant/Shop	Beached/Blocked	2
REICHARDT MANFRED	Restaurant/Shop	Wet Slip	7
REICHERT GARY A + BONNIE JEAN	Multi-Family	Seawall	2
REICHERT GARY A + BONNIE JEAN	Multi-Family	Wet Slip	1
REINS BARBARA TR	Hotel/Motel	Davits	1
REINS BARBARA TR	Hotel/Motel	Ramp	1
REINS BARBARA TR	Hotel/Motel	Trailer	1
REINS BARBARA TR	Hotel/Motel	Wet Slip	12
REINS BARBARA TR	Multi-Family	Trailer	1
REINS BARBARA TR	Multi-Family	Wet Slip	5
RICHARD JOHN W	Hotel/Motel	Wet Slip	2
RICHARD JOHN W TR	Multi-Family	Wet Slip	2
RICHARD JOHN W TR	Restaurant/Shop	Beached/Blocked	1
RICHARD JOHN W TR	Restaurant/Shop	Wet Slip	2
RICHARD L LEWIS CONSTRUCTION	Restaurant/Shop	Hoist	1
RICHARD L LEWIS CONSTRUCTION	Restaurant/Shop	Wet Slip	7
RINALDI LOUIS E + ROSA M	Multi-Family	Wet Slip	1
RIPTIDE CONDO	Multi-Family	Wet Slip	2
RIVER FOREST COMM ASSOC	Club	Ramp	1
RIVER FOREST COMM ASSOC	Club	Wet Slip	1
RIVER GARDEN CONDOMINIUM	Multi-Family	Wet Slip	4
RIVER GROVE ESTATES	Multi-Family	Ramp	1
RIVER GROVE ESTATES	Multi-Family	Wet Slip	1
RIVER HARBOR CLUB CONDO	Multi-Family	Seawall	1
RIVER HARBOR CLUB CONDO	Multi-Family	Wet Slip	11
RIVER PARK PLACE CONDO	Multi-Family	Hoist	20
RIVER PARK PLACE CONDO	Multi-Family	Wet Slip	8
RIVER PLACE CONDO	Multi-Family	Hoist	1
RIVER PLACE CONDO	Multi-Family	Wet Slip	3
RIVER SUBDIVISION	Multi-Family	Float/Ramp	1
RIVER SUBDIVISION	Multi-Family	Hoist	5
RIVER SUBDIVISION	Multi-Family	Wet Slip	10
RIVER TERRACE II CONDO	Multi-Family	Wet Slip	2
RIVER TOWERS CONDO	Multi-Family	Wet Slip	17
RIVER VIEW OF CAPE CORAL CONDO	Multi-Family	Hoist	5
RIVER VIEW OF CAPE CORAL CONDO	Multi-Family	Wet Slip	3
RIVERBEND GOLF + COUNTRY CLUB	Restaurant/Shop	Wet Slip	5
RIVERGATE CONDO	Multi-Family	Beached/Blocked	2
RIVERGATE CONDO	Multi-Family	Wet Slip	7
RIVERLAWN TERRACE PARK	Multi-Family	Hoist	1

RIVERLAWN TERRACE PARK	Multi-Family	Wet Slip	18
RIVERS ARLENE +	Multi-Family	Beached/Blocked	2
RIVERS ARLENE +	Multi-Family	Davits	1
RIVERS ARLENE +	Multi-Family	Wet Slip	3
RIVERS BOAT BASIN PROPERTY	Multi-Family	Hoist	16
RIVERS BOAT BASIN PROPERTY	Multi-Family	Wet Slip	15
RIVERS EDGE MOBILE HOME PARK	Multi-Family	Trailer	1
RIVERS EDGE MOBILE HOME PARK	Multi-Family	Wet Slip	8
RIVERS I CONDO	Multi-Family	Davits	1
RIVERS I CONDO	Multi-Family	Hoist	6
RIVERS I CONDO	Multi-Family	Wet Slip	3
RIVERSIDE BEACH CONDO	Multi-Family	Hoist	8
RIVERSIDE BEACH CONDO	Multi-Family	Wet Slip	6
RIVERSIDE CLUB INC	Multi-Family	Wet Slip	3
RIVERSIDE CONDO	Multi-Family	Wet Slip	3
RIVERSIDE YACHT CLUB ESTS	Multi-Family	Wet Slip	8
RIVERVIEW APARTMENTS LTD	Multi-Family	Beached/Blocked	1
RIVERVIEW APARTMENTS LTD	Multi-Family	Seawall	1
RMS ASSET MANAGEMENT TRUST +	Multi-Family	Wet Slip	1
ROBBINS LEWIS	Other	Wet Slip	1
ROBERTS DEVELOPMENT CORP	Anchorage	Anchorage	1
ROBERTS DEVELOPMENT CORP	Marina	Beached/Blocked	20
ROBERTS DEVELOPMENT CORP	Marina	Float/Ramp	4
ROBERTS DEVELOPMENT CORP	Marina	Hoist	16
ROBERTS DEVELOPMENT CORP	Marina	Ramp	1
ROBERTS DEVELOPMENT CORP	Marina	Trailer	5
ROBERTS DEVELOPMENT CORP	Marina	Wet Slip	86
ROBERTS KENNETH + LORI LEE	Multi-Family	Beached/Blocked	1
ROBINSON JEANETTE A + PAUL N	Multi-Family	Beached/Blocked	1
ROBINSON JEANETTE A + PAUL N	Multi-Family	Wet Slip	2
ROCHE JAMES + VIRGINIA	Multi-Family	Wet Slip	2
ROCHESTER RESORTS INC	Hotel/Motel	Beached/Blocked	23
ROCHESTER RESORTS INC	Hotel/Motel	Other	2
ROCHESTER RESORTS INC	Hotel/Motel	Wet Slip	42
ROCHESTER RESORTS INC	Marina	Beached/Blocked	2
ROCHESTER RESORTS INC	Marina	Mooring	2
ROCHESTER RESORTS INC	Marina	Ramp	1
ROCHESTER RESORTS INC	Marina	Wet Slip	8
ROCHESTER RESORTS INC	Restaurant/Shop	Beached/Blocked	1
ROCHESTER RESORTS INC	Restaurant/Shop	Ramp	2
ROCHESTER RESORTS INC	Restaurant/Shop	Wet Slip	4
ROGERS MARTHA A +	Multi-Family	Wet Slip	1
ROGERS ROBERT C + MARGARET T	Multi-Family	Wet Slip	6
ROOSA RICHARD V S 15% ETAL	Other	Wet Slip	1
ROSATI PETER J + MARY LOUISE	Multi-Family	Hoist	1

ROSATI PETER J + MARY LOUISE	Multi-Family	Wet Slip	3
ROSSETTO RONALD J + MARIA	Multi-Family	Wet Slip	2
ROTH GARY S	Multi-Family	Seawall	1
ROTH GARY S	Multi-Family	Trailer	1
ROYAL PALM CONDO	Multi-Family	Wet Slip	3
ROYAL PALM YACHT CLUB INC	Club	Wet Slip	2
ROYAL PALM YACHT CLUB INC	Marina	Davits	1
ROYAL PALM YACHT CLUB INC	Marina	Ramp	1
ROYAL PALM YACHT CLUB INC	Marina	Seawall	1
ROYAL PALM YACHT CLUB INC	Marina	Trailer	2
ROYAL PALM YACHT CLUB INC	Marina	Wet Slip	39
ROYAL PELICAN TOWNHOUSE	Multi-Family	Hoist	63
ROYAL PELICAN TOWNHOUSE	Multi-Family	Wet Slip	21
ROYAL VISTA CONDOMINIUM	Multi-Family	Hoist	1
ROYAL VISTA CONDOMINIUM	Multi-Family	Wet Slip	8
ROZA DENIS J + SUZANNE E	Multi-Family	Wet Slip	1
RUBICAN VISTA CONDO	Multi-Family	Float/Ramp	1
RUBICAN VISTA CONDO	Multi-Family	Wet Slip	7
RUBICON CONDO	Multi-Family	Wet Slip	6
RUBICON MANOR CONDOMINIUM	Multi-Family	Wet Slip	8
RUBIN MARK I 1/2 INT TR +	Multi-Family	Wet Slip	1
RUFFOLO SERAFINO + MIRELLA	Multi-Family	Beached/Blocked	2
RUFFOLO SERAFINO + MIRELLA	Multi-Family	Wet Slip	2
RUPPRICH KARL + HEIDRUN	Multi-Family	Wet Slip	1
RUSK BREESE COUSIN	Hotel/Motel	Beached/Blocked	2
RUSK BREESE COUSIN	Hotel/Motel	Wet Slip	1
RUSK BREESE COUSINS	Hotel/Motel	Wet Slip	2
RUSSELL MONIKA	Multi-Family	Wet Slip	3
S FL WATER MGMT DIST	Club	Wet Slip	4
S FL WATER MGMT DIST	Other	None	2
S FL WATER MGMT DIST	Other	Wet Slip	1
SABELJAMES M	Multi-Family	Seawall	1
SABELJAMES M	Multi-Family	Wet Slip	1
SACCENDE ANGELINA	Multi-Family	Wet Slip	3
SADOWSKI GENE L	Multi-Family	Wet Slip	4
SAFETY HARBOR CLUB INC	Multi-Family	Wet Slip	49
SAIL HARBOUR CONDO	Multi-Family	Wet Slip	4
SAMBRATO JOAN +	Multi-Family	Wet Slip	5
SAMBRATO NICHOLAS	Restaurant/Shop	Wet Slip	1
SAND M P +ILSE-MARGARETHE ETAL	Multi-Family	Hoist	2
SAND M P +ILSE-MARGARETHE ETAL	Multi-Family	Wet Slip	3
SANDER MARJORIE	Marina	Beached/Blocked	4
SANDER MARJORIE	Marina	Hoist	1
SANDER MARJORIE	Marina	Wet Slip	7
SANDPIPER ASSOCIATES	Multi-Family	Davits	2

SANDPIPER ASSOCIATES	Multi-Family	Hoist	2
SANDPIPER ASSOCIATES	Multi-Family	Wet Slip	8
SANDPIPER OF CAPE CORAL CONDO	Multi-Family	Wet Slip	6
SANDY CIRCLE CONDO	Multi-Family	Wet Slip	11
SANDY HOOK INC	Restaurant/Shop	Wet Slip	2
SANIBEL ARMS CONDO ASSOC	Multi-Family	Wet Slip	2
SANIBEL ARMS WEST CONDO	Multi-Family	Beached/Blocked	4
SANIBEL ARMS WEST CONDO	Multi-Family	Hoist	1
SANIBEL ARMS WEST CONDO	Multi-Family	Wet Slip	23
SANIBEL HARBOUR MARINA LIMITED	Marina	Beached/Blocked	17
SANIBEL HARBOUR MARINA LIMITED	Marina	Dry Stack	256
SANIBEL HARBOUR MARINA LIMITED	Marina	Trailer	2
SANIBEL HARBOUR MARINA LIMITED	Marina	Wet Slip	19
SANTA MARIA II CONDO ASSOC	Multi-Family	Hoist	4
SANTA MARIA II CONDO ASSOC	Multi-Family	Wet Slip	21
SANTA MARIA MASTER ASSOC INC	Multi-Family	Hoist	3
SANTA MARIA MASTER ASSOC INC	Multi-Family	Wet Slip	12
SAVOY PLAZA CONDO	Multi-Family	Wet Slip	3
SCAN PROPERTIES	Marina	Beached/Blocked	1
SCAN PROPERTIES	Marina	Hoist	1
SCAN PROPERTIES	Marina	Trailer	2
SCAN PROPERTIES	Marina	Wet Slip	15
SCHLACHTA ERICH TR +	Hotel/Motel	Wet Slip	6
SCHLEICHER ANNALIESE TR	Multi-Family	Wet Slip	1
SCHOONER COVE CONDO	Multi-Family	Hoist	2
SCHOONER COVE CONDO	Multi-Family	Wet Slip	7
SCHRECK JAMES O + MARY L TR	Multi-Family	Davits	1
SCHRECK JAMES O + MARY L TR	Multi-Family	Wet Slip	1
SCHULTZ WAYNE M ETAL	Hotel/Motel	Hoist	1
SCHULTZ WAYNE M ETAL	Hotel/Motel	Wet Slip	4
SCHUMACHER RICHARD	Multi-Family	Hoist	3
SCHUMACHER RICHARD	Multi-Family	Wet Slip	2
SCHWIND MARINA INC	Yard	Beached/Blocked	92
SCHWIND MARINA INC	Yard	Dry Stack	125
SCHWIND MARINA INC	Yard	Hoist	3
SCHWIND MARINA INC	Yard	Trailer	24
SCHWIND MARINA INC	Yard	Wet Slip	32
SEA GRAPE BAY CONDO	Multi-Family	Hoist	7
SEA GRAPE BAY CONDO	Multi-Family	Wet Slip	7
SEA ISLES CONDO	Multi-Family	Hoist	11
SEA QUEST CONDO	Multi-Family	Wet Slip	2
SEABREEZE CONDO	Multi-Family	Hoist	1
SEABREEZE CONDO	Multi-Family	Wet Slip	2
SEAGO GROUP	Marina	Float/Ramp	1
SEAGO GROUP	Marina	Hoist	2

SEAGO GROUP	Marina	Wet Slip	89
SEASCAPE CONDO PH III CONDO	Multi-Family	Hoist	11
SEASCAPE CONDO PH III CONDO	Multi-Family	Wet Slip	9
SEAWIND CONDO	Multi-Family	Float/Ramp	1
SEAWIND CONDO	Multi-Family	Wet Slip	6
SEAWIND II HOMEOWNERS ASSN INC	Multi-Family	Hoist	2
SEAWIND II HOMEOWNERS ASSN INC	Multi-Family	Wet Slip	1
SEHNAL DANIEL + KAREN	Multi-Family	Wet Slip	1
SEIBEL MICHAEL	Multi-Family	Hoist	1
SEIBEL MICHAEL	Multi-Family	Wet Slip	3
SEIBT ROBERT	Multi-Family	Wet Slip	1
SEMERARO ELIZABETH	Multi-Family	Trailer	1
SEMERARO ELIZABETH	Multi-Family	Wet Slip	5
SEMMER WILLIAM J	Industrial	Wet Slip	33
SEMMER WILLIAM J	Marina	Wet Slip	21
SENTER CHRISTINE R	Restaurant/Shop	Wet Slip	1
SEVERSON ENTERPRISES	Multi-Family	Beached/Blocked	9
SEVERSON ENTERPRISES	Multi-Family	Ramp	2
SEVERSON ENTERPRISES	Multi-Family	Trailer	52
SEVERSON ENTERPRISES	Multi-Family	Wet Slip	195
SEXTON DAVID TR	Multi-Family	Ramp	1
SEXTON DAVID TR	Multi-Family	Wet Slip	2
SHELBURNE KEVIN L TR	Multi-Family	Wet Slip	1
SHEPPARD ANNABELLE T TR +	Multi-Family	Hoist	1
SHERWOOD ANDREW B	Multi-Family	Wet Slip	3
SHERWOOD CONDO	Multi-Family	Float/Ramp	1
SHERWOOD CONDO	Multi-Family	Wet Slip	9
SHOVLIN GEORGE 3/4 INT ETAL	Marina	Beached/Blocked	18
SHOVLIN GEORGE 3/4 INT ETAL	Marina	Hoist	1
SHOVLIN GEORGE 3/4 INT ETAL	Marina	Trailer	97
SHOVLIN GEORGE 3/4 INT ETAL	Marina	Wet Slip	55
SHOVLIN GEORGE 3/4 INT ETAL	Multi-Family	Ramp	1
SHOVLIN GEORGE 3/4 INT ETAL	Multi-Family	Wet Slip	26
SIGLER JAMES FRANCES JR	Restaurant/Shop	Ramp	1
SIGLER JAMES FRANCES JR	Restaurant/Shop	Wet Slip	3
SIMER CLIFTON L + MARGIE A	Multi-Family	Trailer	2
SJOSTROM ROBERTA L	Multi-Family	Hoist	1
SJOSTROM ROBERTA L	Multi-Family	Wet Slip	1
SKADBERG PER T + MARIL H/W +	Multi-Family	Wet Slip	1
SKAP REALTY INC	Industrial	Beached/Blocked	1
SKAP REALTY INC	Industrial	Davits	1
SKEWES RICHARD E + PEGGY P	Multi-Family	Wet Slip	4
SLACK EILEEN NEWTON	Multi-Family	Wet Slip	1
SLEE KAREN LORAYN	Marina	Beached/Blocked	6
SLEE KAREN LORAYN	Marina	Hoist	1

SLEE KAREN LORAYN	Marina	Seawall	8
SLEE KAREN LORAYN	Marina	Trailer	1
SLEE KAREN LORAYN	Marina	Wet Slip	40
SMITH ARTHUR R	Other	Wet Slip	4
SMITH RICHARD D + PHYLLIS J	Multi-Family	Float/Ramp	1
SMITH RICHARD D + PHYLLIS J	Multi-Family	Wet Slip	4
SNO-BIRD CONDO	Multi-Family	Hoist	6
SNO-BIRD CONDO	Multi-Family	Wet Slip	1
SNUG HARBOR CONDO ASSOCIATION	Multi-Family	Wet Slip	5
SNYDER MELODY L	Multi-Family	Davits	1
SNYDER MELODY L	Multi-Family	Hoist	1
SNYDER MELODY L	Multi-Family	Wet Slip	1
SORRENTO COURT	Multi-Family	Wet Slip	2
SOUTH SEAS RESORT	Marina	Davits	1
SOUTH SEAS RESORT	Marina	Float/Ramp	2
SOUTH SEAS RESORT	Marina	Ramp	2
SOUTH SEAS RESORT	Marina	Trailer	1
SOUTH SEAS RESORT	Marina	Wet Slip	80
SOUTH SEAS RESORT	Multi-Family	Beached/Blocked	63
SOUTH SEAS RESORT	Multi-Family	Davits	1
SOUTH SEAS RESORT	Multi-Family	Ramp	1
SOUTH SEAS RESORT	Multi-Family	Trailer	2
SOUTH SEAS RESORT	Multi-Family	Wet Slip	61
SOUTHERN PALMS	Multi-Family	Wet Slip	2
SOUTHWICK DAVID W + JANE M	Industrial	Beached/Blocked	1
SPANISH HARBOR CONDO	Multi-Family	Wet Slip	17
SPOHN + ASSOCIATES INC	Marina	Beached/Blocked	22
SPOHN + ASSOCIATES INC	Marina	Ramp	1
SPOHN + ASSOCIATES INC	Marina	Trailer	29
SPOHN + ASSOCIATES INC	Marina	Wet Slip	33
SPORTSMANS COVE	Multi-Family	Beached/Blocked	2
SPORTSMANS COVE	Multi-Family	Ramp	1
SPORTSMANS COVE	Multi-Family	Wet Slip	36
SPTMRT PROPERTIES TRUST	Hotel/Motel	Wet Slip	4
ST CHARLES YACHT CLUB INC	Marina	Beached/Blocked	1
ST CHARLES YACHT CLUB INC	Marina	Hoist	11
ST CHARLES YACHT CLUB INC	Marina	Wet Slip	62
ST JAMES PLACE HOMEOWNERS INC	Multi-Family	Float/Ramp	5
ST JAMES PLACE HOMEOWNERS INC	Multi-Family	Hoist	16
ST JAMES PLACE HOMEOWNERS INC	Multi-Family	Wet Slip	15
ST JAMES TRADEWINDS INC	Restaurant/Shop	Davits	1
ST JAMES TRADEWINDS INC	Restaurant/Shop	Wet Slip	7
STAHL WOLFGANG + MICHAELE	Multi-Family	Wet Slip	1
STANO EDWARD C + BARBARA	Multi-Family	Beached/Blocked	4
STANO EDWARD C + BARBARA	Multi-Family	Wet Slip	13

STEDDING R M SR + WINIFRED J	Multi-Family	Hoist	1
STEFFAN EUGENE + DIANE	Marina	Beached/Blocked	11
STEFFAN EUGENE + DIANE	Marina	Dry Stack	16
STEFFAN EUGENE + DIANE	Marina	Ramp	1
STEFFAN EUGENE + DIANE	Marina	Seawall	1
STEFFAN EUGENE + DIANE	Marina	Trailer	8
STEFFAN EUGENE + DIANE	Marina	Wet Slip	88
STEFFAN EUGENE M + DIANE	Marina	Beached/Blocked	33
STEFFAN EUGENE M + DIANE	Marina	Trailer	50
STEVEN DOMINIC 37.5% ETAL	Industrial	Wet Slip	3
STINER RUSSEL E + DONNA K	Hotel/Motel	Beached/Blocked	2
STINER RUSSEL E + DONNA K	Hotel/Motel	Wet Slip	2
STREIT EDWARD F TR	Hotel/Motel	Wet Slip	25
STUART GREG + JOAN ALLISON	Multi-Family	Davits	1
STUBRUD MICHAEL T	Multi-Family	Wet Slip	1
STUTTGART GROUP INC	Multi-Family	Hoist	3
STUTTGART GROUP INC	Multi-Family	Wet Slip	1
SULLIVAN DAVID C	Multi-Family	Wet Slip	1
SULLIVAN HAYWOOD C TR	Marina	Wet Slip	55
SUN BANK OF LEE COUNTY TR	Multi-Family	Ramp	2
SUN BANK OF LEE COUNTY TR	Multi-Family	Wet Slip	9
SUN CASTLE CONDO	Multi-Family	Wet Slip	1
SUN-N-FUN MOBILE HOME VILLAGE	Multi-Family	Hoist	1
SUN-N-FUN MOBILE HOME VILLAGE	Multi-Family	Wet Slip	5
SUN-N-FUN MOBILE HOMEOWNERS	Multi-Family	Ramp	1
SUN-N-FUN MOBILE HOMEOWNERS	Multi-Family	Seawall	15
SUN-N-FUN MOBILE HOMEOWNERS	Multi-Family	Trailer	1
SUN-N-FUN MOBILE HOMEOWNERS	Multi-Family	Wet Slip	2
SUNNYBROOK HARBOUR CONDO	Multi-Family	Hoist	1
SUNNYBROOK HARBOUR CONDO	Multi-Family	Wet Slip	12
SUNRISE BAY CONDO	Multi-Family	Wet Slip	4
SUNSCAPE CONDO	Multi-Family	Hoist	1
SUNSCAPE CONDO	Multi-Family	Wet Slip	6
SUNSET TOWERS APARTMENTS	Multi-Family	Wet Slip	10
SUNSHINE I CONDO	Multi-Family	Hoist	1
SUNSHINE I CONDO	Multi-Family	Wet Slip	4
SUNSHINE ISLAND INN LTD	Hotel/Motel	Wet Slip	2
SUNWOOD CONDO	Multi-Family	Wet Slip	3
SURFUS JOHN D	Hotel/Motel	Hoist	3
SURFUS JOHN D	Hotel/Motel	Wet Slip	6
SWOR DAVID W TR	Industrial	Beached/Blocked	1
SWOR DAVID W TR	Industrial	Trailer	1
SWOR DAVID W TR	Industrial	Wet Slip	4
SWOR DAVID W TR	Multi-Family	Beached/Blocked	1
SWOR DAVID W TR	Multi-Family	Wet Slip	1

SWOR DAVID W TR	Restaurant/Shop	Wet Slip	3
TALAN CORPORATION	Other	Wet Slip	1
TAYLOR JAMES A	Multi-Family	Trailer	1
TAYLOR JAMES A	Multi-Family	Wet Slip	1
TEBBE F J + ROBERTA J	Multi-Family	Wet Slip	2
TENNISPLACE 1 PHASE A	Multi-Family	Wet Slip	9
TENNISPLACE 1 PHASE C	Multi-Family	Wet Slip	5
THAYER STELLA FERGUSON ET AL	Multi-Family	Beached/Blocked	1
THAYER STELLA FERGUSON ET AL	Multi-Family	Trailer	1
THAYER STELLA FERGUSON ET AL	Multi-Family	Wet Slip	5
THOMPSON JAMES E + DIANE P	Multi-Family	Hoist	2
THOMPSON JAMES E + DIANE P	Multi-Family	Wet Slip	4
THURSTON LEWIS E	Multi-Family	Hoist	3
THURSTON LEWIS E	Multi-Family	Wet Slip	1
TIITF/REC + PARKS	Anchorage	Mooring	4
TIITF/REC + PARKS	Government	Beached/Blocked	16
TIITF/REC + PARKS	Government	Davits	1
TIITF/REC + PARKS	Government	Float/Ramp	3
TIITF/REC + PARKS	Government	Wet Slip	22
TIITF/REC + PARKS	Multi-Family	Seawall	5
TIITF/REC + PARKS	Multi-Family	Wet Slip	13
TOWN + RIVER PH 1	Multi-Family	Wet Slip	16
TRINIDAD CONDO	Multi-Family	Wet Slip	2
TROPIC TERRACE BLDG 14	Multi-Family	Ramp	1
TROPIC TERRACE BLDG 14	Multi-Family	Wet Slip	13
TUDOR VILLAS CONDO	Multi-Family	Beached/Blocked	1
TUDOR VILLAS CONDO	Multi-Family	Hoist	1
TUDOR VILLAS CONDO	Multi-Family	Seawall	1
TURNBULL MARK S TR	Multi-Family	Wet Slip	1
TURNBULL MARK TR	Multi-Family	Wet Slip	1
TURNER K H + KATHLEEN A	Multi-Family	Wet Slip	1
UNSPECIFIED	Anchorage	Anchorage	128
UNSPECIFIED	Anchorage	Mooring	48
UNSPECIFIED	Government	Mooring	1
UNSPECIFIED	Government	Ramp	2
UNSPECIFIED	Government	Wet Slip	2
UNSPECIFIED	Hotel/Motel	Hoist	2
UNSPECIFIED	Hotel/Motel	Wet Slip	9
UNSPECIFIED	Industrial	Beached/Blocked	1
UNSPECIFIED	Industrial	Wet Slip	6
UNSPECIFIED	Marina	Float/Ramp	2
UNSPECIFIED	Marina	Hoist	1
UNSPECIFIED	Marina	Ramp	1
UNSPECIFIED	Marina	Wet Slip	66
UNSPECIFIED	Multi-Family	Anchorage	1

UNSPECIFIED	Multi-Family	Beached/Blocked	4
UNSPECIFIED	Multi-Family	Davits	1
UNSPECIFIED	Multi-Family	Float/Ramp	1
UNSPECIFIED	Multi-Family	Hoist	40
UNSPECIFIED	Multi-Family	Mooring	9
UNSPECIFIED	Multi-Family	Ramp	4
UNSPECIFIED	Multi-Family	Trailer	4
UNSPECIFIED	Multi-Family	Wet Slip	199
UNSPECIFIED	Other	Anchorage	3
UNSPECIFIED	Other	Beached/Blocked	3
UNSPECIFIED	Other	Mooring	3
UNSPECIFIED	Other	Wet Slip	6
UNSPECIFIED	Restaurant/Shop	Beached/Blocked	6
UNSPECIFIED	Restaurant/Shop	Davits	1
UNSPECIFIED	Restaurant/Shop	Wet Slip	55
U S FISH + WILDLIFE SERVICE	Government	Beached/Blocked	31
U S FISH + WILDLIFE SERVICE	Government	Hoist	2
U S FISH + WILDLIFE SERVICE	Government	Trailer	6
U S FISH + WILDLIFE SERVICE	Government	Wet Slip	12
USA	Government	Beached/Blocked	2
USA	Government	Mooring	14
USA	Government	Ramp	3
USA	Government	Wet Slip	23
USA-DEPT NATURAL RESOURCES	Government	Beached/Blocked	2
USA-DEPT NATURAL RESOURCES	Government	Hoist	3
USA-DEPT NATURAL RESOURCES	Government	Trailer	1
USA-DEPT NATURAL RESOURCES	Government	Wet Slip	5
VANFOSSEN DANNY + GRACE L/E+	Multi-Family	Hoist	1
VANFOSSEN DANNY + GRACE L/E+	Multi-Family	Wet Slip	3
VANFOSSEN JAMES D + TERRI D	Multi-Family	Wet Slip	1
VENDOME CONDO	Multi-Family	Wet Slip	2
VENTURA CAPTIVA CONDO	Multi-Family	Wet Slip	10
VICTORIA GREY CONDO	Multi-Family	Wet Slip	3
VICTORIA MANOR CONDO	Multi-Family	Wet Slip	9
VIENTO DE MAR CONDO	Multi-Family	Wet Slip	3
VIKING CONDO	Multi-Family	Wet Slip	2
VILLA DE VERN CONDO	Multi-Family	Wet Slip	7
VILLA GRANDE I CONDO	Multi-Family	Wet Slip	2
VILLA GRANDE II CONDO	Multi-Family	Hoist	1
VILLA GRANDE II CONDO	Multi-Family	Wet Slip	2
VILLA MARIA CONDO	Multi-Family	Hoist	3
VILLA MARIA CONDO	Multi-Family	Wet Slip	3
VILLAGE AT INDIAN CREEK	Multi-Family	Beached/Blocked	1
VILLAGE AT INDIAN CREEK	Multi-Family	Wet Slip	9
VILLAGE AT SAFETY HARBOR	Multi-Family	Beached/Blocked	4

VILLAGE AT SAFETY HARBOR	Multi-Family	Wet Slip	9
VILLA-LISA CONDO ASSOC INC	Multi-Family	Beached/Blocked	2
VILLA-LISA CONDO ASSOC INC	Multi-Family	Wet Slip	9
VISSER JAN	Marina	Trailer	4
VISTA D ORO	Multi-Family	Wet Slip	41
VISTA POINTE CONDO	Multi-Family	Hoist	4
VISTA POINTE CONDO	Multi-Family	Wet Slip	6
WAGAR MELVIN F	Hotel/Motel	Wet Slip	9
WAGAR MELVIN F	Multi-Family	Hoist	1
WAGAR MELVIN F	Multi-Family	Wet Slip	2
WALKER STEPHEN ETAL	Multi-Family	Wet Slip	1
WALLACE JERALD L + JOANNE	Multi-Family	Wet Slip	1
WALLINGTON ADA MARY +	Hotel/Motel	Wet Slip	1
WARD DALE + DOROTHY	Multi-Family	Wet Slip	9
WATERGATE CONDO	Multi-Family	Wet Slip	7
WATERHOUSE RICHARD P + GLORIA	Multi-Family	Wet Slip	1
WATERSIDE I CONDO ASSOC	Multi-Family	Wet Slip	14
WATERSIDE WEST CONDO	Multi-Family	Wet Slip	7
WATERWAY GROUP INC	Marina	Wet Slip	26
WATERWAY SHORES PROPERTY	Multi-Family	Hoist	2
WATERWAY SHORES PROPERTY	Multi-Family	Ramp	1
WATERWAY SHORES PROPERTY	Multi-Family	Wet Slip	12
WAYWARD WIND	Multi-Family	Wet Slip	4
WCI COMMUNITIES LMTD PTRSHP	Marina	Ramp	1
WCI COMMUNITIES LMTD PTRSHP	Marina	Wet Slip	24
WCI COMMUNITIES LMTD PTRSHP	Multi-Family	Wet Slip	15
WCSJR IV CORP	Marina	Beached/Blocked	35
WCSJR IV CORP	Marina	Dry Stack	163
WCSJR IV CORP	Marina	Trailer	11
WCSJR IV CORP	Marina	Wet Slip	22
WCSJR IV CORP	Restaurant/Shop	Seawall	1
WCSJR IV CORP	Restaurant/Shop	Wet Slip	49
WEAVER SUSAN A 1/2 INT +	Multi-Family	Wet Slip	1
WEEKLY MARK + MARGARET H	Multi-Family	Ramp	1
WEEKS MARY A TR	Marina	Wet Slip	8
WEINER CORPORATION	Other	Wet Slip	8
WELCH JOHN I + JO ANN TRS	Multi-Family	Wet Slip	5
WENDL JOHN A + KATHRYN M	Restaurant/Shop	Wet Slip	10
WHITTLE JOHN F TR	Multi-Family	Trailer	2
WHITTLE JOHN F TR	Multi-Family	Wet Slip	5
WIEGAN ELLEN M TR	Multi-Family	Davits	1
WIEGAN ELLEN M TR	Multi-Family	Seawall	2
WIEGAN ELLEN M TR	Multi-Family	Trailer	1
WIEGAN ELLEN M TR	Multi-Family	Wet Slip	4
WIER RICHARD J	Multi-Family	Hoist	1

WIER RICHARD J	Multi-Family	Wet Slip	1
WIGH EMILY S	Restaurant/Shop	Wet Slip	6
WILLOW DALE CONDO	Multi-Family	Seawall	1
WILSON VALERIE B	Restaurant/Shop	Wet Slip	1
WIND SONG CONDO	Multi-Family	Hoist	1
WIND SONG CONDO	Multi-Family	Wet Slip	7
WINDSOR MANOR CONDO	Multi-Family	Wet Slip	11
WINDWARD POINT CONDO	Multi-Family	Hoist	4
WINDWARD POINT CONDO	Multi-Family	Wet Slip	2
WINTERHAWK CONDO	Multi-Family	Hoist	1
WINTERHAWK CONDO	Multi-Family	Wet Slip	5
WISE NORMA J TR	Multi-Family	Wet Slip	5
WISTRAND W H JR + HAZEL	Restaurant/Shop	Wet Slip	12
WOLFORD HEDRICK L+JOSEPHINE TR	Multi-Family	Wet Slip	3
YACHT HAVEN	Multi-Family	Hoist	5
YACHTSMANS COVE UNIT I II III	Multi-Family	Beached/Blocked	1
YACHTSMANS COVE UNIT I II III	Multi-Family	Wet Slip	20
ZIMMERMAN RAYMOND H	Multi-Family	Wet Slip	1
ZINN DAVID E + MICHELE G H/W	Multi-Family	Trailer	1
ZIVIC JOSEPH S	Multi-Family	Wet Slip	1
ZIZUNAS CONSTANCE	Multi-Family	Wet Slip	2
ZUKAITIS JOHN + VERONICA	Restaurant/Shop	Hoist	2
ZUKAITIS JOHN + VERONICA	Restaurant/Shop	Wet Slip	2
Total			**16,494**

TABLE 8. VESSELS REGISTERED IN LEE COUNTY BY CLASS

CLASS TYPE	NUMBER OF BOATS (Year)						
	1995	96-97	97-98	98-99	2000	2001	2002
CLASS A-1, Less than 12'	4544	4987	5007	5027	5492	5926	6100
CLASS A-2, 12' – 15'11"	6911	6819	6667	6531	6865	7222	7131
CLASS 1, 16' – 25'11"	19015	19307	20298	21258	23147	24614	25834
CLASS 2, 26' – 39'11"	2910	2977	3228	3460	4156	4556	4871
CLASS 3, 40' – 64'11"	409	411	438	431	536	632	713
CLASS 4, 65' – 109'11"	67	66	63	58	59	65	65
CLASS 5, Over 110'	0	0	0	0	0	0	0
CANOES	323	350	338	332	169	208	268
DEALERS	237	240	221	2231	281	429	431
GRAND TOTAL	34451	35157	36255	37328	40725	43652	45413

Source: Florida Fish and Wildlife Conservation Commission

TABLE 9. TOTAL VESSELS REGISTERED BY FISCAL YEAR

Fiscal Year	Number of Boats
86-87	25,570
87-88	27,548
88-89	30,581
89-90	31,450
90-91	31,719
91-92	31,381
92-93	31,190
93-94	32,222
94-95	16,410*
95-96	34451
96-97	35,157
97-98	36,255
98-99	37,328
2000	40,725
2001	43,652
2002	45,413

Source: Florida Fish and Wildlife Conservation Commission
* Anomaly in the data most likely caused by transition of records to Department of Motor Vehicles and modification from all annual renewals to monthly based on owners birthday.

TABLE 10. NEW BOAT COMPOSITION BY SIZE - 1998 STATE-WIDE SALES.
Presents the 1998 Boat Sales of New Boats statewide, by size category. This table also illustrates that boats in the 16' to 25' 11" range comprise the majority of boats sold, totaling approximately 88% of all boats sold in the county for that period.

Boat Size (ft)	Number of Boats	% of Total New Boats
16-20'	17,203	63.5
21-25'	6,468	23.9
26-30'	2,190	8.1
31-35'	673	2.5
36-40'	280	1.0
41-45'	129	0.5
46'+	146	0.5
Total	**27,089**	

Source: Where Do They All Come From, An Analysis of Boat Traffic and How It Relates to Manatee Mortality in Lee County, Florida

TABLE 11. LOCAL LAW ENFORCEMENT ACTIVITY.
Citations are a combined total and include infractions unrelated to manatees.

Dept.		Fiscal Year 1996/1997	Fiscal Year 1997/1998	Fiscal Year 1998/1999	Fiscal Year 1999/2000	Fiscal Year 2000/2001
		TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
LCSO	hours - water	2706	2711	5001	4952	3695.75
	citations	180	66	106	141	84
SPD	hours - water	527.5	375	504	511	404
	citations	28	20	2	4	4
CCPD	hours - water	2008	1486	1823	2179.5	1709
	citations	2036	95	40	55	404
FMPD	hours - water	142	205.5	625	152	
	citations	19	21	132	27	
FMBch	hours – water		226.5	1367	1662.5	1590
	citations		17	10	53	11

LCSO = Lee County Sheriff's Office; SPD = Sanibel Police Department; CCPD = Cape Coral Police Department; FMPD = Fort Myers Police Department; FMBch = LCSO activity done under contracted detail for the Town of Fort Myers Beach.

TABLE 12. INCREASE IN LAW ENFORCEMENT ACTIVITY
(LEE COUNTY AND CAPE CORAL PD), HOURS ON WATER AND TOTAL CITATIONS ISSUED, BY FY QUARTERS, CALENDAR YEARS 2001 AND 2002.

Citations By Department

	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
LCSO	21	19	20	1	7	7	27	120
FMB Detail	1	6	0	12	0	1	57	22
Bonita Detail	0	0	0	24	13	1	14	7
CCPD	19	5	17	16	5	16	11	19
Total=	41	30	37	53	25	25	109	168

FMB= Fort Myers Beach
Bonita= City of Bonita Springs
CCPD= Cape Coral Police Department

Water Hours By Department

	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
LCSO	817.5	1063	646	903.3	1102	1042	993	821.5
FMB Detail	365	486	343.5	141	452	307	352	324
Bonita Detail	0	0	0	490.5	134.5	195	204	100.5
CCPD	328	404	468	396	424.5	630.5	475	141
Total=	1510.5	1953	1457.5	1930.8	2113	2174.5	2024	1387

TABLE 13. TASK FORCE INVENTORY

AGENCY	# OF OFFICERS	# OF VESSELS	WEEKDAY COVERAGE	WEEKEND COVERAGE
LEE SO	10 (35)	10	0400-1900	0400-1900
CCPD	6	5	0600-1800	0600-1800
FWC	11(2)	11	0800-2300	0800-2300
FMPD	(6)	2	VAR. 0800-1800	VAR. 0800-1800
SPD	2	2	0900-1900	0900-1900
USCG	48	4	VAR.	VAR.
TOTAL=				

* Figures in parenthesis represent officers that are trained as marine officers, but work either half time or on detail work. All other numbers are fully dedicated marine officers.

11.0 Bibliography

Adequacy of Speed Zones in Lee County. (Nov., 2003) Florida Fish and Wildlife Conservation Commission. Retrieved Dec 22nd from: http://myfwc.com/commission/2003/November/Lee_spd_Zones.pdf.

Antonini, G.A., Alexander, L.C., Fann, D.A., & Swett, R.A. (2000). Regional Waterway Management System for Lee County, Phase 1. *Florida Sea Grant.*

Antonini, G.A., Alexander, L.C., Fann, D.A., & Swett, R.A. (2001). Regional Waterway Management System for Lee County, Phase 2. *Florida Sea Grant.*

Antonini, G.A., Alexander, L.C., Fann, D.A., & Swett, R.A. (2002). Regional Waterway Management System for Lee County, Phase 3. *Florida Sea Grant.*

Buergelt, C.D., R.K. Bonde, C.A. Beck, and T.J. O'Shea. 1984. Pathologic findings in manatees in Florida. Journal of the American Veterinary Medical Association 185(11):1331-1334.

Domning, D.P. and L.C. Hayek. 1986. Interspecific and intraspecific morphological variation in manatees (Sirenia: Trichechus). Marine Mammal. Science. 2:87-144.

Final Biological Status Review of the Florida Manatee (trichechus manatus latriostris). 2002. Report by the Florida Fish and Wildlife Conservation Commission, Florida Marine Research Institute.

Frohlich, R.K, Ackerman, B.B., and Clemons, M.A., Unpublished Revised June 13, 1994, Manatee Abundance and Distribution in Lee County, 1984-1985, Florida Fish and Wildlife Conservation Commission

Gorzelany, J.F., (1996), Evaluation of Boater Compliance with Speed Regulation in Sarasota County, Florida. Mote Marine Laboratory.

Gorzelany, J.F., October 2, 1998, Evaluation of Boat Traffic Patterns and Boater Compliance in Lee County, Florida. Mote Marine Laboratory.

Gorzelany, J.F., October 20, 1999, Quantitative Analysis of Recreational Vessel Speeds Prior to the Establishment of Speed Restricted Zones in Lee County, Florida, Mote Marine Laboratory

Gorzelany, J.F., November 9, 1999, Evaluation of Boat Traffic Patterns in Estero Bay, Florida, Mote Marine Laboratory.

Gorzelany, J.F., September 30, 2000. Evaluation of Vessel Traffic and Boater Compliance in Association with New Boat Speed Regulations in the Lower

Caloosahatchee River. Mote Marine Laboratory report to the Florida Fish and Wildlife Conservation Commission.

Gorzelany, J.F., September 30, 2002. An Evaluation of Boater Compliance in Association with New Boat Speed Regulations at Two Locations in Estero Bay. Mote Marine Laboratory report to the Florida Fish and Wildlife Conservation Commission.

Hartman, D.S. 1979. Ecology and behavior of the manatee *(Trichechus manatus)* in Florida. Special publication: American Society of Mammologists special report no. 5: 1-153.

Koelesch, Jessica, Barton, Sheri, and Flamm, Richard. (2001) Manatee Use of Matlacha Isles, an Alternate Winter Aggregation Site in Southwest Florida. Mote Marine Laboratory Research Publication.

Krebs, C.J. 1989. Ecological Methodology. Harper & Row, New York.

Manatee Population Status Working Group, 2001. *Appendix A: Recommendation of Population Benchmarks to Help Measure Recovery. Florida Manatee Recovery Plan, (Trichechus manatus latirostris)*, Third Revision. U.S. Fish and Wildlife Service. Atlanta, Georgia. 144pp.+ appendices.

Mezich, R.R., June 2000, Manatees and the Florida Power and Light – Fort Myers Power Plant, Florida Fish and Wildlife Conservation Commission

Morris, J. G. (1990). Final report for Brevard County boating activity study. Unpublished report, Department of Biological Sciences, Florida Institute of Technology, Melbourne, Florida. Submitted to Brevard County Office of Natural Resource Management, Proposal Number P-1-0-03.

Packard, J.M., G.B. Rathbun, and D.P. Domning. 1984. Sea cows and manatees. Pp. 292-295 in The Encyclopedia of Mammals (D. Macdonald, ed.). Facts on File Publications, New York. 944 pp.

Packard, J.M., R.C. Summers, and L.B. Barnes. 1985. Variation of visibility bias during aerial surveys of manatees. Journal of Wildlife Management 49(2):347-351.

Reynolds, J.E. and D.K. Odell, 1991. Manatees and Dugongs. Facts on File, New York

Reynolds, III, J. E. 1992. Distribution and abundance of Florida manatees (Trichechus manatus latirostris) around selected power plants following winter cold fronts: 1991-1992. Final report prepared for Florida Power & Light Company. Juno Beach, Florida.

Reynolds, III, J. E. 1996. Distribution and abundance of Florida manatees (Trichechus manatus latirostris) around selected power plants following winter cold fronts: 1995-1996. Final report prepared for Florida Power & Light Company. Juno Beach, Florida.

Riley, P. and Stead, K.J., November 1, 1999, Where Do They All Come From?, An Analysis of the Origination of Boat Traffic and How it relates to Manatee Mortality in Lee County, Florida

Shapiro, S. (2002) A Special Study of the Caloosahatchee River Eastward to the Edison Bridge and of Mullock Creek. Florida Marine Research Institute.

Sidman, C. and R.O. Flamm. (2001). A Survey of Methods for Characterizing Recreational Boating in Charlotte Harbor, Florida. Final Report submitted to Florida Sea Grant (Project No. E/WCIND-1). Gainesville, Florida.

United States Fish and Wildlife Service. 1989. Florida Manatee (Trichechus manatus latirostris) Recovery Plan. Prepared by the Florida Manatee Recovery Team for the U.S. Fish and Wildlife Service, Atlanta, Georgia. 98pp.

Weigle, Bradley L., Wright, Irene E., Ross, Monica, and Flamm, Richard. (2001). Movements of Radio-Tagged Manatees in Tampa Bay and Along Florida's West Coast 1991-1996. Florida Fish and Wildlife Conservation Commission FMRI Technical Report TR-7.

APPENDIX I. LEE COUNTY ORDINANCE NO. 02-14

LEE COUNTY ORDINANCE NO. 02-14

AN ORDINANCE AMENDING AND RESTATING THE LEE COUNTY VESSEL CONTROL AND WATER SAFETY ORDINANCE, NO. 96-22 RELATING TO VESSEL CONTROL AND WATER SAFETY; PROVIDING FOR TITLE, PURPOSE AND AUTHORITY; PROVIDING FOR DEFINITIONS; PROVIDING FOR AREAS OF ENFORCEMENT AND MEANS OF ENFORCEMENT; PROVIDING FOR VESSEL REGULATION INCLUDING SPEED, CAREFUL AND PRUDENT OPERATION REQUIRED, AREAS OF PROHIBITED WATER ACTIVITY, AREAS OF REGULATED WATER ACTIVITY, AREAS OF SPECIAL MANAGEMENT PROVIDING FOR REGULATIONS FOR PERSONAL WATERCRAFT RENTALS; PROVIDING FOR PROCEDURES TO DESIGNATE AREAS; PROVIDING FOR EXEMPTIONS; PROVIDING FOR PENALTY; PROVIDING FOR REPEALER, CONFLICTS AND SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the recreational use of the waters and public beaches is an asset of this County which is afforded the public at large, including residents and visitors to the County; and,

WHEREAS, it is not the intent of the County in this Ordinance to either regulate or post speed limits for motorized vessels in all of the waters that may be subject to the County's jurisdiction, nor to unduly interfere with traditional waterway uses for commercial and recreational purposes by boaters and fishermen; and

WHEREAS, the manner, mode, type and degree of uses to which the waters adjoining beaches are placed by the public affects the health, safety and welfare as well as the right to enjoyment by individuals using the beaches or waters for recreational purposes as well as those residing nearby; and,

WHEREAS, the operation of vessels in certain known swimming areas and in excess of idle speed poses a threat to the health, safety and welfare of swimmers and others located offshore from beaches; and,

WHEREAS, regulations which reduce vessel wakes and regulate vessel speeds will aid in reducing turbidity along and erosion to grass beds, mangroves and shorelines that serve as habitat for manatees, wading birds and other flora and fauna within Lee County; and,

WHEREAS, the use of personal watercraft floating vendors in Lee County has been found to create an intrusion of commercial activity into residentially zoned areas; and,

WHEREAS, it is in the interest of protecting residential neighborhoods, preserving the County's natural resources and limiting intrusion into public bathing areas that this Ordinance is further amended to set forth specific standards for the location and operation of commercial personal watercraft rentals and to regulate the use of personal watercraft floating vendors in the waters of Lee County; and,

WHEREAS, it is in the interest for safety and welfare of the public and the County's natural resources to establish certain regulations for speed control and limited areas of watercraft activity to reduce injury to the public and ensure the continuation of our natural resources for the public benefit and welfare; and

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA:

SECTION ONE: TITLE

This Ordinance shall be known and may be cited as the Lee County Vessel Control and Water Safety Ordinance.

SECTION TWO: PURPOSE AND AUTHORITY

A. The purpose of this Ordinance shall be to promote safety in and between boating, swimming and other water related activities in Lee County and to preserve and protect our natural resources.

B. The County does hereby declare that the public health, safety and welfare of the citizens of the County and others requires designation of specific areas within which the operation of vessels may be regulated or prohibited, and in which swimming, waterskiing, skindiving and other water activity, or any of them, may be prohibited or regulated.

C. The County is hereby authorized to designate specific areas prescribing the water activities that may be conducted and the operation of vessels therein, and the regulations for the conduct thereof. The County may, in the interest of safety, prohibit vessels from operating within such designated area and may prohibit swimming, waterskiing, skindiving and other water activities, or any of them, from being conducted in such areas.

SECTION THREE: DEFINITIONS

For the purposes of this Ordinance, the following terms, phrases, words and derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, and the words in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

A. "Bather" means any person who is in the same water as a vessel, whether said person is swimming, wading or engaged in any other activity in the water.

B. "Beach" means the soft sand portion of land lying seaward of a seawall or line of permanent vegetation and seaward of the mean high water line.

C. "Floating Vendor" means a vessel represented as a place of business, a professional or other commercial enterprise which is used to solicit, conduct, or canvass for the sale or rental of any merchandise, services, goods or property of any kind or

character. This term does not include the following types of vessels:

1. A vessel which in and of itself is rented;
2. Any parasail operation using self contained operational equipment so that launching or landing does not occur on land;
3. A vessel maintained in a permanent location over privately owned or leased submerged bottomlands; or,
4. A vessel used for hire (i.e., charter boat, dive boat, dinner cruise boat, tour boat, etc.).

D. "Idle speed" means the lowest speed at which a vessel can operate and maintain steering control. The actual speed will depend upon the design of the vessel and on the vessel's load, wind direction and speed, and the sea conditions. Generally, it will be between 1 and 3 miles per hour for outboard and inboard/outboard vessels, between 2 and 5 miles per hour for fixed shaft/rudder vessels, and the minimum speed merely necessary to effectively traverse breaking water for personal watercraft. For a non-motor propelled vessel, idle speed means that speed necessary for steerageway.

E. "Littoral Waters" means that part of the ocean or sea which abuts the shoreline and includes the shore to the ordinary high watermark. For purposes of this ordinance, the littoral right to use such waters shall be limited to the waters within the boundaries of the land-based site as those boundaries extend into the water at right angles from the shoreline. See attached Exhibit "A".

F. "Operate" means to navigate or otherwise use any vessel in, on or under the water.

G. "Person" means any individual, partnership, firm, corporation, association or other entity.

H. "Personal watercraft" means a small class A-1 or A-2 vessel as defined by state law which uses an outboard motor, or an inboard motor powering a water jet pump, as its primary source of motive power and which is designated to be operated by a person sitting, standing, or kneeling on, or being towed behind the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

I. "Site" means the plot or parcel of land or combination of contiguous lots or parcels of land.

J. "Slow speed" means no speed greater than that which is reasonable and prudent to avoid either intentionally or negligently disturbing, colliding with, or injuring manatees and which comports with the duty of all persons to use due care under the circumstances. A vessel in a slow speed zone that:

1. is operating on a plane is not proceeding at slow speed;
2. that is in the process of coming off plane and settling into the water, which action creates more than no or minimum wake, is not proceeding at slow speed;
3. that produces no wake or minimum wake is proceeding at slow speed;
4. that is completely off plane and which has settled into the water and is proceeding without wake or with minimum wake is proceeding at slow speed.

K. "Slow speed zone" means a designated area within which all vessel operators shall proceed at slow speed not on a plane and producing no or minimum wake.

L. "Steerageway" means the minimum rate of motion required for the helm of the vessel to have effect.

M. "Vessel" means an engine propelled or artificially-propelled vehicle and every

other description of boat, watercraft, barge, and air boat other than a seaplane on the water, used or capable of being used as a means of transportation on water including personal watercraft. This term shall not include unpowered rafts, floats or floatation devices, whether of canvas, vinyl, rubber, styrofoam or other substance, intended or capable of assisting in the floatation of a person on or in the water.

N. "Water-oriented structure" shall mean and include without limitation, any fishing pier, pier, wharf, observation walkway, platform, boathouse, mooring pile, riprap, revetment, seawall, bulkhead, retaining wall, jetty, platform, boat lift, davit, boat ramp, or any other obstacle, obstruction or protrusion used primarily for the landing or launching of watercraft, erosion control and shoreline stabilization, or for water oriented activities.

SECTION FOUR: AREA OF ENFORCEMENT

The area of enforcement of the provisions of this Ordinance shall be all public navigable waters, creeks, bayous, canals and channels, whether natural or man-made, located within the unincorporated areas of Lee County, including all public waters within the jurisdiction of the County in which the tide ebbs and flows. This Ordinance does not apply to the Florida Intracoastal Waterway and West Coast Inland Navigation District Waterway.

SECTION FIVE: MEANS OF ENFORCEMENT

The provisions of this Ordinance shall be enforced by members of all duly authorized law enforcement agencies within the County. Section Seven of this Ordinance shall also be enforced by the appropriate Lee County Department, Division or Agency.

SECTION SIX: VESSEL REGULATION

A. SPEED

Vessel speed shall not exceed reasonable speed under existing conditions. Nothing contained in this Ordinance shall be construed to authorize or approve any speed greater than is reasonable and proper in consideration of local conditions, other water traffic, fishermen, water skiers or bathers in the area, or other hazards.

B. CAREFUL AND PRUDENT OPERATION REQUIRED

Every person operating any vessel in, on or under any waters within the area of enforcement as set forth above shall do so in a careful and prudent manner, taking into consideration the weather conditions and range of visibility, water turbulence, proximities to fishermen, bathers, water skiers and other boats and watercraft, and all other attendant circumstances so as not to endanger the life, limb or property of any person. Failure to operate a vessel in such a careful and prudent manner shall constitute careless boating in violation of this Ordinance.

C. AREAS OF PROHIBITED WATER ACTIVITY

No owner, operator or person in command of any vessel shall permit or operate a vessel within 500 feet of a County-park beach on littoral waters adjacent thereto and designated by proper signage as a "Swimming Only" zone - vessel exclusion area, or any other area that may be so designated by the Lee County Board of County Commissioners pursuant to the procedures set forth in this Ordinance.

D. AREAS OF REGULATED WATER ACTIVITY

No owner, operator or person in command of any vessel shall permit or operate said vessel at a speed greater than, or in excess of, idle speed whenever the vessel is in an Area of Regulated Water Activity except as to those prohibited areas set

forth in Section Six C. of this Ordinance. Ingress and egress to the beaches shall be as nearly perpendicular to the shoreline as possible and parallel cruising of the shoreline shall be prohibited. The following areas are hereby designated as Areas of Regulated Water Activity:

1. All waters within 500 feet offshore from all beaches whether or not so designated with appropriate signs;
2. All waters within 500 feet from any water-oriented structure, whether or not designated for such purpose by appropriate signs;
3. Any area designated as an official "NO WAKE - IDLE SPEED ONLY" area which is so posted in such a manner and place that it may be reasonably expected to be seen and read by a person in operation of a vessel within the area;
4. The Great Calusa Blueway Paddling Trail is intended for recreational use solely by canoeists and kayakers, except in those areas where a boating channel crosses the paddling trail or is a part of the paddling trail. In those areas of the paddling trail where gasoline-engine powered vessels may operate, certain parts may be marked as "no wake-idle speed only" areas for safety of all boaters in that area.
5. All waters within 100 feet inshore and offshore of the Bascule bridge span of the Sanibel Causeway whether or not so designated with idle speed signs; and
6. Any other area that may be so designated by the Lee County Board of County Commissioners according to the procedures set forth in this Ordinance;

E. AREAS OF SPECIAL MANAGEMENT

No owner, operator or person in command of any vessel shall permit or operate a vessel at a speed greater than, or in the excess of, either idle speed, slow speed or under engine power, whichever is applicable, whenever the vessel is in an Area of Special Management except as to those prohibited areas or regulated areas as set forth in Sections Six C. and D., respectively. These Areas are so designated to provide increased protection of the manatees and other natural resources.

F. REGULATIONS FOR OPERATION OF PERSONAL WATERCRAFT

All personal watercraft shall be operated in the following manner:

1. A person may not operate a personal watercraft unless each person riding on or being towed behind such vessel is wearing a type I, type II, type III or type V personal flotation device approved by the united States Coast Guard.
2. A person operating a personal watercraft equipped by the manufacturer with a lanyard type engine cutoff switch must attach such lanyard to his person, clothing or personal flotation device as is appropriate for the specific vessel.
3. No person under the age of 14 shall operate a personal watercraft on the waters of this County.
4. It is unlawful for the owner of any personal watercraft or any person having charge over or control of a personal watercraft to authorize or knowingly permit the same to be operated by a person under 14 years of age in violation of this section.

5. A person shall not operate a personal watercraft at any time between sunset to sunrise.

6. A personal watercraft must at all times be operated in a reasonable and prudent manner. Maneuvers which unreasonably or unnecessarily endanger life, limb, or property, including, but not limited to, weaving through congested vessel traffic, jumping the wake of another vessel unreasonably or unnecessarily close to such other vessel or when visibility around such other vessel is obstructed, and swerving at the last possible moment to avoid collision shall constitute reckless operation of a vessel. Failure to operate a personal watercraft in such a careful and prudent manner shall constitute careless boating in violation of this Ordinance.

SECTION SEVEN: REGULATIONS AND LOCATIONS FOR PERSONAL WATERCRAFT RENTALS

Any person engaged in the rental, leasing, bailment for consideration or otherwise providing transportation for remuneration, of personal watercraft for use by the public on any waters of Lee County, must meet the following requirements as of the effective date of this Ordinance including any new and already existing rental operations:

A. A person is required to obtain a county occupational license which shall be issued to the personal watercraft rental operations office.

1. The operations office shall be located at a land-based site; and,

2. The land-based site shall have direct access to the beach. Direct access shall not include public rights-of-way, County-owned beach access, or any residentially zoned land that must be traversed to gain

beach access; and,

3. All business transactions such as the exchange of consideration or remuneration for the rental, leasing, bailment or any other type of transaction between the commercial rental operator and customer shall occur on the land-based site for which the occupational license is issued; and,

4. The personal watercraft shall only be rented or operated on the littoral waters offshore of the land-based site for which the occupational license is issued until the personal watercraft travels beyond the 500 feet offshore idle speed limit.

A floating vendor of personal watercraft rentals may operate within the littoral waters of a land-based site as long as the floating vendor has an occupational license issued at that land-based site.

B. A person must have and maintain a telephone and an operable marine radio at its land-based operations office.

C. A person must have a manned, motorized chase vessel with operational marine radio in good running condition that meets all United States Coast Guard safety requirements and is within vision of where the personal watercraft are being operated during all hours of the persons operations.

D. A person must have and maintain comprehensive general liability insurance with coverage not less than $500,000.00 combined single limits. A copy of the current insurance policy shall be kept at the rental operations office.

E. A person shall register each personal watercraft and have a Florida vessel registration number affixed thereon.

F. A person may not lease, hire or rent a personal watercraft to any person who is under 16 years of age.

SECTION EIGHT: PROCEDURES TO DESIGNATE AREAS

By Resolution adopted at a public hearing upon at least ten (10) days notice (excluding Sundays and legal holidays) published in a newspaper of general circulation in Lee County, Florida, the Board of County Commissioners of Lee County may designate additional specific areas as an "Area of Prohibited Water Activity" as described in Section Six. C., an "Area of Regulated Water Activity" as described in Section Six. D., or an "Area of Special Management" as described in Section Six.

E. In designating such areas, the Board of County Commissioners shall hear all testimony presented and make a finding that the designation is necessary for the safety and/or welfare of the citizens of the County. Upon the adoption of such a Resolution, the Board of County Commissioners shall publish the Resolution one time in a newspaper of general circulation in Lee County, Florida, after which the designation of the area shall be complete and binding; provided, however, no person shall be convicted of a violation of this Section relating to such specified areas until signs designating the boundaries of the area so designated have been posted in such a manner and place that they may reasonably be expected to be seen and read by a person operating a vessel in that area; provided however that no signs will need to be posted for areas described in Sections Six. C. and D. unless so designated as a requirement.

SECTION NINE: EXEMPTIONS

A. The provisions of this Ordinance shall not be construed to prohibit the running of racing or exhibition boats or personal watercraft during a publicly announced, properly authorized and supervised, and adequately patrolled regatta or speed trial or exhibition.

"Properly authorized" shall require approval by the Lee County Board of County Commissioners.

B. Florida Fish and Wildlife Conservation Commission craft, Lee County Sheriff's Department craft, other official craft and craft operating under emergency conditions shall be exempted from the provisions of this Ordinance while performing their official duties or operating in an emergency.

C. Commercial vessels are exempted from the provisions of this Ordinance while conducting fish netting operations, provided the operations are conducted under the safety constraints of Sections Six. A., SPEED and Six. B., CAREFUL AND PRUDENT OPERATION REQUIRED; but at no time shall vessels be operated at greater than slow speed within 500 feet of bathers. This exemption is consistent with the "commercial watercraft" exemption set forth in the Lee County Caloosahatchee River Vessel Operation and Manatee Protection Ordinance. Such commercial vessels will also be exempt from State regulations if they comply with the conditional exemption requirements set forth in Section 16N-22.003, F.A.C.

SECTION TEN: PENALTY

Violation of the provisions of this Ordinance, or failure to comply with any of the requirements, shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any provisions shall upon conviction thereof be fined or imprisoned, or both, as provided by law, and in addition shall pay all costs and expenses involved in the case. In the alternative, a citation may be issued pursuant to the procedures set forth in Sections 327.73 and 327.72, Florida Statutes.

SECTION ELEVEN: REPEALER

Lee County Ordinance numbers 83-30 and 84-3 are hereby repealed and shall be null and void on the effective date of this ordinance.

SECTION TWELVE: CONFLICT

In the event that any provision of this Ordinance is found to be contrary to any other Lee County Ordinance which regulates the same subject matter, then in said event, the more restrictive Ordinance shall apply.

SECTION THIRTEEN: SEVERABILITY

The provisions of this Ordinance are severable, and it is the intention to confer the whole or any part of the powers herein provided for. If any of the provisions of this Ordinance shall be held unconstitutional by any Court of competent jurisdiction, the decision of such Court shall not affect or impair any remaining provisions of this Ordinance. It is hereby declared to be the legislative intent that this Ordinance would be adopted had such unconstitutional provision not been included therein.

SECTION FOURTEEN: EFFECTIVE DATE

This Ordinance shall take effect immediately upon receipt of official acknowledgment from the Secretary of State of Florida that it has been filed with that office.

THE FOREGOING ORDINANCE was offered by Commissioner Albion who moved its adoption. The motion was seconded by Commissioner St. Cerny and, upon being put to a vote, the vote was as follows:

BOB JANES	Aye
DOUGLAS ST. CERNY	Aye
RAY JUDAH	Nay
ANDREW COY	Aye
JOHN ALBION	Aye

DONE AND ADOPTED this 26th day of March, 2002.

ATTEST: CHARLIE GREEN
CLERK OF THE COURT

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Chairman

APPROVED AS TO FORM:

BY: _____
Office of the County Attorney

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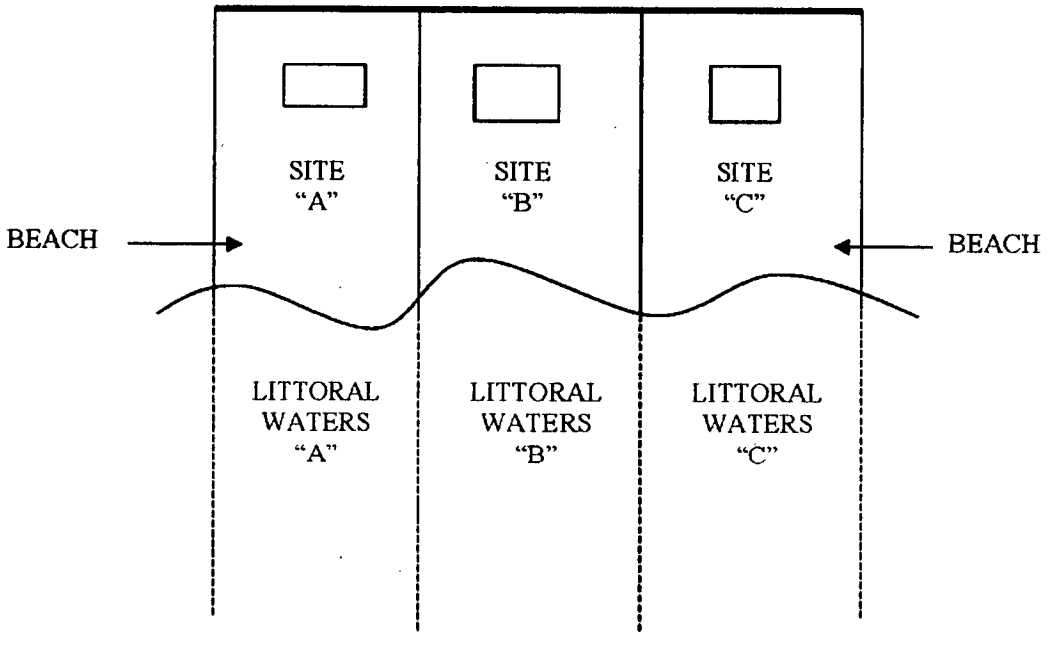
EXHIBIT "A"



NOT TO SCALE

Appendix II. Lee County Comprehensive Plan Objectives and Policies Concerning Resource Protection and the West Indian Manatee

GOAL 77: RESOURCE PROTECTION. To manage the county's wetland and upland ecosystems so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.

OBJECTIVE 77.1: RESOURCE MANAGEMENT PLAN. The county will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydroecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape. (Amended by Ordinance No. 94-30, 00-22)

POLICY 77.1.1: County agencies implementing the natural resources management program will be responsible for the following:

1. Identifying upland and wetland habitats/systems most suitable for protection, enhancement, reclamation, and conservation.

2. Recommending standards to the Board of County Commissioners for Board approval for development and conservation that will protect and integrate wetlands (as defined in Objective 84.1) and significant areas of Rare and Unique upland habitats (as defined in Objective 74.1)

3. Preparing standards for wetland and rare and unique upland mitigation.

4. Conducting a sensitive lands acquisition program, which will consist of the following elements (see also Policy 77.2.8):

    a. A comprehensive inventory of environmentally sensitive lands will be maintained and expanded as new data becomes available.

    b. Environmentally sensitive lands will include wetlands (as defined in Objective 84.1); important plant communities (as identified by Objective 77.2); critical habitat for listed wildlife species (see also Objective 77.8 and Policies 77.4.1, 77.4.2, 77.10.4, and 77.11.2); environmentally sensitive coastal planning areas (as defined in Policy 83.1.5); natural waterways; important water resources (as defined in Policy 87.1.1); storm and flood hazard areas; and Rare and Unique uplands (as defined in Objective 74.1).

    c. Beginning in 1997, the county will adopt and implement a program to acquire and manage lands critical to water supply, flood protection, wildlife habitat, and passive recreation. The program will be funded by an ad

valorem tax of up to 0.50 (1/2) mil annually for a period not to exceed seven years. A fifteen member advisory group to be called the Conservation Lands Acquisition and Stewardship Advisory Committee (CLASAC) will develop and implement the program. Ten percent of the funds will be used to manage the lands acquired.

d. The county will take full advantage of opportunities to cooperatively acquire and manage sensitive lands and to leverage other funding sources by working with state land acquisition and land management agencies such as the Florida Communities Trust and the Florida Game and Fresh Water Fish Commission and by participating in state land acquisition programs such as the Save Our Rivers program and the Conservation and Recreational Lands program.

e. The county (or other appropriate agency) will prepare a management plan for each acquired site for the long term maintenance and enhancement of its health and environmental integrity. The management plan will address any necessary people management (e.g., fences and signage to prevent incompatible uses such as off road vehicle use and hunting); surface water management and restoration; ecosystems restoration; litter control; fire management; invasive exotic plant and animal control; and, where appropriate, compatible recreational use facilities. The plan will also address how maintenance will be funded.

f. The county will encourage the establishment of and provide assistance to communitybased land trusts, whose purpose is the preservation and protection of Lee County's natural resources.

5. Maintaining a central clearinghouse for all environmental studies and recommendations by both public and private organizations.

6. Compiling, maintaining and regularly updating county mapping of vegetation communities; listed species habitat and sitings; and water resources including watersheds, floodplains, wetlands, aquifers, and surface water features.

7. Preparing recommendations for maintaining or restoring the desired seasonal base flows and water quality after reviewing monitoring data.

8. Coordinating in the preparation of plans with the municipalities, South Florida Water Management District, and Southwest Florida Water Management District to better control flows of freshwater and reduce pollutant discharges into the Lee County coastal waters.

9. Providing an annual progress report to the county commission on the resource management program. The report should address the adequacy of the program and land use regulations to protect and enhance these natural systems.

10. Providing an annual report to the County Commission on the status of wetlands and rare and unique uplands by 1996. (Amended by Ordinance No. 94-30, 98-09, 00-22)

OBJECTIVE 77.4: ENDANGERED AND THREATENED SPECIES IN GENERAL. Lee County will continue to protect habitats of endangered and threatened species and species of special concern in order to maintain or enhance existing population numbers and distributions of listed species.

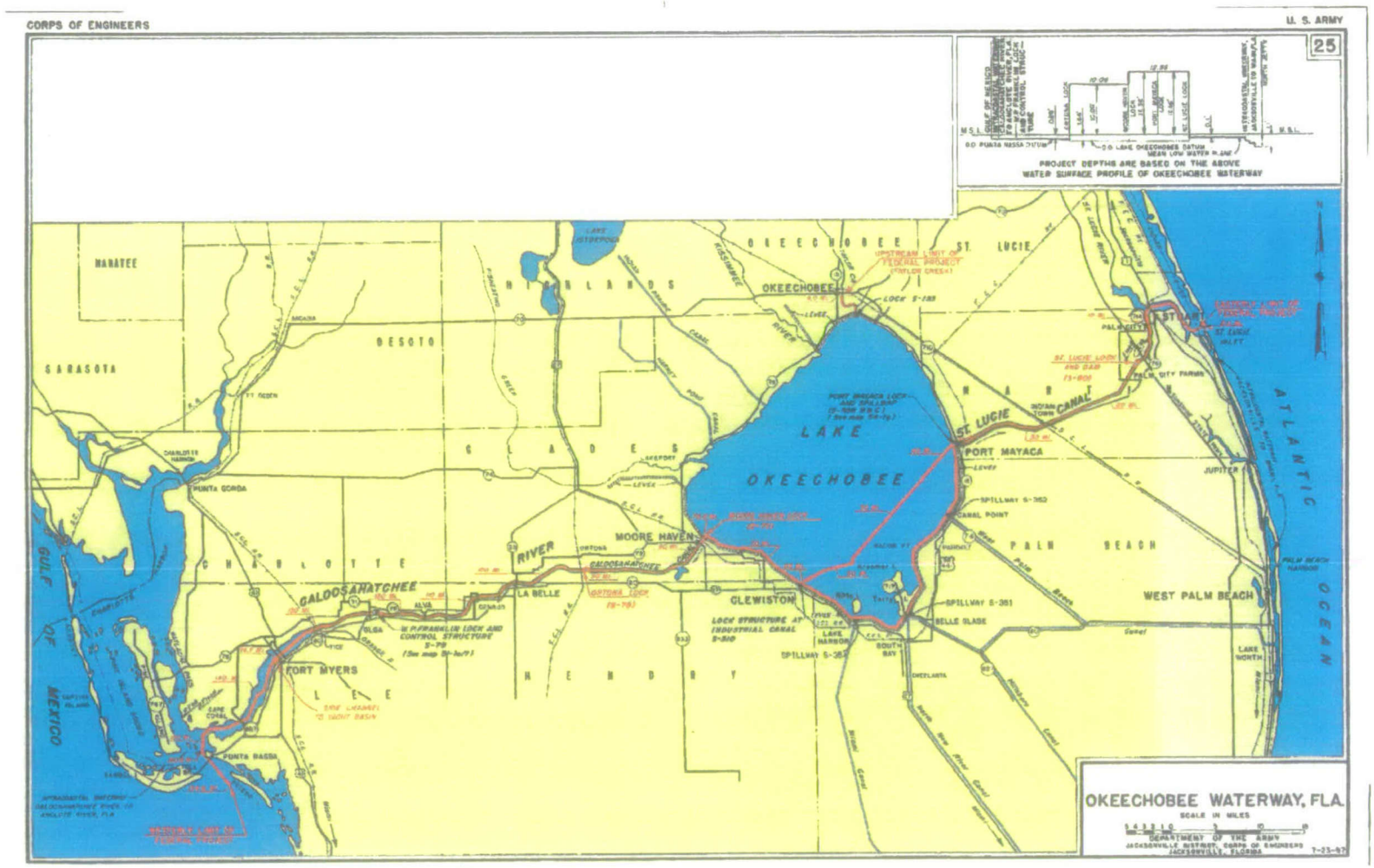
POLICY 77.4.1: Identify, inventory, and protect flora and fauna indicated as endangered, threatened, or species of special concern in the "Official Lists of Endangered and Potentially Endangered Fauna and Flora of Florida," Florida Game and Freshwater Fish Commission, as periodically updated. Lee County's Protected Species regulations will be enforced to protect habitat of those listed species found in Lee County that are vulnerable to development. There will be a funding commitment of one full-time environmental planner to enforce this ordinance through the zoning and development review process. (Amended by Ordinance No. 92-48, 94-30, 00-22)

POLICY 77.4.2: Conserve critical habitat of rare and endangered plant and animal species through development review, regulation, incentives, and acquisition.

POLICY 77.4.3: Require detailed inventories and assessments of the impacts of development where it threatens habitat of endangered and threatened species and species of special concern.

POLICY 77.4.4: Restrict the use of protected plant and wildlife species habitat to that which is compatible with the requirements of endangered and threatened species and species of special concern. New developments must protect remnants of viable habitats when listed vegetative and wildlife species inhabit a tract slated for development, except where equivalent mitigation is provided. (Amended by Ordinance No. 94-30, 00-22)

APPENDIX III. OKEECHOBEE WATERWAY



APPENDIX IV. LEE ORDINANCE 96-12

LEE COUNTY ORDINANCE NO. 96-12

AN ORDINANCE OF LEE COUNTY, FLORIDA, CREATING THE LEE COUNTY CONSERVATION LAND ACQUISITION AND STEWARDSHIP ADVISORY COMMITTEE, PROVIDING FOR CRITERIA RELATING TO THE PROCEDURAL IMPLEMENTATION OF LEE COUNTY'S AD VALOREM TAX LEVY PROGRAM TO PURCHASE AND IMPROVE ENVIRONMENTALLY CRITICAL OR SENSITIVE LANDS, PROVIDING FOR OBJECTIVES AND DUTIES OF THE COMMITTEE; PROVIDING FOR APPOINTMENT, COMPOSITION, TERMS AND PROCEDURES; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the public health, safety and welfare is served, promoted and enhanced by the acquisition and management of environmentally critical or sensitive lands for the protection of natural flood plains, marshes or estuaries, for surface water management and water supply, for the restoration of altered ecosystems; and to provide wildlife management areas and recreation opportunities; and the conservation of said natural resources, and

WHEREAS, applicable Florida Statutes reflect that such land acquisition and improvement serves a public purpose; and

WHEREAS, Lee County has determined it is in the public's interest to submit to voter referendum the issue of whether the county should be authorized to levy and use certain ad valorem tax funds to finance the purchase and improvement of said lands; and

WHEREAS, if said funding is authorized by the voters of Lee County and the Board in its discretion levies the necessary millage on an annual review basis as required by Florida law, it is further in the public's interest to have any resulting acquisition and improvement program procedurally implemented in a manner that sets specific guidelines for the program and provides the county with recommendations to ensure effective and successful completion of the program; and

WHEREAS, the Board of County Commissioners recognizes the need for the creation of an advisory committee in order to advise the county and public in the

implementation of the program and in proceeding with projects constituting a part of the limited general obligation bond acquisition and improvement program,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, THAT.

SECTION ONE: NAME:

This ordinance shall be known as the Lee County Conservation Lands Implementation Ordinance

SECTION TWO. CREATION OF ADVISORY COMMITTEE

The Board of County Commissioners hereby creates and establishes the Conservation Lands Acquisition and Stewardship Committee, hereinafter called "The Land Committee "

SECTION THREE: OBJECTIVES AND DUTIES:

The "Land Committee" will advise and provide recommendations to the Board concerning the county's environmentally critical or sensitive land purchase and improvement program, "The Land Program." Upon formation of the Land Committee, the Board, with input from the committee, shall establish reasonable rules, guidelines and milestones in order for the committee to meet its objectives and duties as provided herein

The Land Committee will perform the following functions:

A. Review and provide recommendations concerning the County's levy of millage and use of ad valorem funds in order to finance and implement The Land Program

B. Establish the parameters of The Land Program to include, but not limited to, criteria for land purchases, procedures to implement the program, and process for ranking purchase projects. The Land Program parameters will be confirmed by the Board by subsequent Resolution.

C. Develop for Board approval by Resolution, a Property Acquisition Map depicting areas for purchase and specific properties which can be

purchased from willing sellers The Land Acquisition Map and priorities for purchase will be reviewed and updated periodically, but at a minimum on an annual basis.

D Establish the parameters of a trust fund for land management, restoration and creation of public access for potential recreational use of acquired properties.

E. Review established Land Program criteria and guidelines and provide recommendations for amendments and/or modifications to The Land Program that serve to enhance the effective operation of same

F. Provide periodic input and updates on the implementation and operation of The Land Program, to include but not limited to land purchase status, expenditures and availability of funds.

G. Disseminate to and coordinate with Lee County local governments, potentially affected property owners and the general public by public hearing or otherwise, information concerning the program guidelines and the rationale for parcel selection

H. Coordinate with and assist as necessary Lee County staff in acquiring and managing the program lands.

I Offer amendments and/or modifications to this ordinance as necessary to effectively and successfully implement the program

SECTION FOUR. PROGRAM CRITERIA

Notwithstanding the duties and objectives as specified in Section Three, supra, the Land Program shall be subject to the following general criteria:

A. All land acquisitions and land improvement functions must be consistent with the legal and financial parameters of any County levy of millage and use of ad valorem tax proceeds providing funds for The Land Program

B All land purchases shall conform to those laws applicable to the county purchase of real property or any interest therein.

C. All lands shall be purchased in a legal interest sufficient to meet the objectives for the uses of the acquired lands herein

D Priorities for land purchase must be reviewed and amended, if necessary, at least on an annual basis.

E. The land Acquisition Program will be on a "willing seller" basis No eminent domain will be used to acquire lands for the program

F. All lands considered for purchase will be appraised by one or more certified appraisers

G In general, the lands considered for purchase should have critical or sensitive conservation value, be large enough in size to be effectively managed or be a unique/rare habitat type, contribute positively to surface water management, water supply, flood control, wildlife habitat or appropriate passive public recreation.

H. Land purchases will be consistent with those lands as identified in the Lee County Comprehensive Plan as being appropriate for conservation and protection of natural resources efforts and public recreation

I. Lands to be acquired under The Land Program will be subject to the county's receipt of off-site mitigation credits from appropriate agencies or agency as the case may be

J ~~Any lands identified as a priority for purchase can be removed from~~ said listing or acquisition map upon the request of any affected land owner

SECTION FIVE. APPOINTMENT AND COMPOSITION.

The Board of County Commissioners shall appoint fifteen (15) members to the Land Committee, as herein established. It is the intent to establish an advisory committee with a balance of environmental, business, government and civic interests in Lee County. The membership will be established by the Board upon consensus vote after a review of recommendations of appointees Each Board member shall nominate three (3) members to the Committee.

SECTION SIX. TERMS OF MEMBERS

The members to the Land Committee shall be appointed by the Board for a term up

The provisions of this ordinance are severable and it is the legislative intention to confer upon the whole or any part of the ordinance the powers herein provided for. If any of the provisions of this ordinance shall be held unconstitutional by any court of competent

County Commissioners

SECTION EIGHT. SEVERABILITY/REPEAL

objectives set forth in this ordinance. Regardless, in no event will the committee meet less than quarterly unless such revised schedule is first approved by the Board. The committee adopted meeting schedule or revisions thereto shall be forwarded to the Board of

D All members will serve without compensation.

E. The committee shall adopt a meeting schedule consistent with the effective implementation and operation of the program and the

C Roberts Rules of Order shall dictate parliamentary procedure. The Committee will elect its own officers for a one (1) year term

Lee County Lobbying Ordinance

B. The Land Committee may adopt additional procedures of operations provided there is no conflict with State Law.

A. The Land Committee and its members shall comply with all applicable requirements of the Florida Sunshine Law, Public Records Law, Financial Disclosure Requirements (F S Ch 112), if required, and the

meetings upon recommendation from the Land Committee

SECTION SEVEN. RULES OF PROCEDURE

confirmation of the Board. Unless otherwise provided by the Board, replacement members will serve the unexpired term

The Board may remove any member who is absent for four (4) consecutive acquisition issue. The Board will make subsequent appointments or reappointments in the same manner as the original appointments. Members may be replaced subject to confirmation of the Board. Unless otherwise provided by the Board, replacement members to three (3) years. The membership hereof shall be appointed within thirty (30) days after the favorable adoption of the non-binding Referendum of November 5, 1996 on the land

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jurisdiction, the decision of such court shall not affect or impair any remaining provisions of the ordinance. It is hereby declared to be the legislative intent that this ordinance would have been adopted had such unconstitutional provision not been included herein. Any subsequent amendments to, or repeal of this ordinance shall not in any way affect the validity of the levy of millage and use of tax proceeds for the land acquisition program or the non-binding of referenda vote of November 5, 1996 The provisions of this ordinance, as a procedural implementing document, shall be deemed separate and apart from said ad valorem tax financing and related actions.

SECTION NINE CODIFICATION, INCLUSION IN CODE AND SCRIVENER'S ERRORS

It is the intention of the Board of County Commissioners that the provisions of this ordinance shall become and be made a part of the Lee County Code, and that sections of this ordinance may be renumbered or relettered and that the word "ordinance" may be changed to "section," "article," or such other appropriate word or phrase in order to accomplish such intention; and regardless of whether such inclusion in the code is accomplished, sections of this ordinance may be renumbered or relettered and typographical errors which do not affect the intent may be authorized by the County Administrator, or his designee, without need of public hearing, by filing a corrected or recodified copy of same with the Clerk of Circuit Court

SECTION TEN EFFECTIVE DATE/REPEALER

This ordinance shall be effective upon official filing of same with the Secretary of the State of Florida, but shall be of no further force or effect and will be deemed repealed if the proposed non-binding Referendum for environmentally critical or sensitive lands is not duly approved at the November 5, 1996, Special Referendum Election

The foregoing Ordinance was offered by Commissioner Ray Judah, who moved its

adoption. The motion was seconded by Commissioner Andrew Coy and, being put to a vote, the vote was as follows:

JOHN E. MANNING	ABSENT
DOUGLAS ST. CERNY	AYE
RAY JUDAH	AYE
ANDREW W. COY	AYE
JOHN E ALBION	AYE

DULY PASSED AND ADOPTED this 31st day of July, 1996.

CHARLIE GREEN, CLERK
LEE COUNTY, FLORIDA

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS

By: _____
Chairman

LEE COUNTY ATTORNEY'S OFFICE
APPROVED AS TO FORM:

By _____
County Attorney

APPENDIX V. CONSERVATION 2020 NOMINATION FORM

Conservation 2020 Application

For Office Use Only **Nomination Number:**

LEE COUNTY CONSERVATION LAND ACQUISITION AND STEWARDSHIP PROGRAM
PROJECT SITE NOMINATION FORM

I. **DESCRIPTION OF THE PROPERTY:** Please list the Tax Identification (STRAP) Number(s) of the propert(y/ies) being nominated. If the property being nominated is a portion of a Tax Id. Number, please attach a legal description:					
APPROXIMATE ACREAGE:		**STRAP#(s):**			
ASKING PRICE: (REQUIRED)	$				
II. ☐ **NOMINATOR OR** ☐ **OWNER'S REPRESENTATIVE: Check all that apply**					
NAME:					
ADDRESS:					
TELEPHONE:		**FACSIMILE:**		**E-Mail Address:**	
III. **OWNER(S) OF PROPERTY:** Please List ALL owners of record or documented Trustee(s):					
NAME(S)					
ADDRESS:					
TELEPHONE:		**FACSIMILE:**		**E-Mail Address:**	

IV. WILLINGNESS TO SELL: The owner(s) of the property described on this form authorize(s) Lee County to evaluate their property for potential purchase in the Conservation Lands Program. If the Board of County Commissioners authorizes staff to pursue acquisition of the property, the owner(s) is/are willing to consider a fair market value offer for the purchase of the land. The owner(s) is/are under no obligation to accept said offer or to withhold this property from other purchase offers or development during the review period. However, **the owner(s) affirm that currently there is no right of first refusal, option or any other contractual agreement affecting ownership pending on this property**. Lee County reserves the right to withdraw this application if the owner causes any material changes to the environmental significance and/or characteristics of the property or enters into any contractual agreement affecting ownership with another party.

All owners of record must sign this form below or submit a separate letter indicating their willingness to sell. Owner signature(s) also authorizes Lee County staff and Advisory Committee members to visit the site upon due notice to the owner(s). Please attach a separate sheet if there are more than two owners of record. An exclusive listing agreement may be attached to this application in lieu of the owner's signature. If a Trustee is signing for multiple owners, please attach a copy of the legal instrument authorizing the Trustee to convey this property.

PRINTED NAME	**SIGNATURE**	**MONTH**	**DAY**	**YEAR**
PRINTED NAME	**SIGNATURE**	**MONTH**	**DAY**	**YEAR**

PLEASE RETURN THIS FORM TO:	**Lee County Division of County Lands** P.O. Box 398 - Fort Myers, FL 33902-0398 ATTN: Lynda Riley, Conservation Lands Program Coordinator *Telephone:* (941) 479-8505 - *Facsimile:* (941) 479-8391 – *Suncom:* 726-8505

For more information about this program, please visit our web site at:
Www.lee-county.com/countylands/cons2020/cons2020.htm.

Questionnaire and Supplemental Information

To assist the Conservation Lands Acquisition and Stewardship Advisory Committee in their evaluation of your property, please answer the following questions. Attach extra pages if more room is needed.

1. **Bargain sale.** Higher priority is given to eligible nominations that sell below the appraised market value (bargain sale). A bargain sale may also be eligible for a tax deduction. Please consult your tax accountant or attorney for the potential tax benefits of a bargain sale.
   Will the owner sell the property below appraised/market value? YES ☐ NO ☐
   If Yes, please specify the percent or amount below market value the owner will consider:

2. **Access.** Does the property have legal access? YES ☐ NO ☐
   Is the property accessible by car or truck? YES ☐ NO ☐
   If Yes, by what road or roads?

3. **Description and Condition of Property.** Describe environment characteristics and condition of site. Also describe type of native plant communities and degree of infestation by invasive exotic plants.

4. **Land Use Activities.** Describe any land clearing, excavation, agricultural and/or construction activity that has occurred on the site. List all buildings and other structures. If cleared or harvested for timber, list last date of occurrence:

5. **Matching Funds.** Describe any potential sources of matching funds, such as grants or other land acquisition program funding.

6. **Oil, Gas, and Mineral Rights.** Does the owner hold all rights to oil, gas, and minerals on the property? YES ☐ NO ☐
   If No, please describe:

7. **Leases.** Describe any outstanding leases on the property; including farming, grazing, timber, oil, gas, mineral, etc.:

8. **Reason(s) for Nomination.** Why do you believe this property is appropriate for acquisition or preservation under Lee County's program for acquiring environmentally sensitive lands?

Please attach copies of the following information, if available:

1. Location map, such as a plat book map, and/or aerial photo, and legal description.
2. Wetland survey, species survey, plant community mapping, or other available environmental reports.
3. Approved or pending development plans.
4. Owner's title policy.
5. Boundary survey.

APPENDIX VI. LEE COUNTY MANATEE ENFORCEMENT CONTRIBUTION FORM

LAW ENFORCEMENT CONTRIBUTION FORM FOR ADDITIONAL LAW ENFORCEMENT IN LEE COUNTY, FLORIDA

NAME OF APPLICANT:_____DATE:_____
ADDRESS:_____
STATE:_____ CITY:_____ ZIP:_____
PHONE NUMBER:_____

COE PERMIT #_____ DATE ISSUED:_____EXP DATE_____
FL DEP PERMIT #_____DATE ISSUED:_____EXP DATE_____

PROJECT LOCATION
STRAP NUMBER:_____
ADDRESS (if different than address listed above):_____
STATE:_____ CITY:_____ ZIP:_____
PHONE NUMBER:_____
LATITUDE_____ LONGITUDE_____
LEE COUNTY MARINE ENFORCEMENT ZONE _____1_____2_____3_____4

CONTRIBUTION CALCULATION:
_____ X $546.00 = $_____ Total amount of contribution
# of proposed slips

AUTHORIZATION:
I, _____ hereby submit this contribution to the LEE COUNTY, MANATEE CONSEWRVATION FUND with the understanding that it authorizes LEE COUNTY to act as my representative (as a permit applicant) with regard to the law enforcement agreement between LEE COUNTY and the LEE COUNTY SHERIFF'S DEPARTMENT. The contribution shall pay for the requisite number of MARINE LAW ENFORCEMENT HOURS to be performed by the LEE COUNTY SHERIFF'S OFFICE in the appropriate MARINE ENFORCEMENT ZONE as determined by LEE COUNTY, FLORIDA and the US FISH ANDS WILDLIFE SERVICE. This agreement is consistent with the DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE, Interim Strategy on Section 7 consultations under the Endangered Species Act for watercraft access projects in Florida that may indirectly affect the West Indian Manatee. I hereby authorize LEE COUNTY, FLORIDA to act as my agent in all matters regarding the completion of the aforementioned agreements.

SIGNATURE_____**DATE**_____

APPENDIX VII. FLORIDA POWER & LIGHT – FORT MYERS MANATEE PROTECTION PLAN

Florida Power & Light – Fort Myers
Manatee Protection Plan

Purpose:

The purpose of the Ft. Myers Plant Manatee Protection Plan is to set forth Florida Power & Light Company's (FPL) procedures to comply with Specific Condition 14 of the facility's State Industrial Wastewater Permit Number FL0001490 that was issued on April 10, 1998. This Specific Condition reads, in part:

14. The permittee, in so far as required to comply with Tasks 25 and 251 of the U.S. Fish and Wildlife Service (USFWS) "Florida Manatee Recovery Plan," shall develop a plan and procedures addressing potential manatee impacts. ...All plans, if required, shall include an implementation schedule and address, at a minimum:

    (a) Plans to minimize disruption to warm-water outflows during the winter and response procedures in case of disruptions.

    (b) Strategy to maintain discharge temperatures that will sustain manatees during cold events.

    (c) Plan to monitor ambient and discharge water temperatures.

    (d) Precautions to minimize hazards to manatees at intake and outfall areas.

    (e) Timely communication to manatee recovery program personnel of any long term changes in the availability of warm water.

Compliance with Specific Condition 14:

1. This Manatee Protection Plan will be in effect during the term of the permit mentioned above. In order for the plant's warm water discharge to provide a safe, warm water refuge for the manatees and to comply with Specific Condition 14, FPL will take the following actions:

    a) In the case of an unplanned shutdown or plant failure that will affect the warm water refuge from November 15 through March 31, when the ambient water temperature is below 61°F, the Florida Department of Environmental Protection (FDEP) and USFWS will be notified no later than four (4) hours after the event has occurred. The following agency representatives shall be notified in the above referenced event or if any distressed manatees are observed at any time:

    FDEP – Florida Marine Research Institute – Marine Mammal Pathobiology Lab: (813) 893-2904
    USFWS – Jacksonville Field Office: (904) 232-2580

    The FDEP, Bureau of Protected Species Management (BPSM) shall be provided a schedule of any anticipated in-water work within the discharge canal or work that will affect the warm water refuge during the period of November 15 through March 31 each year. This would include schedules for work being done in conjunction with the repowering of the Ft. Myers plant. Schedules for work pursuant to the repowering project should be updated and provided to BPSM as schedule changes occur. No routine in-water maintenance work shall occur in the discharge canal from November 15 through March 31, unless it is considered essential by FPL and approved by BPSM prior to the start of work. If emergency in-water work is needed, the BPSM will be notified and consulted no later than two weeks following the commencement of the activity. All vessels used in the operation or associated with the activity shall be operated pursuant to the attached standard manatee construction conditions.

b) From November 15 through March 31 each year, to coincide with the time of greatest manatee abundance, if the ambient water temperature falls below 61°F, the FPL Ft. Myers power plant shall endeavor to operate in a manner that maintains the water temperature in an adequate portion of the discharge canal at or above 68°F, until such time as the ambient water temperature reaches 61°F, unless otherwise authorized by the BPSM and the USFWS, or unless safety or reliability of the plant would be compromised.

c) The FPL Ft. Myers power plant will provide personnel from the BPSM, USFWS, Florida Marine Research Institute, USGS-Sirenia Project, or a designee of these agencies, access to FPL Ft. Myers power plant property to conduct manatee research and monitoring activities which may include, placing, maintaining and downloading data from temperature data loggers. These temperature data loggers will be used to collect air and water temperature data in an ongoing research effort to better understand manatee behavior patterns in response to artificial warm water refugia and environmental variables. The temperature data loggers will be placed in the discharge canal and at ambient water and air locations. Access would be limited to normal business hours (8:00 a.m. to 5:00 p.m.) unless arrangements are made in advance with the FPL Fort Myers power plant.

Intake Area: No special surveys will be required for the intake canal.

Discharge Area: No special surveys will be required for the discharge canal.

d) Should the FPL decide to retire this plant, notice will be provided to FDEP and USFWS as soon as practical after a definite decision is made or, if possible, at least five years prior to the date of retirement

e) To assist in documenting long-term use patterns of this facility, FPL should conduct periodic aerial surveys of manatees at the Fort Myers facility. The continuation of the ongoing statewide aerial survey that FPL has funded in the past years meets these criteria.

g) The FPL Ft. Myers Power Plant will provide phone numbers for weekday and weekend notification of appropriate plant personnel for the purpose of allowing FDEP or USFWS to coordinate manatee rescue operations as necessary.

2. FPL actions, pursuant to this plan, that will be conducted for the current Ft. Myers Power Plant and the Ft. Myers Power Plant post-repowering:

a) Provide a site map of the facility as a part of the plan that includes the following information;

1. The location of the intake pipes and outfall pipes.
2. Proximate streams, rivers, bays, etc.
3. The location of the condenser inlet and outlet temperature monitoring stations.
4. The location of any fuel barge docking facilities in relation to the discharge canal.
5. The delineation of the no-entry boundary at the discharge canal.

b) In order to evaluate and determine what portions of the thermal discharge will provide a sufficient warm water refuge for manatees under potential cold stress water conditions; the FPL Ft. Myers power plant will, within two (2) years of the effective date of this plan, provide a profile of the thermal gradient (either actual or calculated) of the discharge canal waters, as well as its gross bathymetry, at the mean rate of discharge when the ambient water temperature reaches a seasonal low.

FLORIDA POWER & LIGHT – FT. MYERS PLANT
MANATEE PROTECTION PLAN

1a) STANDARD MANATEE CONSTRUCTION CONDITIONS FOR ARTIFICIAL WARM WATER REFUGIA DURING THE PERIOD OF NOVEMBER 15 THROUGH MARCH 31.

The permittee shall comply with the following manatee protection conditions:

a. The permittee shall instruct all personnel associated with in-water work within the discharge canal and/or the warm water refuge of the potential presence of manatees and the need to avoid collisions with manatees. All vessels used in the operation or in association with the in-water work shall have an observer on board responsible for identifying the presence and location of manatee(s).

b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act of 1972, The Endangered Species Act of 1973, and the Florida Manatee Sanctuary Act.

c. All vessels associated with in-water work associated with the discharge canal and/or warm water refuge shall operate at "no wake/idle" speeds at all times while in the manatee warm water refuge area. All vessels will follow routes of deep water whenever possible.

d. If manatee(s) are seen within the discharge canal and/or warm water refuge area all appropriate precautions shall be implemented to ensure protection of the manatee(s). These precautions shall include the immediate shutdown of equipment if necessary. Activities will not resume until the manatee(s) has departed to a safe distance on its own volition.

e. Any collision with and/or injury to a manatee shall be reported immediately to the Florida Fish & Wildlife Conservation Commission at (1-800-342-5367). Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-232-2580).

APPENDIX VIII. SERVICE LAW ENFORCEMENT COST BREAKDOWN

COST ANALYSIS FOR USER FEE MANATEE RECOVERY & PROTECTION

COST FOR ESTABLISHING A LAW ENFORCEMENT OFFICER (START-UP)

ITEM	COST (1K)
SALARY*	31
OVERTIME*	8
TRAVEL*	7.5
PATROL BOAT	30
PERSONAL WATERCRAFT	5
VEHICLE	25
COMMUNICATIONS	4
PHOTOGRAPHIC EQUIPMENT	2
L. E. GEAR	5
ELECTRONICS	2.5
MISC. COSTS*	5
STORAGE*	2.5
OFFICE*	2.5
MAINTENANCE*	2
ADMIN. SUPPORT*	5
TOTAL	142

* DENOTES ANNUALLY RECURRING COSTS

COST FOR MAINTAINING AN ESTABLISHED LAW ENFORCEMENT OFFICER (ANNUALLY RECURRING COSTS)

ITEM	COST ($K)
SALARY	35
OVERTIME	9
TRAVEL	8
MISC. COSTS	5
STORAGE	2.5
OFFICE	2.5
MAINTENANCE	3.5
EQUIP. REPLACEMENT	3
ADMIN. SUPPORT	5
TOTAL	73.5

FOR THE SAKE OF COMPARISON, THE FLORIDA MARINE PATROL ESTIMATES THAT THEIR COSTS FOR FIELDING A NEW OFFICER IS $139,500 AND THEIR ANNUALLY RECURRING COSTS FOR EACH OFFICER IS $63,700.

THERE ARE CURRENTLY 458 FMP OFFICERS.

THE RATIO OF OFFICERS TO REGISTERED WATERCRAFT IS APPROXIMATELY

1 OFFICER : 1650 BOATS

USER FEES FOR ESTABLISHMENT
OF PERMITTED BOATING FACILITIES
COMMERCIAL & RESIDENTIAL

FEES TO ESTABLISH AN OFFICER :

BASED ON 1 : 2000 RATIO	**$71**
BASED ON 1 : 1650 RATIO	**$86**
BASED ON 1 : 1000 RATIO	**$142**
BASED ON 1 : 500 RATIO	**$284**

FEES TO MAINTAIN AN OFFICER

BASED ON 1 : 2000 RATIO	**$37**
BASED ON 1 : 1650 RATIO	**$45**
BASED ON 1 : 1000 RATIO	**$74**
BASED ON 1 : 500 RATIO	**$147**

RECOMMENDATION

THE FLORIDA MARINE PATROL HAS CONSISTENTLY CONTENDED THAT THEIR ORGANIZATION IS GROSSLY UNDERSTAFFED. BASED ON THIS CONTENTION AND ON PATROL EXPERIENCE, THE USFWS RECOMMENDS ATTAINING A RATIO OF ONE OFFICER TO ONE THOUSAND BOATS (1 : 1000).

ESTABLISHING A MANATEE LAW ENFORCEMENT PATROL FORCE OF FOUR OFFICERS WOULD ENTAIL IMPLEMENTING A USER FEE FOR MARINA/WATERCRAFT SLIP PERMIT APPLICATIONS OF $150 (ROUNDED UP FROM $142).

USER FEES FOR THE RENEWAL OF PERMITS COULD BE THE SAME AMOUNT ($150) UNTIL A MINIMAL CADRE OF FOUR OFFICERS IS ESTABLISHED OR REDUCED TO THE AMOUNT TO MAINTAIN AN OFFICER IN THE FIELD. THIS AMOUNT WOULD BE $75 (ROUNDED UP FROM $74).

APPENDIX IX. LEE COUNTY MARINE LAW ENFORCEMENT TASK FORCE MISSION GOALS.

LEE COUNTY MARINE LAW ENFORCEMENT TASK FORCE

Mission Statement:

The agencies of the Lee County Marine Law Enforcement Task Force are committed to providing the highest quality of marine law enforcement to protect the users of Lee County's waterways, safeguard property, and conserve/protect marine life along with its environment.

Goals/Objectives:

- Conduct coordinated patrols of Lee County's waterways
- Reduce the number of boating accidents and therefore the number of fatalities, injuries, and amount of property damage by enforcing boating safety laws
- Reduce the number of watercraft related manatee mortalities through coordinated enforcement of manatee regulatory zones
- Provide coordinated marine related response to search and rescue incidents
- Reduce marine related theft within Lee County through coordinated enforcement targeting "hot spots"
- Provide coordinated marine related response during natural disasters
- Provide coordinated marine related response to domestic security incidents
- Coordinate to enforce net limitation laws/rules
- Coordinate for joint marine enforcement training
- Coordinate for Special Marine Events

APPENDIX X. LEE COUNTY COMPREHENSIVE PLAN OBJECTIVES AND POLICIES CONCERNING MARINA SITING AND DESIGN

OBJECTIVE 98.5: MARINA SITING CRITERIA. The county will consider the following marina siting criteria in evaluating requests for new and substantially expanded marinas, other wet slip facilities, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts. (Amended by Ordinance No. 00-22)

POLICY 98.5.1: Proposed marinas (and expansion of wet slips at existing marinas and new boat ramps) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values. (Amended by Ordinance No. 00-22)

POLICY 98.5.2: Cumulative effects of several marinas and/or boat ramps in a small area will be considered in the review of proposed marina projects. (Amended by Ordinance No. 00-22)

POLICY 98.5.3: Marina and/or boat ramp siting must be consistent with the appropriate aquatic preserve management plan where applicable. (Amended by Ordinance No. 00-22)

POLICY 98.5.4: Marinas and boat ramp siting must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.
- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.
- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged. (Amended by Ordinance No. 00-22)

POLICY 98.5.5: New marinas must be designed to avoid erosion on adjacent shorelines. (Amended by Ordinance No. 00-22)

POLICY 98.5.6: Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern. (Amended by Ordinance No. 00-22)

POLICY 98.5.7: Marinas, multi-slip docking facilities, and boat ramps which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 98.5.8: New marinas should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as only minimal dredging may be considered.

POLICY 98.5.9: Marina and boat ramp locations which minimize natural shoreline disruption are preferred.

POLICY 98.5.10: Marina and boat ramp construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 98.5.11: Proposed marinas and boat ramps must demonstrate that the marina site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems. (Amended by Ordinance No. 00-22)

POLICY 98.5.12: Rezoning and DRI applications for marinas and boat ramps will be evaluated in the context of cumulative impacts on manatees and marine resources. (Amended by Ordinance No. 00-22)

OBJECTIVE 98.6: MARINA DESIGN CRITERIA. The county will utilize the following criteria in evaluating the design of new marinas (or expansion of wet slip facilities at existing marinas) in order to minimize negative impacts; detailed regulations on these subjects may be contained in the county's development regulations. (Amended by Ordinance No. 00-22)

POLICY 98.6.1: Boat maintenance activities in new or expanded marina sites must be located as far as possible from open water bodies in order to reduce contamination of water bodies by toxic substances common to boat maintenance. Runoff from boat

maintenance activities must be collected and treated prior to discharge. (Amended by Ordinance No. 00-22)

POLICY 98.6.2: Open wet slips will be preferred to covered wet slips in marina design to reduce shading of water bodies which results in lowered biological productivity. (Amended by Ordinance No. 00-22)

POLICY 98.6.3: Fuel and/or oil containment facilities or contingency plans is required at all new marina sites and in marina expansion proposals. (Amended by Ordinance No. 00-22)

POLICY 98.6.4: All marinas serving the general public or live-aboards must provide pump-out facilities if sanitary sewer service is available.

POLICY 98.6.5: All parking, dry storage, and non-water-dependent facilities must be built on existing uplands.

POLICY 98.6.6: Marinas and multi-slip docking facilities must prepare hurricane plans with the assistance of the county which describe measures to be taken to minimize damage to marina sites, neighboring properties, and the environment; this hurricane plan is subject to county approval. (Amended by Ordinance No. 00-22)

POLICY 98.6.7: Fueling facilities associated with marinas must be designed to preclude spills and must be prepared to contain any spills which reach the water. (Amended by Ordinance No. 00-22)

POLICY 98.6.8: Marina design must incorporate natural wetland vegetative buffers near the docking area and in ingress/egress areas for erosion and sediment control, runoff purification, and habitat purposes. (Amended by Ordinance No. 00-22)

POLICY 98.6.9: New fuel facilities must be located on the uplands of a marina site. Proper use and maintenance of fuel pump hoses and other fueling equipment is required. (Amended by Ordinance No. 00-22)

POLICY 98.6.10: Piling construction and other non-dredge-and-fill techniques shall be utilized where possible to minimize habitat destruction.

POLICY 98.6.11: Mitigation or restoration to offset proposed adverse environmental effects will be required as a condition of approval for any new or expanded marina facilities. Mitigation/restoration is not preferred over preservation of existing resources.

POLICY 98.6.12: To reduce dredging, docks should extend to naturally deep waters when possible. County regulations will specify the criteria for such extensions. (Amended by Ordinance No. 00-22)

POLICY 98.6.13: Dry storage of small boats should be encouraged, with dry storage structures located inland as far as feasible.

POLICY 98.6.14: Marina designs must not reduce water quality in adjacent natural water bodies in order to accommodate an increase in water quality in the marina basin itself. (Amended by Ordinance No. 00-22)

POLICY 98.6.15: Existing navigational channels will be used to access new marina sites where possible . (Amended by Ordinance No. 00-22)

POLICY 98.6.16: Expansion of dry storage capabilities will be strongly encouraged to reduce dredging. (Amended by Ordinance No. 00-22)

12.0 Index

CPA2005-00041
MANATEE PROTECTION PLAN
BoCC SPONSORED
AMENDMENT
TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

LPA Public Hearing Document
for the
November 27th, 2006 Public Hearing

Lee County Planning Division
1500 Monroe Street
P.O. Box 398
Fort Myers, FL 33902-0398
(239) 479-8585

November 15, 2006

LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
CPA2005-00041

☑ **Text Amendment** ☐ **Map Amendment**

✓	This Document Contains the Following Reviews:
✓	Staff Review
	Local Planning Agency Review and Recommendation
	Board of County Commissioners Hearing for Transmittal
	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: November 15, 2006

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. **APPLICANT/REPRESENTATIVE:**
LEE COUNTY BOARD OF COUNTY COMMISSIONERS
REPRESENTED BY LEE COUNTY DIVISION OF PLANNING AND THE DIVISION OF NATURAL RESOURCES

2. **REQUEST:** Amend the Conservation and Coastal Management Element and/or the Future Land Use Element to incorporate the "boating facility siting element" of the Manatee Protection Plan as required by F.S. 370.12.(2)(t)(3).

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY:

1. **RECOMMENDATION:** Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment. The existing policy language is shown below, with modifications proposed by staff shown in strike through, underline format. The proposed revisions are as follows:

OBJECTIVE 8.2: All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marinae Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.

OBJECTIVE 128.5: MARINAE FACILITIES SITING CRITERIA. The County will consider the following marina siting criteria in evaluating requests for new and substantially expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

POLICY 128.5.1: Proposed marinas boat access facilities (and expansion of wet slips at existing marinas and new boat ramps existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities marinas and/or boat ramps in a small area will be considered in the review of proposed marina projects.

POLICY 128.5.3: Boat access facilities Marina and/or boat ramp siting must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities Marinas and boat ramp siting must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.

- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee ~~p~~Protection ~~p~~Plans approved by Lee County on June 29, 2004.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- Florida Statutes (F.S. 370.12(2)(t)) require Lee County to prepare a Manatee Protection Plan (MPP).

- On June 29, 2004, the Lee County Board of County Commissioners unanimously approved the MPP. The MPP has been used for permitting guidance since that time.

- The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee.

- The recent Evaluation and Appraisal Report identified the need to incorporate the "boating facility siting element" of the MPP into the Lee Plan to be consistent with State Statutes.

- Proposed Policy 128.5.6 ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3 requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan.

PART II - STAFF ANALYSIS

A. LEE COUNTY MANATEE PROTECTION PLAN

Description of a Manatee Protection Plan (MPP)
The Manatee Protection Plan (MPP) is a planning document designed to provide countywide, comprehensive protection of the West Indian Manatee. The specific purposes are to reduce boat related manatee mortality, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment in Lee County. The MPP is intended to satisfy the requirements of Florida Statutes 370.12(2)(t) and may satisfy exemption prerequisites for marina developments of regional impact in accordance with Florida Statutes 380.06(24)(k).

The MPP provides guidance and recommendations used by local, state and federal entities. The Lee County Board of County Commissioners (BOCC), the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (USFWS) will implement the provisions of the MPP as appropriate. For instance, all three entities will use the boat facility siting portion of the plan to review permit applications for docking facilities, providing for a predictable and consistent approach to permitting.

Requirements for MPP Development
The Florida Manatee Recovery Plan originally developed by the U.S. Fish and Wildlife Service (Service) in 1980, helps to identify and guide species recovery needs. Revisions were made to the plan in 1989, 1996 and 2001. The Florida Manatee Recovery Plan identifies development of site-specific manatee protection plans at the local level as a priority task important to the recovery of the species.

In 1989, the Governor and Cabinet recommended the development of MPPs in 13 "key" counties. This recommendation was not binding on local governments, but lead to development of guidance on MPP content. In August 2000, the Trustees of the Internal Improvement Trust Fund adopted a policy that prohibited new or expanded submerged land lease in key counties that were not making significant progress toward MPP adoption.

More recently, the 2002 Legislature amended Chapter 370.12(2) Florida Statutes, the Florida Manatee Sanctuary Act, to incorporate the 1989 directive for the development of county MPPs. This statute provided deadlines for MPP development and required adoption of the boat facility element into county comprehensive plans. F.S. 370.12(2)(t)1. Is reproduced below:

> *In order to protect manatees and manatee habitat, the counties identified in the Governor and Cabinet's October 1989 Policy Directive shall develop manatee protection plans consistent with*

commission criteria based upon "Schedule K" [attached] of the directive, and shall submit such protection plans for review and approval by the commission. Any manatee protection plans not submitted by July 1, 2004, and any plans not subsequently approved by the commission shall be addressed pursuant to subparagraph 2.

Additionally, there was an amendment made to the DRI statute that allows for certain exemptions from DRI requirements in a county with an approved MPP that has been incorporated in to the comprehensive plan. This is an allowance; not a requirement. The question of DRI exemption has never been pursued in the case of Lee County. F.S. 380.06(24)(k)1. is reproduced below:

Any waterport or marina development is exempt from the provisions of this section if the relevant county or municipality has adopted a boating facility siting plan or policy which includes applicable criteria, considering such factors as natural resources, manatee protection needs and recreation and economic demands as generally outlined in the Bureau of Protected Species Management Boat Facility Siting Guide, dated August 2000, into the coastal management or land use element of its comprehensive plan. The adoption of boating facility siting plans or policies into the comprehensive plan is exempt from the provisions of s. 163.3187(1). Any waterport or marina development within the municipalities or counties with boating facility siting plans or policies that meet the above criteria, adopted prior to April 1, 2002, are exempt from the provisions of this section, when their boating facility siting plan or policy is adopted as part of the relevant local government's comprehensive plan.

The plan states that it will be revisited and possibly revised on a five-year basis. More frequent revisions may occur under circumstances discussed in the MPP.

Specifics of the Lee County MPP
The MPP is posted on the Lee County website at the following location:
http://www.lee-county.com/naturalresources/MPP_final.pdf

Plan Development
As defined by the Florida Fish and Wildlife Conservation Commission (FWC), a comprehensive manatee protection plan typically includes speed zones, sign posting, enforcement, education, habitat protection, and a boat-facility siting plan. County staff actively worked with the Florida Fish and Wildlife Conservation Commission (FWC) for over a year to edit and complete a MPP consistent with the requirements of Florida Statutes. On January 20, 2004, the BOCC directed staff to submit the revised MPP to FWC for approval (Walk-on #1). On April 12, 2004, a letter from FWC transmitted comments, not only from FWC, but also from US Fish and Wildlife Service and the Department of Community Affairs.

On Tuesday, June 29, 2004, the Lee County Board of County Commissioners unanimously approved the final plan which included many modifications based on the April 2004 letter and a subsequent meeting with FWC and USFWS. This version of the MPP was approved by FWC on August 24, 2004 and given concurrence from USFWS on August 26, 2004. It has been used for permitting guidance since that time.

Plan Implementation
Even before final approval of the MPP, Lee County had implemented most plan components. The County continues efforts related to speed zones, including posting and enforcement, as well as habitat protection and education efforts.

The largest significant change has been the use of a new screening process to determine on a site specific basis the number of vessels to be accommodated by new or expanded boat access facilities. The MPP only applies (per statute) to facilities with 5 or more slips, unless the slips are repetitive use slips such as cruise ships, water taxis, etc. It does not apply retroactively to any facility that has already received state and federal permits. The MPP does not apply to reconfiguration or reduction of slips as long as a project does not adversely impact any more than 1000 square feet of submerged aquatic vegetation, such as seagrass.

Projects that require a review are evaluated individually and given a score based on factors including water depth, submerged aquatic vegetation impacts, manatee abundance, manatee mortality, manatee aggregation areas, proximity to open water, presence or absence of speed zones, and whether a project is a new or expanding facility. The total "score" is then used to categorize the site as preferred, conditional or non-preferred. Depending on the category and whether the project is located in an area of special concern, the maximum number of slips allowable is recommended. This is a slip to shoreline ratio and typically ranges from unlimited to 1 slip per 100 linear feet of shoreline.

Facilities that are subject to MPP review and score as conditional or non-preferred, are required to pay fees for additional marine law enforcement. A discussion of this fee can be found in the MPP on page 57.

The plan allows for a transfer of slip credits, discussed in detail in the MPP on page 51.

B. STAFF DISCUSSION

Staff is proposing to amend Objective 128.5, Marina Siting Criteria, and call the objective Marine Facilities Siting Criteria and add dry slip facilities with launches. Staff is also recommending that the citation to Objective 128.5 located in Objective 8.2 be changed to also refer to the "Marine Facilities Siting Criteria." The specific recommended language modifications for these 2 objectives are as follows:

> **OBJECTIVE 8.2:** All development approvals for marine-oriented land uses must also comply with requirements in the Ports, Aviation and Related Facilities sub-element, Objective 128.5: Marina~~e~~ Facilities Siting Criteria, and Objective 128.6: Marina Design Criteria.
>
> **OBJECTIVE 128.5: MARIN~~A~~E FACILITIES SITING CRITERIA.** The County will consider the following ~~marina siting~~ criteria in evaluating requests for new and ~~substantially~~ expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps in order to make efficient use of limited shoreline locations and to minimize environmental impacts.

Staff is also proposing to change the reference to Marinas in many policies of the plan and replace this term with a new term: "boat access facilities." This term is broader in nature. The MPP defines a Boat Facility as "a public or private structure or operation where boats are moored and/or launched, including commercial, recreational, and residential marinas, and boat ramps." A dry storage facility is considered

part of a boat facility if the dry storage facility has the capability of launching vessels into adjacent waters or water access is provided adjacent to the project. The MPP definition also provides that facilities such as long-term boat storage lots or boat dealership lots that do not have adjacent water access or single-family docks with less than five (5) wet slips are not considered boat facilities. The specific recommended modifications are as follows:

POLICY 128.5.1: Proposed ~~marinas~~ boat access facilities (and expansion of ~~wet slips at existing marinas and new boat ramps~~ existing facilities) in the following areas face a variety of technical, legal, or environmental obstacles which must be addressed during the review process:

Aquatic Preserve (DEP)
Outstanding Florida Waters (DEP)
Class I Waters (DEP)
Marine or Estuarine Sanctuaries (NOAA)
Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
Approved or conditionally approved shellfish harvesting areas (DEP)
Federal navigation channel setbacks (USCG, USACE)
Bridge/road right-of-way easement (County DOT, State DOT)
Other Endangered/Threatened Species Habitat (USFWS, DEP, USACE)

Extra caution and consideration will be given prior to authorizing use of areas with high environmental values.

POLICY 128.5.2: Cumulative effects of several boat access facilities ~~marinas and/or boat ramps~~ in a small area will be considered in the review of proposed ~~marina~~ projects.

POLICY 128.5.3: Boat access facilities ~~Marina and/or boat ramp siting~~ must be consistent with the appropriate aquatic preserve management plan where applicable.

POLICY 128.5.4: Boat access facilities ~~Marinas and boat ramp siting~~ must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- Priority should be given to the expansion of existing facilities, if environmentally sound, over new facilities.
- Marinas are encouraged in previously disturbed areas and in areas that have historically been used for marina-related activities.
- Marinas should be located as close as possible to boating demand.
- Marinas should be encouraged where adequate uplands are available to develop related support activities and to allow for possible future expansion.

- Location of marinas in highly productive marine habitats should be discouraged.

- Location of marinas in or near well-flushed, deep-water areas should be encouraged.

- Impacts upon state-designed manatee sanctuaries should be considered. Particular marina locations or design features which threaten manatees in these sanctuaries should be discouraged.

POLICY 128.5.5: New boat access facilities ~~marinas~~ must be designed to avoid erosion on adjacent shorelines.

POLICY 128.5.7: Boat access facilities ~~Marinas~~, including multi-slip docking facilities~~;~~ and boat ramps~~;~~ which would disturb or destroy wetlands or grassbeds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.

POLICY 128.5.8: Boat access facilities ~~New marinas~~ should be located in areas of maximum physical advantage (e.g. adequate water depth). Adequate existing water depths between the proposed facility and any navigational channel, inlet, or deep water, are preferred, as ~~only minimal~~ new dredging ~~may be considered~~ is discouraged.

POLICY 128.5.9: Boat access facility ~~Marina and boat ramp~~ locations ~~which~~ should minimize natural shoreline disruption ~~are preferred~~.

POLICY 128.5.10: Boat access facility ~~Marina and boat ramp~~ construction in dead-end canals are discouraged due to difficulty in meeting state water quality standards.

POLICY 128.5.11: Proposed boat access facilities ~~marinas and boat ramps~~ must demonstrate that the ~~marina~~ site has adequate uplands to provide support facilities for all activities proposed on site without damaging or removing wetlands or rare and unique upland systems.

POLICY 128.5.12: Rezoning and DRI applications for boat access facilities ~~marinas and boat ramps~~ will be evaluated in the context of cumulative impacts on manatees and marine resources.

Staff is proposing to modify Policy 128.5.6 to refer to the adopted MPP and that Section 8 of the MPP, the Marine Facility Siting Requirements, will be used to determine the appropriate number of slips in new or expanded facilities. This proposed Policy essentially ensures Lee County consistency with the Florida Statute Chapter 370.12(2)(t)3. requirement that Lee County incorporate the "boating facility siting element" of the MPP into the comprehensive plan. The specific recommended language modifications are as follows:

POLICY 128.5.6: ~~Marina and boat ramp siting preference will be given to those properties which are located in proximity to large navigable water bodies outside areas of critical manatee concern.~~ Proposed boat access facilities and expansion of existing facilities will be evaluated in accordance with the Lee County Manatee Protection Plan (MPP), dated June 17, 2004 and approved by the Board of County Commissioners on June 29, 2004. Specifically, Section 8 of the MPP, Marine Facility Siting Requirements, will be used to determine the appropriate number of slips as defined by the MPP for each new project or allowable expansion.

The Lee Plan contains an objective that is specific to West Indian Manatees, Objective 107.7. The current objective is to "minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County." The objective also provides that "by 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees." Staff notes that the purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. Given this fact, Objective 107.7 and subsequent policies should be revised to acknowledge the existence of the MPP. Staff believes that the concept of management alternatives should be incorporated into Policy 107.7.1. Staff also believes that Policies 107.7.5 and 107.7.6 should be modified to recognize the existence of the MPP and the need to update the MPP in the future. Staff recommends the following specific modifications to Objective 107.7 and subsequent Policies:

OBJECTIVE 107.7: West Indian Manatees. ~~Minimize injuries and mortality of manatees to maintain the existing population by encouraging the adoption by the state of Florida and local governments of regulations to protect the West Indian Manatee in the Caloosahatchee and elsewhere in Lee County. By 1998, manatee protection plans will be prepared for other waters of Lee County also frequented by manatees.~~ Implement a broad based approach to manatee protection, including reduced boat related mortality, habitat protection, and increased public awareness, in order to maintain the health and stability of the marine ecosystem including the existing manatee population.

POLICY 107.7.1: Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management ~~agreements~~ alternatives to protect such habitats.

POLICY 107.7.2: ~~Identify areas of greatest actual or potential boat/barge mortality and/or injury by 1998, and re-evaluate existing slow or idle speed zones~~ Work with Federal and State agencies and law enforcement officers to evaluate and update as necessary the appropriateness of vessel regulations and ensure adequate sign posting for reducing manatee injuries and mortality.

POLICY 107.7.4: Educational materials regarding manatees should be disseminated to boaters and ~~warning~~ signs placed in areas where both manatees and humans congregate and at public boat access locations.

POLICY 107.7.5: Construction and expansion of ~~multi slip docking~~ boat access facilities ~~and boat ramps~~ with a capacity of five vessels or more will be ~~encouraged in locations where there is quick access to deep, open waters where the associated increase in boat traffic will be outside areas of high manatee concentration~~ evaluated against the marine facility siting criteria in the Lee County Manatee Protection Plan approved on June 29, 2004.

POLICY 107.7.6: Federal, State, local, and private interests will work in cooperation to ~~develop and~~ implement and update as necessary the Lee County ~~area specific m~~Manatee ~~p~~Protection ~~p~~Plans approved by Lee County on June 29, 2004.

C. CONCLUSIONS

State law requires Lee County to prepare a Manatee Protection Plan. The County has prepared and adopted a Manatee Protection Plan. The purpose of the adopted MPP is to provide for countywide, comprehensive protection of the West Indian Manatee. The proposed revisions ensure that Lee County is consistent with State Statutes, specifically Chapter 370.12(2)(t)3.

D. RECOMMENDATION

Planning and Natural Resources staff recommend that the Board of County Commissioners transmit the proposed amendment as contained in Part I.B. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: November 27, 2006

A. LOCAL PLANNING AGENCY REVIEW

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. RECOMMENDATION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

NOEL ANDRESS	_____
DEREK BURR	_____
RONALD INGE	_____
CARLETON RYFFEL	_____
RAYMOND SCHUMANN, ESQ.	_____
RAE ANN WESSEL	_____
VACANT	_____

PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT

DATE OF TRANSMITTAL HEARING: December 13, 2006

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANK MANN	_____

PART V - DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT

DATE OF ORC REPORT:

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

B. STAFF RESPONSE

PART VI - BOARD OF COUNTY COMMISSIONERS
HEARING FOR ADOPTION OF PROPOSED AMENDMENT

DATE OF ADOPTION HEARING:

A. BOARD REVIEW:

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. BOARD ACTION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

	_____
BRIAN BIGELOW	_____
TAMMARA HALL	_____
BOB JANES	_____
RAY JUDAH	_____
FRANK MANN	_____