

LOCAL PLANNING AGENCY OLD LEE COUNTY COURTHOUSE 2120 MAIN STREET, FORT MYERS, FL 33901 BOARD CHAMBERS

THURSDAY, JUNE 28, 2012 8:30 AM

AGENDA

- 1. Call to Order/Review of Affidavit of Publication
- 2. Pledge of Allegiance
- 3. Public Forum
- 4. Approval of Minutes May 31, 2012
- 5. New Horizon 2035: Plan Amendments
 - A. CPA2011-00004 Conservation and Coastal Management
 - B. CPA2011-00010 Housing
- 6. Other Business
- 7. Adjournment Next Meeting Date: Monday, July 23, 2012

Any person appealing a decision made at this hearing must ensure a record of the proceedings is made. In accordance with the Americans with Disabilities Act, Reasonable Accommodations will be made upon request. If you are in need of a Reasonable Accommodation or would like additional information, please contact Janet Miller at 239-533-8583.

CPA2011-04 CONSERVATION AND COASTAL MANAGEMENT ELEMENT BOCC SPONSORED EAR BASED AMENDMENT TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

Publicly Sponsored Amendment and Staff Analysis

LPA Public Hearing Document For the June 28th, 2012 Public Hearing

> Lee County Planning Division 1500 Monroe Street P.O. Box 398 Fort Myers, FL 33902-0398 (239) 533-8585

> > June 15, 2012

LEE COUNTY DIVISION OF PLANNING STAFF REPORT FOR COMPREHENSIVE PLAN AMENDMENT CPA2011-03

✓ Text Amendment	Map Amendment
This Document Contains the	Following Reviews
✓ Staff Review	
Local Planning Agency Revie	ew and Recommendation
Board of County Commission	ners Hearing for Transmittal
_	bjections, Recommendations, and
Comments (ORC) Report Board of County Commission	ners Hearing for Adontion

STAFF REPORT PREPARATION DATE: June 15, 2012

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. APPLICANT:

Lee County Board of County Commissioners Represented by Lee County Division of Planning

2. REQUEST:

Amend the Conservation and Coastal Management Element of the Lee Plan, incorporating the recommendations of County staff and the March 1, 2011 Evaluation and Appraisal Report.

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. RECOMMENDATION:

Staff recommends that the Board of County Commissioners **transmit** the proposed amendment to the Conservation and Coastal Management Element of the Lee Plan as

identified in Attachment 1 to this staff report. Proposed text within this report has been depicted in strikethrough and underline format as it relates to the existing provisions of the Lee Plan. Attachment 1 provides a clean copy of the element as recommended for transmittal.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- The Board of County Commissioners initiated this plan amendment on March 1, 2011, with the adoption of the Evaluation and Appraisal Report.
- The adopted Evaluation and Appraisal Report found that the updated Lee Plan needed to address element clarity, effectiveness and redundancies.
- The proposed Conservation and Coastal Management Element is consistent with the recommendations in the Evaluation and Appraisal Report.
- The recommendation is largely a reorganization of the element and inclusion of goals that are currently found in other elements.
- Several goals addressing public safety within the coastal areas are better suited for inclusion in the proposed new Community Wellbeing and Safety Element.
- The proposed amendments meet the statutory requirements of FS 163.3177(6)(d) for conservation elements and FS163.3177(6)(g) for coastal management elements.

C. BACKGROUND INFORMATION

Chapter 163.3177 of the Florida Statutes requires that comprehensive plans contain a Conservation Element and a Coastal Management Element. Chapter 163.3177 of the Florida Statutes specifically states that:

"A conservation element for the conservation, use, and protection of natural resources in the area, including air, water, water recharge areas, wetlands, waterwells, estuarine marshes, soils, beaches, shores, flood plains, rivers, bays, lakes, harbors, forests, fisheries and wildlife, marine habitat, minerals, and other natural and environmental resources, including factors that affect energy conservation."

In addition, the Florida Statutes require that communities located along the Atlantic Ocean or the Gulf of Mexico shall provide a Coastal Management Element within their comprehensive plan. The Coastal Management Element is intended to "set forth the principles, guidelines, standards, and strategies that shall guide the local government's decisions and program implementation" regarding the protection of the coastal environment, directing orderly development, and the preservation of historic and archaeological resources.

The Conservation and Coastal Management Element combines two statutorily required elements into one element. Lee County has had a combined Conservation and Coastal Management Element within the Lee Plan since the original adoption in 1984. At that time the element was called the Conservation and Coastal Zone Element.

Staff Report for June 15, 2012 CPA2011-03 Page 3 of 46 A primary focus of the element is to protect the county's natural resources for future generations and to manage development in coastal areas so as to minimize damage due to natural events. As such, the element directly supports many of the sustainability issues identified in the Evaluation and Appraisal Report.

The current Conservation and Coastal Management Element includes policies that address emergency preparedness, hazardous materials, protection of life and property in coastal high hazard areas, coastal resource protection, wetland and upland resource protection, estuarine water quality, watershed management, hazard mitigation, evacuation planning and shelter space, post-disaster redevelopment, intergovernmental coordination, planning for coastal areas, water resources, air quality, fisheries management, commercial fishing, marine and navigation management, water access, artificial reefs, and shoreline management.

Overall, the comprehensive array of goals, objectives, and policies contained in this element provide the county with the means to accomplish these objectives. But this same array of goals also leads the element to seem unfocused. Shortcomings identified with the element relate to the element's organizational structure, large number of goal statements which can be confusing to the reader, lack of linkages to other plan elements, and the need for stronger policies to support environmentally critical areas.

Recommended amendments are intended to reinforce the role the county's natural resources play in the health of its communities, economy, and environment and to ensure their protection.

PART II - STAFF ANALYSIS

A. STAFF DISCUSSION

The amendments proposed to the Conservation and Coastal Management Element are based on the recommendations contained in the Evaluation and Appraisal Report (EAR), New Horizon 2035, which was adopted by the Board of County Commissioners on March 1st, 2011. The EAR provided both general and specific recommendations for the Lee Plan and the Conservation and Coastal Management Element. General recommendations for the Conservation and Coastal Management Element include the following:

• Reorganize goals, objectives, and policies (in) this element under two major topics for clarity: Conservation and Coastal Management.

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- Modify or add policies that affect energy conservation in keeping with the requirements of HB 697.
- Expand application of the term rare and unique county wide rather than within the (coastal) planning area.

The Evaluation and Appraisal Report also included general organizational recommendations. One of these recommendations was to provide a clear overview section in each element that sets the context for the goals, objectives, and policies that follow, in addition to describing the relationships and linkages to other elements in the plan. Therefore, staff recommends that the following paragraph be incorporated as the preamble to the Conservation and Coastal Management Element:

Lee County's coastal location and abundant natural resources and features contribute significantly to the desired character of the county and to the quality of life of county residents. These environmental features contribute to the sustainability of Lee County by providing groundwater recharge areas, natural flood and storm protection, and species habitat. Environmental and coastal features also contribute to the county's recreation, education, cultural and economic opportunities as a result of its appeal for tourism and as a second home destination. The Conservation and Coastal Management Element guides the management, protection, and use of Lee County's environmental and coastal features.

Division of Planning staff reviewed the Conservation and Coastal Management Element cooperatively with Division of Environmental Sciences and Division of Natural Resources staff. The element was also reviewed by the Office of Sustainability and the County Attorney's Office.

As recommended by the EAR the proposed amendment to the Conservation and Coastal Management Element primarily include a reorganization of the existing element as well as incorporating goals, objectives and policies that are currently found in other elements, but are better suited for Conservation and Coastal Management. Specifically portions of *Goal 60: Coordinating Surface Water Management and Land Use Planning on a Watershed Basis* and *Goal 61: Protection of Water Resources* will be relocated from the Community Facilities and Services Element to the Conservation and Coastal Management Element. In addition there are several goals, objectives, and policies that will be moved to the Community Safety and Wellbeing Element, a newly proposed element. The goals, including subsequent objectives and policies that are proposed to be moved to the Community Safety and Wellbeing Element are as follows:

- Goal 101: Planning Coordination and Implementation;
- Goal 102: People with Special Needs;
- Goal 103: Hazardous Materials;

- Goal 105: Protection of Life and Property in Coastal High Hazard Areas;
- Goal 106: Limitation of Public Expenditures in Coastal High Hazard Areas;
- Goal 109: Evacuation and Shelter:
- Goal 110: Hazard Mitigation, and;
- Goal 111: Post-Disaster Redevelopment.

The proposed reorganization results in two distinct sub-elements that create a more user friendly element. The two sub-elements include A) Environmental Conservation, and B) Coastal Management. This is consistent with recommendations throughout the EAR which suggest "dividing goals, objectives, and policies into two sections: one for Conservation and one for Coastal Management."

In addition to the reorganization of the Conservation and Coastal Management Element there were numerous recommendations made by the County Attorney's Office that are intended to cleanup and simplify much of the language within the element.

The goals, objectives and policies of the proposed element are listed in order below with an explanation of the change in Italics, where appropriate. The proposed amendments to the goals, objectives and policies are identified in strikethrough (for deletions) and underline (for additions) formatting. The element has been renumbered starting with Goal 1. The former goal, objective, or policy number is shown in strikethrough as it is proposed to be deleted.

TEXT AMENDMENTS:

<u>GOAL 1 GOAL 107</u>: RESOURCE PROTECTION. <u>To mM</u> anage the county's <u>coastal</u>, wetland and upland ecosystems <u>and natural resources</u> so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.

GOAL 112: INTERGOVERNMENTAL COORDINATION. To protect natural resource systems that cross governmental boundaries through intergovernmental coordination.

<u>OBJECTIVE 1.1</u> OBJECTIVE 112.1: Lee County will pParticipate with adjacent county natural resource protection agencies and state and federal environmental agencies in regularly conducted natural resource protection staff intergovernmental coordination meetings. (Amended by Ordinance No. 94-30)

<u>POLICY 1.1.1</u> POLICY 112.1.1: The county will continue to <u>pP</u>articipate in an intergovernmental task force consisting of representatives from Lee County and incorporated municipalities to <u>develop a permanent intergovernmental resource protection organization to deal with <u>address</u> stormwater runoff, wastewater discharge, and development management policies aimed at protecting and enhancing estuarine</u>

Staff Report for June 15, 2012 CPA2011-03 Page 6 of 46 water quality and unusual vegetative communities. (Amended by Ordinance No. 94-30, 00-22)

<u>POLICY 1.1.2</u> OBJECTIVE 112.2: The county will continue to <u>pP</u>articipate with other governments to prepare and implement water management plans, including the Estero Bay Agency on Bay Management, Charlotte Harbor National Estuary Program, the Charlotte Harbor Management Plan, the Water Management District Surface Water Improvement and Management (SWIM), <u>Caloosahatchee River Watershed Protection</u> plans, <u>DEP Basin Management Action Plans</u>, <u>DEP aquatic preserve management plans</u>, water supply plans, and other water resource management plans. (Amended by Ordinance No. 94-30, 98-09, 00-22)

<u>POLICY 1.1.3</u> <u>POLICY 112.2.1</u>: <u>Lee County will rRe-evaluate and amend as needed county policies for protecting and enhancing natural resources upon a review of natural resource management plans that are newly adopted or revised by other agencies. (Amended by Ordinance No. 94-30, 00-22)</u>

<u>OBJECTIVE 1.2</u> <u>OBJECTIVE 107.1</u>: RESOURCE MANAGEMENT PLAN. The eounty will continue to iImplement 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)

<u>POLICY 1.2.1</u> <u>POLICY 107.1.1</u>: County agencies implementing the natural resources management program will be responsible for the following:

- a. Identifying upland and wetland habitats/systems most suitable for protection, enhancement, reclamation, and conservation.
- b. 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 114.1) and significant areas of Rare and Unique upland habitats (as defined in Objective 104.1) as defined in this plan.
- c. Preparing standards for wetland and rare and unique upland mitigation.
- d. Conducting a sensitive lands acquisition program, which will consist<u>ing</u> of the following elements (see also Policy 1.3.8107.2.8):
 - 1. A comprehensive inventory of environmentally sensitive lands will be maintained and expanded as new data becomes available.

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- 2. Environmentally sensitive lands will include wetlands (as defined in Objective 114.1); important plant communities (as identified by Objective 107.2); critical habitat for listed wildlife species (see also Objective 107.8 and Policies 107.4.1, 107.4.2, 107.10.4, and 107.11.2); environmentally sensitive coastal planning areas (as defined in Policy 113.1.5); natural waterways; important water resources (as defined in Policy 117.1.1); storm and flood hazard areas; and Rare and Unique uplands, (all as defined in this plan Objective 104.1).
- 3. Beginning in 1997, tThe county will continue to evaluate the effectiveness of the Conservation 20/20 Program, 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. A minimum of tTen percent of the funds will be used to manage the lands acquired.
- 4. The county will tTake 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 and Wildlife Commission and by participating in state land acquisition programs such as the Save Our Rivers program and the Conservation and Recreational Lands program. Priority should be given to acquiring and otherwise protecting properties which are adjacent to or in close proximity to existing preservation areas, with emphasis on maintaining opportunities for a regional greenways system that may include a mix of flow ways, areas subject to flooding, native habitats, recreational trails and wildlife corridors. (Amended by Ordinance No. 07-09)
- 5. The county (or other appropriate agency) will pPrepare 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 fundinged.
- 6. The county will eEncourage the establishment of and provide assistance to community-based land trusts, whose purpose is the preservation and protection of Lee the County's natural resources.

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- 7. The County will bBuild upon the Conservation 20/20 program for funding to fund a green infrastructure and natural functions program, which will be within the County CIP program.
- e. <u>Maintaining aA</u> central clearinghouse for all environmental studies and recommendations by both public and private organizations.
- f. Compiling, maintaining and regularly updating county mapsping of vegetation communities; listed species habitat and sitings; and water resources including watersheds, floodplains, wetlands, aquifers, and surface water features.
- g. Preparing recommendations for maintaining or restoring the desired seasonal base flows and water quality after reviewing monitoring data.
- h. 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.
- i. Providing an annual progress report to the <u>eCounty eCommission</u> 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.
- j. Providing on an as needed basis a report to the County Commission on the status of wetlands and rare and unique uplands.

(Amended by Ordinance No. 94-30, 98-09, 00-22, 07-09, 07-12, 07-16)

<u>POLICY 1.2.2</u> <u>POLICY 107.1.2</u>: To increase protection of natural resources, the County will promote the <u>formation of a public/private management team to</u> coordinatione of area wide conservation easements. (Added by Ordinance No. 07-16)

POLICY 1.2.3 POLICY 107.1.3: Pursue Mutual Aid Agreements to plan and pool resources and equipment. (Added by Ordinance No. 07-16)

<u>OBJECTIVE 1.3</u> OBJECTIVE 107.2: PLANT COMMUNITIES. Lee County will mMaintain and routinely update an inventory of natural plant communities and will protect at various suitable locations remnant tracts of all important and representative natural plant communities occurring within Lee County. (Amended by Ordinance No. 94-30)

<u>POLICY 1.3.1</u> POLICY 107.2.1: Coordinate with state and regional agencies to exchange updated natural resources information. (Amended by Ordinance No. 94-30)

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- <u>POLICY 1.3.2</u> <u>POLICY 107.2.2</u>: Continue to provide regulations and incentives to prevent incompatible development in and around environmentally sensitive lands (as defined in Policy 107.1.1.4.b.). (Amended by Ordinance No. 94-30)
- **POLICY 1.3.3 POLICY 107.2.3**: Prevent water management and development projects from altering or disrupting the natural function of significant natural systems.
- **<u>POLICY 1.3.4</u> <u>POLICY 107.2.4</u>**: Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.
- <u>POLICY 1.3.5</u> <u>POLICY 107.2.5</u>: Maintain regulations to control the clearing of natural vegetation, including tree removal and clearing of understory, prior to the development of property or its conversion to agricultural uses. (Amended by Ordinance No. 94-30)
- <u>POLICY 1.3.6</u> <u>POLICY 107.2.6</u>: Avoid needless destruction of upland vegetation communities including coastal and interior hammocks through consideration during the site plan review process of alternative layouts of permitted uses.
- **POLICY 1.3.7 POLICY 107.2.7**: Require inventories and assessments of the impacts of development in environmentally sensitive lands. (Amended by Ordinance No. 94-30)
- **POLICY 1.3.8 POLICY 107.2.8:** Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, and public acquisition, and other means. (Amended by Ordinance No. 94-30)
- **POLICY 1.3.9 POLICY 107.2.9:** Maintain regulations, incentives, and programs for preserving and planting native plant species and for controlling invasive exotic plants, particularly within environmentally sensitive areas. (Amended by Ordinance No. 94-30)
- <u>POLICY 1.3.10</u> <u>POLICY 77.3.8</u>: Criteria for <u>local monitoring and enforcement for preserving and planting native vegetation will <u>also include consideration of Southwest Florida specific needs, such as attention to <u>nutrient contents of available irrigation water, nutrient content and drainage of soils of chlorides and conductance, and <u>ability</u> to <u>utilize</u> low nutrient fertilizers. (Added by Ordinance No. 07-16)</u></u></u>
- <u>POLICY 1.3.11</u> <u>POLICY 107.2.10</u>: Development adjacent to aquatic and other nature preserves, wildlife refuges, and recreation areas must <u>be designed to protect</u> the natural character and public benefit of these areas including, but not limited to, scenic values for the benefit of future generations. (Amended by Ordinance No. 00-22)

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- **POLICY 1.3.12 POLICY 107.2.11:** Prohibit the planting of invasive exotic plants in landscaping requirements for land development projects. <u>Identify p</u>Prohibited invasive exotic plant species will be specified in the Land Development Code. (Amended by Ordinance No. 94-30, 00-22)
- **POLICY 1.3.13 POLICY 107.2.12:** To ensure that adequate protection of mangroves is maintained, the county will re-evaluate and amend, if necessary, its mangrove protection regulations whenever state mangrove protection regulations are revised. The county will oppose any efforts of other agencies to reduce or eliminate regulations relating to the protection of mangroves and other wetland areas. (Amended by Ordinance No. 93-25, 94-30, 00-22)
- **POLICY 1.3.14 POLICY 107.2.13:** Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning. (Added by Ordinance No. 07-16)
- <u>POLICY 1.3.15</u> <u>POLICY 107.2.14</u>: Coordinate and stay informed on exotic eradication, management, and compliance plan, and i<u>I</u>nvolve private land owners, with incentives for exotics removal. (Added by Ordinance No. 07-16)
- <u>OBJECTIVE 1.4</u> <u>OBJECTIVE 107.3</u>: WILDLIFE. Maintain and enhance the fish and wildlife diversity and distribution within Lee County for the benefit of a balanced ecological system. (Amended by Ordinance No. 94-30)
 - <u>POLICY 1.4.1</u> <u>POLICY 107.3.1</u>: Encourage upland preservation in and around preserved wetlands to provide habitat diversity, enhance edge effect, and promote wildlife conservation.
 - <u>POLICY 1.4.2</u> <u>POLICY 107.3.2</u>: Participate with the Southwest Florida Regional Planning Council and the Florida Game and Fresh Water Fish Commission in the development of a regional plan that identifies and protects areas utilized by wildlife, including panthers and bears so as to promote the continued viability and diversity of regional species. (Amended by Ordinance No. 92-48)
 - **POLICY 1.4.3:** Require new development in Non-Urban areas to prepare a human—wildlife coexistence plan.
 - POLICY 1.4.4 OBJECTIVE 107.4: ENDANGERED AND THREATENED SPECIES IN GENERAL. Lee County will continue to pProtect 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. To protect endangered and threatened species Lee County will do the following:
 - <u>a.</u> **POLICY 107.4.1:** 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 and Wildlife Commission, as periodically updated. Lee County's Enforce 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)

- <u>b.</u> **POLICY 107.4.2:** Conserve eritical habitat of rare and endangered plant and animal species through development review, regulation, incentives, and acquisition.
- <u>c.</u> **POLICY 107.4.3:** Require detailed inventories and assessments of the impacts of development where it threatens habitat of endangered and threatened species and species of special concern.
- <u>d.</u> POLICY 107.4.4: 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 within Lee County. (Amended by Ordinance No. 94-30, 00-22)

POLICY 1.4.5 OBJECTIVE 107.5: LOGGERHEAD SEA TURTLES. Continue the sea turtle protection program to minimize the disorientation of sea turtles along the Gulf beaches. **POLICY 107.5.1:** The sea turtle protection program includes at least the following activities:

- a. Distribute a guide for homeowners and builders which explains the detrimental effects of night-time beachfront lighting on hatchling sea turtles.
- b. Continue to examine public light sources (streetlights, security lights, beach access lights, etc.) and prepare a plan to minimize the amount of harmful light from such sources onto the beach during the nesting season.
- c. Continue to conduct an educational program to persuade residents to reduce lighting levels on the beach and to publicize other hazards to turtles from activities of people, pets, and vehicles.
- d. Continue to provide and enforce sea turtle regulations to prevent inappropriate lighting along beaches during the nesting season. (Amended by Ordinance No. 94-30)

<u>POLICY 1.4.6</u> OBJECTIVE 107.6: SOUTHERN BALD EAGLES. The county will continue to monitor Southern bald eagle nesting activity and offer incentives to

Staff Report for June 15, 2012 CPA2011-03 Page 12 of 46 conserve buffer areas around Southern bald eagle nests. (Amended by Ordinance No. 98-09) To protect the Southern Bald Eagle, Lee County will do the following:

- <u>a.</u> POLICY 107.6.1: Maintain a policy of negotiations with owners of land surrounding eagle nests to provide an optimal management plan for land subject to imminent development. <u>Management plans will include measures to protect and enhance critical eagle nesting habitat.</u>
- <u>b.</u> **POLICY 107.6.2:** The county Eagle Technical Advisory Committee will continue to conduct nest monitoring through the nesting season for all known eagle nests in Lee County. Information from these assessments will be used to modify, as needed, the adopted nest guidelines and to adopt guidelines for new eagle nests documented in Lee County. (Amended by Ordinance No. 94-30, 98-09, 00-22)
- <u>c.</u> <u>POLICY 107.6.3</u>: The Committee will continue to inform land owners and the general public of proper practices to minimize disturbances to eagle nests. (Amended by Ordinance No. 94-30, 98-09)

<u>POLICY 1.4.7</u> 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, 07-09) This broad based approach will include the following features:

- <u>a.</u> **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. (Amended by Ordinance No. 07-09)
- <u>b.</u> <u>POLICY 107.7.2:</u> <u>Work Coordination</u> with Federal and State agencies and law enforcement officers to <u>routinely</u> evaluate <u>and update as necessary the appropriateness the effectiveness of vessel regulations and <u>ensure adequate</u> sign posting for reducing manatee injuries and mortality. (Amended by Ordinance No. 94-30, 98-09, 07-09)</u>
- <u>c.</u> **POLICY 107.7.3:** Inform and educate the public through sign posting, lectures, and regulations about manatee protection.
- <u>d.</u> <u>POLICY 107.7.4</u>: 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. (Amended by Ordinance No. 07-09)

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- e. POLICY 107.7.5: Evaluate the cConstruction and expansion of boat access facilities with a capacity of five vessels or more for consistency with 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, 07-09)
- <u>f.</u> <u>POLICY 107.7.6</u>: <u>Cooperate with Federal, State, local, and private interests will work in cooperation</u> to implement and update as necessary the <u>Lee County</u> Manatee Protection Plan approved by Lee County on June 29, 2004. (Amended by Ordinance No. 00-22, 07-09)
- g. **POLICY 107.7.7:** The county will continue to pProvide a permanent funding source to assist in the enforcement of vessel regulations for manatee protection. (Amended by Ordinance No. 94-30, 00-22)

<u>POLICY 1.4.8</u> OBJECTIVE 107.8: GOPHER TORTOISES. Restore and maintain secure, viable populations of Gopher Tortoises Lee County through the following measures:

- <u>a.</u> The county will protect gopher tortoises through the <u>eEnforcement of</u> the protected species regulations and <u>coordinateion</u> with the Florida Fish and Wildlife <u>Conservation Commission to determine the appropriate mitigation to ensure protection.</u>
- <u>b.</u> by Operateing and maintaining, in coordination with the Florida Game and Fresh Water Fish and Wildlife Conservation Commission, the Hickey Creek Mitigation Park.
- <u>c.</u> <u>POLICY 107.8.1:</u> The county's policy is to <u>P</u>protect gopher tortoise burrows wherever they are found. <u>However, iIf</u> unavoidable conflicts make on-site protection infeasible, <u>then allow off-site</u> mitigation <u>may be provided in accordance</u> with Florida <u>Game and Fresh Water</u> Fish <u>and Wildlife Conservation</u> Commission requirements. (Amended by Ordinance No. 94-30)

<u>POLICY 1.4.9</u> OBJECTIVE 107.9: RED-COCKADED WOODPECKER. County staff will coordinate with the Florida Game and Fresh Water Fish and Wildlife Conservation Commission to determine on a case-by-case basis the appropriate mitigation for the protection of the red-cockaded woodpecker's habitat. Mitigation may include on-site preservation, on-site mitigation, off-site mitigation, and associated habitat management. POLICY 107.9.1: County staff will note and dDocument other possible red-cockaded woodpecker sites during routine site inspections.

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- <u>POLICY 1.4.10</u> <u>OBJECTIVE 107.10</u>: WOODSTORK. <u>Lee County will mM</u>aintain regulatory measures to protect the wood stork's feeding and roosting areas and habitat-including: (Amended by Ordinance No. 94-30, 00-22)
- <u>a.</u> **POLICY 107.10.1:** County protected species <u>Maintain</u> regulations <u>will continue</u> to <u>that</u> include wood storks as a Lee County Listed Species. <u>Requireing</u> surveys for and protection of wood stork habitat. <u>The county will continue to mMaintain</u> an inventory of documented feeding, roosting, and rooking areas for the wood stork to ensure that <u>those areas are included in</u> surveys submitted <u>through under</u> the Protected Species Ordinance <u>include such areas</u>. (Amended by Ordinance No. 94-30, 00-22)
- <u>b.</u> **POLICY 107.10.2:** The county will continue to <u>rRequire</u> management plans for existing wood stork feeding, roosting, and rooking areas to utilize "Habitat Management Guidelines for the Wood Stork in the Southeast Region" (U.S Fish and Wildlife Service, 1990). (Amended by Ordinance No. 94-30, 00-22)
- <u>c.</u> <u>POLICY 107.10.3:</u> The county will <u>eEncourage</u> the creation of wood stork feeding areas in mandatory littoral shelf design, construction, and planting. (Amended by Ordinance No. 94-30, 00-22)
- d. POLICY 107.10.4: By 1995, the county will-iIdentify wood stork flight patterns from roosting and rooking areas to feeding areas within the county. By 2000, Eevaluate the impact of existing tall structures on wood storks within significant flight areas and consider adoption of regulations if it is deemed appropriate. Include significant wood stork roosting, rooking, and feeding areas in the inventory of environmentally sensitive lands for potential acquisition (see Policy 1.2.1107.1.1.4). (Amended by Ordinance No. 94-30, 00-22)
- <u>e.</u> <u>POLICY 107.10.5</u>: The county will continue to <u>pPermit</u> communication towers in excess of 100 feet only by special exception. <u>Evaluate tThe</u> impacts of such towers on woodstorks <u>must be considered</u> in the review of these applications. (Added by Ordinance No. 94-30, Amended by Ordinance No. 00-22)
- **POLICY 1.4.11 OBJECTIVE 107.11: FLORIDA PANTHER AND BLACK BEAR.** County staff will dDevelop measures to protect the Florida panther and black bear through greenbelt and acquisition strategies. (Amended by Ordinance No. 92-48, 00-22)
- <u>a.</u> Ensure panther habitat needs are incorporated in the planning of new roads and road expansion projects.
- b. Provide education and outreach to increase public understanding of panthers and support for panther conservation

- c. Promote connectivity of preserves to ensure safe passage of panthers and work with land owners to protect known panther corridors.
- d. POLICY 107.11.1: Lee County will Coordinate with regulatory agencies to maintain and update data on sitings and habitat for the black bear and Florida panther. (Amended by Ordinance No. 94-30)
- <u>e.</u> <u>POLICY 107.11.2</u>: Encourage state land acquisition programs to include <u>and restore</u> known panther <u>and black bear corridors identified by least-cost pathways analysis</u>. The corridor boundaries will include wetlands, upland buffers, and nearby vegetative communities <u>which are particularly</u> beneficial to the Florida <u>Ppanther and black bear (such as high palmetto and oak hammocks)</u>. (Amended by Ordinance No. 94-30, 00-22)
- <u>f.</u> <u>POLICY 107.11.3: Lee County will inform Collier and Charlotte counties as to Lee County Inform neighboring counties of corridor acquisition projects to encourage a regional approach to corridor acquisition. (Amended by Ordinance No. 00-22)</u>
- g. **POLICY 107.11.4:** The county will continue to <u>pP</u>rotect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway, a regionally significant greenway with priority panther habitat, through continued participation in land acquisition programs, incentive programs to restore and enhance habitat, and land management activities and through <u>Land Development Code</u> buffer and open space requirements of the Land Development Code. (Amended by Ordinance No. 98-09)

Staff is recommending that the following policy is deleted from the Lee Plan as it is redundant and no longer necessary. The Land Development Code has already been modified to include the Florida Panther and Black Bear in the protected species management section of Chapter 10.

- **POLICY 107.11.5:** The county will continue to include the Florida panther and black bear in the protected species management section of Chapter 10 of the Land Development Code. (Amended by Ordinance No. 94 30, 00 22)
- <u>h.</u> POLICY 107.11.6: In any vegetation regression projects conducted by Lee County—for land acquired due to its—environmental sensitivity (such as the Six Mile Cypress Strand and the Flint Pen Strand), plant lists will include plant species that provide forage for the prey of the Florida panther, where appropriate and forage for the black bear. (Amended by Ordinance No. 00-22)
- POLICY 1.4.12: FLORIDA BLACK BEAR: Maintain sustainable black bear populations in suitable habitats and promote connectivity between subpopulations

through land use planning, acquisitions and easements, waste management, and conflict resolution by:

- <u>a.</u> Promoting connectivity within and among Florida black bear subpopulations by maintaining, improving, or creating landscape connectivity.
- b. Promoting the Bear Smart Community (BSC) program and encouraging facilities/developments within known bear habitat to secure waste and other attractants using authorized bear proof containers.
- <u>c.</u> Increasing public understanding of bears and support for bear conservation through public education and outreach.
- <u>d.</u> Participate in the Black Bear Assistance Group (BBAG) within the South Bear Management Unit.

<u>GOAL 2: WATER RESOURCES.</u> To conserve, manage, and protect the natural hydrologic systems of Lee County to ignsure continued water resource availability. (Goal 117), Lee County will work Coordinate with the South Florida Water Management District and private developers to ensure new development will maximizes stormwater recharge, retention and treatment. Review all new upland development in terms of its for impacts on watersheds and downstream estuarine systems.

<u>OBJECTIVE 2.1</u> <u>OBJECTIVE 117.1</u>: WATER SUPPLIES. <u>E</u>Insure water supplies of sufficient quantity and quality to meet the present and projected demands of all consumers and the environment, based on the capacity of the natural systems.

POLICY 2.1.1 POLICY 117.1.1: Identify, protect, and manage nNatural water system features which are essential for retention, detention, purification, runoff, recharge, and maintenance of stream flows and groundwater levels shall be identified, protected, and managed.

<u>POLICY 2.1.2</u> POLICY 117.1.2: The county will rRecognize and encourage water and wastewater management <u>practices that</u>, provided that such management does not exceed the natural assimilative capacity of the environment or applicable health standards. Appropriate water and wastewater management includes, but is not limited to, aquifer recharge, aquifer storage and recovery, reclaimed water, reverse osmosis, dual water systems, use of low volume irrigation systems, use of water-conserving vegetation, and other conservation and recycling techniques. (Amended by Ordinance No. 94-30, 00-22, 09-13)

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- <u>POLICY 2.1.3</u> <u>POLICY 117.1.3</u>: Manage <u>Ff</u>reshwater resources <u>will be managed</u> in order to maintain adequate freshwater supplies during dry periods and to conserve water. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.4</u> <u>POLICY 117.1.4</u>: Development <u>must be designsed to must provide</u> for maintaining surface water flows, groundwater levels, and lake levels at or above existing conditions. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.5</u> POLICY 117.1.5: The county will cooperate <u>Collaborate</u> with the United States Geological Survey, South Florida Water Management District, and state agencies to develop an area-wide water resources plan emphasizing planning and management of water resources on the basis of drainage basins; and addressing the needs of the existing and potential built environment, natural hydrologic system requirements, and freshwater flow impacts on estuarine systems. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.6</u> <u>POLICY 117.1.6</u>: The county will continue to <u>sSupport a</u> monitoring programs of existing baseline conditions of water resources. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.7 POLICY 117.1.7</u>: The county will <u>cC</u>ooperate fully with emergency water conservation measures of the South Florida Water Management District. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.8</u> POLICY 117.1.8: The county will sSupport the acquisition and protection of the Flint Pen Strand as a major water retention and aquifer recharge area. (See also Policy 107.11.41.4.1) (Amended by Ordinance No. 94-30, 00-22)
- <u>POLICY 2.1.9 POLICY 117.2.1</u>: The county will continue to e<u>E</u>ncourage <u>xeriscape</u> <u>Florida Friendly</u> landscaping techniques for new development in the Land Development Code. (Amended by Ordinance No. 94-30, 00-22)
- <u>POLICY 2.1.10</u> <u>POLICY 117.2.2</u>: The county will provide e<u>E</u>ducateion on water conservation through creative landscaping, and promote the conservation and use of native plant species through <u>xeriscape</u>—<u>Florida Friendly</u> landscaping techniques. (Amended by Ordinance No. 94-30, 00-22) <u>POLICY 117.2.3</u>: The county will establish local guidelines that will assist in efforts to reduce landscape irrigation water use to the lowest and most efficient, practical level. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.1.11</u> <u>POLICY 117.1.9</u>: The county will uUtilize the recommendations made in the Water Supply Facilities Work Plan (see Policy 55.1.3) and the Lower West Coast Water Supply Plan as a guide to potable water facilities planning, potable water resources, and water conservation as well as expanding potable water facilities

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- consistent with Table 6, the 10 Year Water Supply Development Projects Table. (Added by Ordinance No. 09-13)
- <u>OBJECTIVE 2.2</u> GOAL 115: WATER QUALITY AND WASTEWATER. To ensure that water quality is maintained or improved for the protection of the environment and people of Lee County. OBJECTIVE 115.1: Maintain high water quality, meeting or exceeding state and federal water quality standards.
 - <u>POLICY 2.2.1</u> <u>POLICY 115.1.1</u>: Sources of water pollution will be identified, controlled, and eliminated wherever feasible.
 - **<u>POLICY 2.2.2</u> <u>POLICY 115.1.2</u>**: New development and additions to existing development must not degrade surface and ground water quality. (Amended by Ordinance No. 00-22)
 - **POLICY 2.2.3 POLICY 115.1.3:** The design, construction, and maintenance of artificial drainage systems must provide for retention or detention areas and vegetated swale systems that minimize nutrient loading and pollution of freshwater and estuarine systems. (Amended by Ordinance No. 00-22)
 - <u>POLICY 2.2.4</u> <u>POLICY 115.1.4</u>: <u>Require that dDevelopments which have with the potential of lowering existing water quality below state and federal water quality standards will provide standardized appropriate monitoring data. (Amended by Ordinance No. 00-22)</u>
 - <u>POLICY 2.2.5</u> <u>POLICY 115.1.5</u>: <u>No gG</u>arbage or untreated sewage <u>will may not</u> be discharged into coastal and interior surface waters. (Amended by Ordinance No. 00-22)
 - <u>POLICY 2.2.6</u> <u>POLICY 115.1.6</u>: The county will i<u>I</u>nitiate a wellfield protection program to prevent the contamination of shallow wells by pollutant generating development including surface water runoff (see Goal 63). (Amended by Ordinance No. 00-22)
 - <u>POLICY 2.2.7</u> <u>POLICY 115.1.7</u>: <u>Require v</u> Valid permits and inspections <u>will be</u> required prior <u>to</u> and subsequent to drilling operations for wells, elevator shafts, foundation holes, and test borings. (Amended by Ordinance No. 00-22)
 - <u>POLICY 2.2.8</u> <u>POLICY 115.1.8</u>: <u>Plug</u> The county will continue its program of plugging improperly constructed wells which are detrimental to groundwater resources. (Amended by Ordinance No. 94-30, 00-22)
- OBJECTIVE 2.3: SURFACE WATER OBJECTIVE 60.1: COUNTY-WIDE PROGRAM. Lee County will continue its efforts in dDeveloping a surface water

management program that is multi-objective in scope and is geographically based on basin boundaries. (Amended by Ordinance No. 94-30, 00-22)

<u>POLICY 2.3.1</u> POLICY 60.1.3: The county will eExamine steps necessary to restore principal flow-way systems, if feasible, to assure the continued environmental function, value, and use of natural surface water flow-ways and associated wetland systems. (Amended by Ordinance No. 00-22, Relocated by Ordinance No. 07-12)

<u>POLICY 2.3.2</u> <u>POLICY 60.5.4</u>: The County will continue to iIdentify and map flow-ways as part of the Lee-County Surface Water Management Plan that includes. The Plan provides a general depiction of watersheds and their trunk and major tributaries and has been expanded to some degree in the DRGR area. As new information is assembled, the Plan will be updated for public use. Due to its magnitude and need for site specific information, not all flow-ways will be shown. (Added by Ordinance No. 03-06)

<u>POLICY 2.3.3 POLICY 60.1.4:</u> Conduct a Additional public hearings on Lee Plan amendments will be held to incorporate each phase of the Surface Water Management Master Plan. These amendments will specifically address:

- 1.(a) incorporating the additions to the database into the Lee Plan;
- 2.(b) modifying the interim level-of-service standards; and
- <u>3.(e)</u> modifying the Future Land Use, Community Facilities and Services, and Capital Improvements elements as necessary to incorporate the study's initial findings.

(Amended by Ordinance No. 94-30, Relocated by Ordinance No. 07-12)

POLICY 2.3.4: OBJECTIVE 61.3: GENERAL SURFACE WATER MANAGEMENT STANDARDS. Lee County will continue to provide sufficient performance and/or design standards for development protective of the function of natural drainage systems. (Amended by Ordinance No. 94-30, 00-22)

<u>a.</u> <u>POLICY 60.1.5</u>: <u>Lee County will mM</u>aintain in its land development regulations that require the installation of requirements that proper stormwater management systems be installed when land is being redeveloped. Appropriate Provide exemptions will be provided to this requirement for individual residential structures and for historic districts. The regulations may also pProvide modified stormwater management standards for publicly sponsored projects within community redevelopment areas (as defined by Chapter 163, Part III, Florida Statutes). However, tThis policy will not be interpreted so as to waive any concurrency or level-of-service standards. (Amended by Ordinance No. 94-30, 00-22, Relocated by Ordinance No. 07-12)

- <u>b.</u> <u>POLICY 61.3.1:</u> <u>Adopt Provide sufficient performance and design standards to require post-development runoff to approximate the total characteristics of the natural flow prior to development.</u>
- <u>c.</u> <u>POLICY 61.3.2</u>: <u>Manage f</u>Floodplains <u>must be managed</u> to minimize the potential loss of life and damage to property by flooding. (Amended by Ordinance No. 00-22)
- <u>d.</u> POLICY 61.3.3: Avoid obstructions to fFloodways should be kept as unobstructed as possible.
- e. POLICY 61.3.4: Restore nNatural flow patterns when restoration will be publicly restored where such action is of significant public or environmental benefit, and feasible. (Amended by Ordinance No. 00-22)
- <u>f.</u> <u>POLICY 61.3.5</u>: The county will m<u>M</u>aintain regulations which provide for the management and protection of floodplains, <u>that are consistent</u> with state and federal regulations. (Amended by Ordinance No. 00-22)
- g. POLICY 61.3.6: Require dDevelopments must have and maintain to provide an adequate surface water management system, provision for acceptable programs for operation and maintenance, and post-development runoff conditions that which reflect the natural surface water flow in terms of rate, direction, quality, hydroperiod, and drainage basin. Adopt dDetailed regulations will continue to be integrated with other county development regulations. (Amended by Ordinance No. 00-22)
- <u>h.</u> **POLICY 61.3.7:** Channelization of natural streams and rivers is prohibited; channelization of other natural watercourses is discouraged. (Amended by Ordinance No. 00-22)
- <u>i.</u> **POLICY 61.3.8:** The banks of wet retention and detention areas must be sloped to promote growth of vegetation and safeguard against accidents. (Amended by Ordinance No. 00-22)
- j. **POLICY 61.3.9:** The county will adopt appropriate regulations to protect the natural functions of riparian systems from incompatible development practices along their banks. (Amended by Ordinance No. 00-22)
- <u>k.</u> <u>POLICY 61.3.10:</u> <u>Prohibit nNew artificial drainage systems must not from channeling runoff directly into natural waterbodies. (Amended by Ordinance No. 00-22)</u>
- <u>l.</u> **POLICY 61.3.11:** Runoff must be routed through retention or detention areas and vegetated swales in order to reduce flow velocity, allow for percolation, and

- trap and remove suspended solids and pollutants. (Amended by Ordinance No. 00-22)
- <u>m.</u> **POLICY 61.3.12:** The design of shorelines of retention and detention areas and other excavations must be sinuous rather than straight. (Amended by Ordinance No. 00-22)
- n. POLICY 61.3.13: Installation of erosion control devices for development activities adjacent to waterbodies, water courses, and wetlands will be required. Such control devices must be maintained to ensure operational effectiveness. (Amended by Ordinance No. 00-22)
- o. **POLICY 61.3.14:** Artificial watercourses must be designed so as to reduce velocity of runoff and prevent erosion. (Amended by Ordinance No. 00-22)
- <u>POLICY 2.3.5:</u> OBJECTIVE 60.5: INCORPORATION OF GREEN INFRASTRUCTURE INTO THE SURFACE WATER MANAGEMENT SYSTEM. The long term benefits of iIncorporatinge green infrastructure as part of the into surface water management systems to include improved water quality, improved air quality, improved water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment. (Added by Ordinance No. 03-06).
- <u>a.</u> <u>POLICY 60.5.1:</u> The County <u>eE</u>ncourages new developments to design their surface water management systems to incorporate best management practices including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flow-ways. (Added by Ordinance No. 03-06)
- <u>b.</u> <u>POLICY 60.5.2:</u> The County <u>eEncourages</u> new developments to design their surface water management system to incorporate existing wetland systems. (Added by Ordinance No. 03-06)
- <u>c.</u> <u>POLICY 60.5.3:</u> The County <u>eEncourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways. (Added by Ordinance No. 03-06)</u>
- <u>d.</u> <u>POLICY 60.1.1:</u> <u>Require</u> <u>Develop</u> surface water management systems <u>in such a manner as to that</u> protect or enhance the groundwater table as a possible source of potable water. (Relocated by Ordinance No. 07-12)
- <u>e.</u> <u>POLICY 60.1.2:</u> Incorporate, utilize, and where practicable, restore natural surface water flow-ways and associated habitats. (Relocated by Ordinance No. 07-12)

- <u>POLICY 2.3.6:</u> OBJECTIVE 61.2: MIMICKING THE FUNCTIONS OF NATURAL SYSTEM. Support a surface water management strategy that relies on natural features (flow ways, sloughs, strands, etc.) and natural systems to receive and otherwise manage storm and surface water.
- <u>a.</u> <u>POLICY 61.2.1:</u> All <u>dD</u>evelopment proposals outside the future urban areas must recognize areas where soils, vegetation, hydrogeology, topography, and other factors indicate that water flows or ponds; and require that these areas <u>must</u> be utilized to the maximum extent possible, without significant structural alteration, for on-site stormwater management; and require that these areas be integrated into area-wide coordinated stormwater management schemes. (Amended by Ordinance No. 00-22)
- <u>b.</u> POLICY 61.2.2: Where no natural features of flow or ponding exist on a site outside the future urban areas, the county will require that water management structures be designed and constructed in such a manner as to mimic the functions of natural systems. <u>Incorporate s</u>Special engineering and design standards for such structures will be incorporated into revised development regulations. (Amended by Ordinance No. 00-22)
- c. POLICY 61.2.3: Outside the future urban areas where traditional drainage structures exist (ditches, canals, dikes, etc.), the county may permit their continued existence and maintenance, but will discourage their expansion or extension. (Amended by Ordinance No. 00-22)
- <u>d.</u> **POLICY 61.2.4:** Where feasible within future urban areas, surface water management plans are eEncouraged surface water management plans that mimic the functions of natural systems, notwithstanding the type or intensity of development permitted.
- <u>e.</u> <u>POLICY 61.2.5</u>: Thise policyies is above (61.2.1 through 61.2.4) are not intended to prohibit any permittable surface water management solution that is consistent with good engineering practices and adopted environmental criteria.
- <u>f.</u> <u>POLICY 61.2.6</u>: The county will mMaintain regulations that require reclamation standards for future excavation that mimic natural systems through the techniques that improve water quality, wildlife utilization, and enhance groundwater recharge. (Amended by Ordinance No. 94-30, 00-22)
- OBJECTIVE 2.4 GOAL 108: ESTUARINE WATER QUALITY. To mM anage estuarine ecosystems so as to maintain or improve water quality and wildlife diversity; to reduce or maintain current pollution loading and system imbalances in order to conserve estuarine productivity; and to provide the best use of estuarine areas. (Amended by Ordinance No. 94-30)

- **POLICY 2.4.1 OBJECTIVE 108.1:** Maintain an ongoing water quality monitoring program. Maintain cCommunicateion with other local, state, and federal estuarine water quality studies to ensure that the latest data and recommendations are available. (Amended by Ordinance No. 94-30, 07-12)
- <u>a.</u> **POLICY 108.1.1:** The Lee County Division of Natural Resources Management (or its successor) will mMonitor estuarine water quality and be responsible for:
 - 1. <u>Establish Setting up</u> and operateing a network of water quality sampling sites to fill in gaps in the state sampling program, especially in Estero Bay.
 - 2. Maintaining liaisons with other local, state, and federal agencies engaged in water quality monitoring, and reviewing their data, conclusions, and recommendations.
 - 3. Developing a system for reporting on water quality conditions and trends on a regular basis.
 - 4. Recommending actions that are intended to maintain or improve water quality in the estuaries to meet the Department of Environmental Protection's criteria for the appropriate class water body and preserve the "approved for shellfish harvesting" classification where applicable, while a to return viable "closed" (due to water quality) shellfishing areas to an "approved" status. (Amended by Ordinance No. 94-30, 00-22)
- <u>b.</u> <u>POLICY 108.1.2:</u> <u>Require dD</u>evelopment affecting coastal and estuarine water resources <u>must to</u> maintain or enhance the biological and economic productivity of theose resources. (Amended by Ordinance No. 00-22)
- <u>c.</u> <u>POLICY 108.1.3:</u> The county will <u>eC</u>ooperate with the South Florida Water Management District, local utilities, and other appropriate agencies for monitoring and review of freshwater discharge affecting estuarine areas, in order to maintain the biological and chemical balances necessary for optimum productivity ecosystem sustainability. (Amended by Ordinance No. 00-22)
- <u>d.</u> <u>POLICY 108.1.4</u>: The county will <u>cC</u>ooperate with the Florida Marine Patrol, U.S. Coast Guard, U.S. Army Corps of Engineers, and the Florida Department of Environmental Regulation state and federal agencies in the to enforcement of pollution control standards for marinas, marine dumping, and illegal discharges from water craft. (Amended by Ordinance No. 00-22)
- <u>e.</u> <u>POLICY 108.1.6:</u> <u>Lee County eE</u>ncourages the on-going efforts by the SFWMD in <u>to</u> establishing a Caloosahatchee Water Management Plan for the Caloosahatchee River that recognizes public, environmental and agricultural uses of the river through

participation in the Southwest Florida Feasibility StudyComprehensive Watershed Plan, Northern Everglades and Estuary Protection Plan, Caloosahatchee River Watershed Protection Plan, Lower East Coast and Lower West Coast Regional Water Supply Plans, Caloosahatchee Study, Minimum Flows and Levels, and the development of maximum flows and discretionary release protocols for Lake Okeechobee. (Added by Ordinance No. 02-02)

POLICY 2.4.2 OBJECTIVE 108.2: ESTUARINE WATERSHED MANAGEMENT PLANS. Review all new upland development in terms of its for impacts on estuarine systems. Lee County will work Coordinate with the South Florida Water Management District and the Florida Department of Environmental Protection to ensure new development will maximize stormwater retention and treatment. (Amended by Ordinance No. 94-30, 07-12)

POLICY 108.2.1: The Lee County Division of Natural Resources, the county's estuarine watershed management agency, will be responsible for:

- <u>a</u>1. Prepar<u>eing</u> management plans for estuarine watersheds, with priority to the watershed of Estero Bay, a critical estuary undergoing development impacts.
- <u>b</u>2. Recommending modifications to the Sanibel causeway in order to improve estuarine water quality. Require enhanced stormwater controls in basins that discharge into waterways with special State or Federal designation of environmental significance such as Outstanding Florida Waters (OWF), Impaired Waters, or Estuaries of National Concern.
- <u>c</u>3. Reviewing the feasibility of changing canal patterns and retrofitting existing stormwater collection systems in order to reduce the impact of freshwater on estuaries.
- <u>d</u>4. Assessing the adequacy of disaster preparedness plans for coastal oil storage facilities. (Amended by Ordinance No. 94-30, 00-22)
- <u>e.</u> <u>POLICY 108.2.2</u>: The County will <u>rReview</u> the Comprehensive Conservation and Management Plan for the Greater Charlotte Harbor Watershed by the year 2002 in order to identify key action plans, objectives and policies that relatinge to Pine Island Sound, Matlacha Pass, the Estero Bay, the tidal Caloosahatchee and attendant watersheds. The review will a Assess County upland and coastal development management practices and public land acquisition programs as they related to the findings and recommendations of the Charlotte Harbor Plan. Particular emphasis will be placed on evaluating the effectiveness and improvement of County watershed programs as they relate to watershed conservation and public land acquisition programs, watershed management needs prioritization and water quality monitoring. (Added by Ordinance No. 02-02)

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GOAL 3: ENVIRONMENTALLY CRITICAL AREAS. Manage and regulate environmentally critical areas to conserve and enhance their natural functions. Environmentally critical areas include wetlands (as defined Objective 3.3), areas critical for surface water management, and Rare and Unique upland habitats.

OBJECTIVE 3.1: AREAS CRITICAL FOR SURFACE WATER MANAGEMENT OBJECTIVE 60.4: CRITICAL AREAS. The Six Mile Cypress Basin (as defined in Chapter 10 of the Land Development Code) and the Density Reduction/Groundwater Resource land use category are both identified as "critical areas for surface water management." The county will Establish and maintain existing regulations to protect the unique environmental and water resource values of the Six Mile Cypress Basin, Impaired Waters, and the Density Reduction/Groundwater Resource land use category these areas. (Amended by Ordinance No. 94-30, 00-22)

<u>POLICY 3.1.1</u> <u>POLICY 60.4.1</u>: The county will mMaintain regulations provisions in Chapter 10 of the Land Development Code that reduce or eliminate the exemptions allowable in the Six Mile Cypress Basin. (Amended by Ordinance No. 94-30, 00-22)

POLICY 3.1.2 POLICY 60.4.2: The county will maintain the elimination of the exemptions in its development regulations for agricultural uses and small subdivisions within the "critical areas for surface water management" and will continue to subject these uses to an appropriate review process. (Amended by Ordinance No. 94-30, 00-22)

OBJECTIVE 3.2 OBJECTIVE 104.1: RARE AND UNIQUE UPLAND HABITATS ENVIRONMENTALLY CRITICAL AREAS. Within the coastal planning area, the county will manage and regulate, in an ongoing basis, environmentally critical areas to conserve and enhance their natural functions. Environmentally critical areas include wetlands (as defined in Goal 114) and Rare and Unique upland habitats. Limit Development in Rare and Unique upland habitats, which include, but are not limited to: sand scrub (320); coastal scrub (322); those pine flatwoods (411) which can be categorized as "mature" due to the absence of severe impacts caused by logging, drainage, and exotic infestation; slash pine/midstory oak (412); tropical hardwood (426); live oak hammock (427); and cabbage palm hammock (428). The numbered references are to the Florida Land Use Cover and Forms Classification System (FLUCFCS) Level III (FDOT, 1985). (See also Policy 113.1.44.1.4.) The digitization of the 1989 baseline coastal vegetation mapping (including wetlands and rare and unique uplands, as defined above) will be completed by 1996. (Amended by Ordinance No. 94-30, 00-22)

POLICY 104.1.1: Development will be limited in Rare and Unique upland habitats and strictly controlled in wetlands in the coastal planning area. (See Policy 107.1.1(2) and Goal 114.) (Amended by Ordinance No. 94-30, 00-22)

<u>POLICY 3.2.1</u> <u>POLICY 104.1.2</u>: <u>Preserve</u> The county will continue to support the preservation of environmentally sensitive areas in the coastal planning area rare and

<u>unique upland habitats through</u> by land acquisition. (Amended by Ordinance No. 94-30, 00-22)

Staff recommends deleting Policy 104.1.3 because much of the undeveloped lands adjacent to the Estero Aquatic Preserve and connecting inland tributaries is currently under public ownership. This Policy is no longer needed.

POLICY 104.1.3: The county will study the costs and benefits of extending the Estero Bay Aquatic Preserve to include major inland tributaries (Hendry, Mullock, and Spring Creeks, and the Estero and Imperial Rivers) by 2005. (Amended by Ordinance No. 94-30, Amended and Relocated by Ordinance No. 98-09, Amended by Ordinance No. 00-22)

GOAL 114: WETLANDS. To maintain and enforce a regulatory program for development in wetlands that is cost effective, complements federal and state permitting processes, and protects the fragile ecological characteristics of wetland systems. (Amended by Ordinance No. 94-30)

OBJECTIVE 3.3 OBJECTIVE 114.1: WETLANDS. Protect and conserve the natural functions of wetlands and wetland systems will be protected and conserved through the enforcement of the county's by enforcing wetland protection regulations and the goals, objectives, and policies in this plan. "Wetlands" include all of those lands, whether shown on the Future Land Use Map or not, that are identified as wetlands in accordance with F.S. 373.019(17) through the use of the unified state delineation methodology described in FAC Chapter 17-340, as ratified and amended by F.S. 373.4211. (Amended by Ordinance No. 94-30, 00-22)

POLICY 3.3.1 POLICY 114.1.1: Ensure that dDevelopment in wetlands is consistent with the Wetlands future land use category. is limited to very low density residential uses and uses of a recreational, open space, or conservation nature that are compatible with wetland functions. The maximum density in the Wetlands category is one unit per 20 acres, except that one single family residence will be permitted on lots meeting the standards in Chapter XIII of this plan, and except that owners of wetlands adjacent to Intensive Development, Central Urban, Urban Community, Suburban, and Outlying Suburban areas may transfer densities to developable contiguous uplands under common ownership in accordance with Footnotes 8(b) and 8(c) of Table 1(a), Summary of Residential Densities. In Future Limerock Mining areas only (see Map 14), impacts to wetlands resulting from mining will be allowed by Lee County when those impacts are offset through appropriate mitigation, preferably within Southeast Lee County (see also Policy 33.1.3). Appropriate wetland mitigation may be provided by preservation of high quality indigenous habitat, restoration or reconnection of historic flowways, connectivity to public conservation lands, restoration of historic ecosystems or other mitigation measures as deemed

Staff Report for June 15, 2012 CPA2011-03 Page 27 of 46 sufficient by the Division of Environmental Sciences. It is recommended that, whenever possible, wetland mitigation be located within Southeast Lee County. The Land Development Code will be revised to include provisions to implement this policy. (Amended by Ordinance No. 94-30, 00-22, 10-20)

<u>POLICY 3.3.2</u> <u>POLICY 114.1.2</u>: The county's <u>Maintain</u> wetlands protection regulations will be consistent with the following:

- a. The county will not undertake an independent review at the Development Order stage of the impacts to wetlands resulting from development in wetlands that is specifically authorized by a DEP or SFWMD dredge and fill permit or exemption.
- b. No development in wetlands regulated by the State of Florida will be permitted by Lee County without the appropriate state agency permit or authorization.
- c. <u>Lee County will incorporate tThe</u> terms and conditions of state permits <u>will be incorporated</u> into county permits. <u>and will The County will prosecute violations of state regulations and permit conditions through its code enforcement procedures.</u>
- d. Every reasonable effort will be required to Minimize or avoid or minimize adverse impacts on wetlands through the clustering of development and other site planning techniques. On- or off-site mitigation will only be permitted in accordance with applicable state standards.
- e. Mitigation banks and the issuance and use of mitigation bank credits will be permitted to the extent authorized by applicable state agencies. (Amended by Ordinance No. 94-30, 00-22, 07-12)
- f. Wetland density will be determined by the jurisdictional wetland line. Impacted wetlands may not be calculated at the underlying upland density rate. Density calculations for impacted wetlands must be at 1 dwelling unit per 20 acres. (Added by Ordinance No. 10-39)

<u>POLICY 3.3.3</u> POLICY 114.1.4: By the end of 2006, Lee County will amend the Lee County Land Development Code to establish Maintain a sufficient setback requirements for the placement of fill adjacent to existing mangroves. OF In the alternative, require development designs that address the interface of fill areas with existing mangroves to eliminate impacts from fill sloughing or washing into mangrove areas. Techniques to accomplish this <u>may</u> include, but are not limited to: setbacks; stabilized slopes; retaining walls; and, rip rap revetments; and, other measures. (Added by Ordinance No. 05-19)

<u>POLICY 3.3.4</u> <u>POLICY 114.1.3</u>: <u>Update t</u>The Future Land Use Map <u>shows to reflect</u> the approximate boundaries of wetlands in <u>Lee County</u>. The map will be <u>updated as needed</u> based on the definitions in this plan and new information. If the

Future Land Use Map is incorrect due to a clear factual error, or if an exact boundary determination is desired, an administrative process is set out in Chapter XIII of this plan to establish the precise boundary of the wetland. (Amended by Ordinance No. 94-30, 07-12)

The Lee Plan has incorporated "Coastal Planning Areas," which include provisions such as protection of beach and dune systems, storm protection, limiting public expenditures on the barrier islands, shoreline stabilization systems, post disaster build back, and beach restoration and nourishment. These provisions are included as Goal 113 and subsequent objectives and policies within the existing Lee Plan. The Coastal Planning Areas goal is proposed to be updated to address FS163.3177(6)(g)(10), which provides coastal municipalities an opportunity to identify an "adaptation action area." Specifically, FS163.3177(6)(g)(10) states:

At the option of the local government, develop an adaptation action area designation for those low-lying coastal zones that are experiencing coastal flooding due to extreme high tides and storm surge and are vulnerable to the impacts of rising sea level. Local governments that adopt an adaptation action area may consider policies within the coastal management element to improve resilience to coastal flooding resulting from high-tide events, storm surge, flash floods, stormwater runoff, and related impacts of sealevel rise. Criteria for the adaptation action area may include, but need not be limited to, areas for which the land elevations are below, at, or near mean higher high water, which have a hydrologic connection to coastal waters, or which are designated as evacuation zones for storm surge.

The Lee Plan provides a definition of the Coastal Planning area, which is substantially consistent with the description of the "adaption action area." Staff will also propose an amended definition for Coastal Planning Areas in the Lee Plan Glossary.

The Coastal Planning Areas provisions are also proposed to be updated to be consistent with the Lee County Climate Change Resiliency Strategy, a component of "Complete Lee: A Sustainability Assessment" which was adopted by the Lee County Board of County Commissioners in March of 2012.

<u>GOAL 4</u> GOAL 113: COASTAL PLANNING AREAS. To <u>eC</u>onserve, maintain, and enhance the natural balance of ecological <u>resources and</u> functions in the coastal planning area, with <u>particular</u> emphasis on the protection of beach and dune systems so as to retain their contribution to storm protection, <u>protection of the FEMA designated Special Flood Hazard Area</u>, natural resources, <u>resiliency to impacts of rising sea level</u>, and economic development. (Amended by Ordinance No. 94-30)

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- <u>OBJECTIVE 4.1</u> <u>OBJECTIVE 113.1</u>: COASTAL PLANNING AREA IN GENERAL. <u>Lee County will mM</u> anage the coastal planning area to provide a balance among conservation of resources, public safety capabilities, and development. (Amended by Ordinance No. 94-30, 00-22)
 - <u>POLICY 4.1.1</u> <u>POLICY 113.1.1</u>: <u>Protect c</u>Coastal areas with significant public value for water retention and purification, wildlife habitat, and primary productivity will be protected through the development permitting process and enforcement of appropriate codes and regulations. (Amended by Ordinance No. 00-22)
 - <u>POLICY 4.1.2</u> <u>POLICY 113.1.2</u>: <u>All dD</u>evelopment within the coastal planning area must be compatible with protection of natural systems. (Amended by Ordinance No. 94-30, 00-22)
 - <u>POLICY 4.1.3 POLICY 113.1.3:</u> <u>Prohibit c</u>Construction of vehicular access to, and paved roads or commercial marinas on, undeveloped barrier islands is prohibited, as mandated by the Charlotte Harbor Management Plan. (See also Policy 106.1.2.) (Amended by Ordinance No. 94-30, 00-22)
 - <u>POLICY 4.1.4</u> <u>POLICY 113.1.4</u>: <u>Maintain u</u>Undeveloped barrier islands will be maintained predominantly in their natural state. <u>Limit pPublic</u> expenditures for infrastructure will be limited to public parks in such areas. (Amended by Ordinance No. 94-30, 00-22)
 - <u>POLICY 4.1.5</u> <u>POLICY 113.1.5</u>: <u>Lee County will pP</u>rotect and conserve the following environmentally sensitive coastal areas: wetlands, estuaries, mangrove stands, undeveloped barrier islands, beach and dune systems, aquatic preserves and wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, and marine grass beds. (Amended by Ordinance No. 00-22)
 - <u>POLICY 4.1.6</u> POLICY 113.1.6: The county will <u>gG</u>ather and utilize available technical criteria and supporting information necessary to guide the formulateion of plans, ordinances, and regulations to <u>ie</u>nsure that development in the coastal planning area is compatible with the continued or improved functioning of natural coastal systems. (Amended by Ordinance No. 94-30, 00-22)
 - <u>POLICY 4.1.7</u> POLICY 113.1.7: Levels of service for facilities and services within the coastal planning area will be the same as those established for the remainder of the county-(see Policy 95.1.3 for service level summaries), except for undeveloped barrier islands. The county's Concurrency Management System will apply in full within the coastal planning area. (Amended by Ordinance No. 94-30, 00-22)
- <u>OBJECTIVE 4.2</u> <u>OBJECTIVE 113.2</u>: SHORELINE STABILIZING SYSTEMS. <u>Lee County will continue to eEncourage</u> the construction of environmentally compatible

shoreline stabilizing systems where stabilizing systems are needed. (Amended by Ordinance No. 00-22)

POLICY 4.2.1 POLICY 113.2.1: Construction of environmentally compatible shoreline stabilizing systems will be allowed along the active gulf beach where necessary for the protection of shorelines from erosion. (Amended by Ordinance No. 00-22)

<u>POLICY 4.2.2</u> POLICY 113.2.2: Vertical seawalls must not be constructed along natural waterways except where such a wall is the most reasonable alternative (using criteria established by ordinance), and vertical seawalls along artificial canals will not be permitted unless an adequate littoral zone consistent with the surrounding environment is provided. Seawalls in artificial canals where 50% of the canal or greater is seawalled or for seawalls of less than 300 feet where both adjoining properties are seawalled, will be exempt from this requirement. (Amended by Ordinance No. 00-22)

<u>POLICY 4.2.3</u> <u>POLICY 113.2.3</u>: The county will <u>eEncourage</u> planting of mangroves or placement of rip-rap in artificial and natural canal systems to replace existing seawalls in need of repair. (Amended by Ordinance No. 00-22)

<u>POLICY 4.2.4</u> <u>POLICY 113.2.4</u>: <u>Prohibit bBuild-back of vertical seawalls will not be permitted</u> along natural waterbodies if one or more of the following conditions exist:

- Build-back would cause excessive shoreline erosion or endanger shorelines of surrounding properties.
- Build-back would threaten wetland resources.
- Build-back would be a threat to public safety or block access to state-owned submerged lands.
- Build-back would be waterward of the existing seawall alignment on adjacent shorelines.

<u>OBJECTIVE 4.3</u> <u>OBJECTIVE 113.3</u>: BEACH AND DUNE SYSTEMS. Lee County will continue to iImplement a beach preservation and management plan through the Lee County Coastal Advisory Council or successor agency. (Amended by Ordinance No. 98-09)

<u>POLICY 4.3.1</u> <u>POLICY 113.3.1</u>: The Division of Natural Resources Management, or successor agency, will be responsible for the <u>Maintain a</u> beach and dune management program <u>that provides for</u>. This program will include:

a. <u>The preparation of Preparing</u> beach and dune management plans, with priority to areas designated by the Florida Department of Environmental Protection as

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- critically eroded in the report entitled Critically Eroded Beaches in Florida (as updated April, 2006).
- b. Coordinationng with local municipalities and the Captiva Erosion Prevention District in preparing beach and dune management plans.
- c. <u>The collection of Collecting</u> information on available sources of beach-quality sand for <u>restoration and renourishment</u>, concentrating on areas <u>which that</u> will have minimal impacts on the county's aquatic resources <u>or coastal processes</u>.
- d. <u>The preparation of Preparing restoration and renourishment plans for eroding areas where public facilities and access exist, including areas designated by the Florida Department of Environmental Protection as critically eroded in the report entitled Critically Eroded Beaches in Florida (as updated April, 2006).</u>
- e. Recommending rRegulations and policies to restrict hardened coastal engineering structures such as groin fields and seawalls, protect eroding coastal areas and sand dunes, and discourage development of undeveloped coastal barriers.
- f. The maintenance of Maintaining a central clearinghouse for information on beach and dune studies and recommendations by both-public and private organizations.
- g. Educating citizens and developers about the costs and benefits of beach and dune conservation approaches.
- h. Preparing a sand conservation plan that emphasizes the importance of maintaining The maintenance of beach quality sand within the littoral system as the preferred option for coastal navigation dredging projects and protecting offshore sand sources.
- i. Continuing to pParticipatione in the Federal Shore Protection Project as the local sponsor, and coordinating; it will also coordinate beach renourishment restoration and nourishment activities, as appropriate, for the Estero Island segment with the Town of Fort Myers Beach.
- j. The pursuit of Pursuing all available sources of funding, to specifically includinge state and federal funding, for implementation of beach and dune projects.
- k. Requiring tThe installation of dune vegetation as a component of all County funded renourishment beach restoration and nourishment projects.
 (Amended by Ordinance No. 94-30, 98-09, 00-22, 07-09)

<u>POLICY 4.3.2</u> <u>POLICY 113.3.2</u>: The costs of beach <u>renourishment restoration and nourishment programs</u> will be borne by the beneficiaries of those programs. <u>As long as title to accreted lands remains public f</u>Funding mechanisms for the <u>renourishment</u>

- <u>restoration and nourishment</u> may include but are not limited to the use of parks impact fees, public metered parking proceeds, tourist development taxes, Municipal Service Benefit Units (MSBUs), and beachfront property assessments, as long as the title to accreted lands remains public. (Amended by Ordinance No. 94-30, 98-09, 00-22)
- <u>POLICY 4.3.3</u> <u>POLICY 113.3.3</u>: The county will <u>sSupport</u> the renourishment restoration and nourishment of beaches through the use of environmentally responsible methods. (Amended by Ordinance No. 98-09, 00-22)
- <u>GOAL 5</u> GOAL 121: FISHERIES MANAGEMENT. To pPreserve the ecosystem that nourishes and shelters the commercial and sport fisheries in Lee County.
 - OBJECTIVE 5.1 OBJECTIVE 107.12: MARINE PRODUCTIVITY. Lee County will sSupport maintenance and improvement of marine fisheries productivity, and promote the conservation of fishery resources through the protection and restoration of finfish and shellfish habitat. (Amended by Ordinance No. 00-22)
 - **POLICY 107.12.1:** Assist in creating and renourishing artificial reefs in coordination with the Florida Department of Environmental Protection and other appropriate organizations. (Amended by Ordinance No. 94-30)
 - <u>POLICY 5.1.1</u> <u>POLICY 107.12.2</u>: Support state and federal fisheries management programs that protect and enhance the long-term biological and economic productivity of coastal and estuarine waters and their sources for commercial and sport fisheries.
 - **POLICY 5.1.2 POLICY 107.12.3:** Unmarked channels or passages that have been used to traverse shallow in-shore waters may be marked to reduce injury to marine seagrass beds if appropriate (subject to obtaining necessary permit approvals).
- **GOAL 127: ARTIFICIAL REEFS.** To encourage maintenance and development of artificial reefs in the waters in and near Lee County.
 - OBJECTIVE 5.2 OBJECTIVE 127.1: ARTIFICIAL REEF PROGRAM. The county will continue Create durable its artificial reef program for increasing fisheries habitat by building and maintaining artificial reefs in coordination with appropriate state, federal, and private organizations. (Amended by Ordinance No. 00-22, 07-12)
 - <u>POLICY 5.2.1</u> <u>POLICY 127.1.1</u>: The county will cCoordinate with the appropriate advisory committee(s) regulatory agencies and user groups on the location and construction or regulation of artificial reefs. (Amended by Ordinance No. 00-22, Relocated by Ordinance No. 07-12)

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- <u>POLICY 5.2.2</u> <u>POLICY 127.1.2</u>: The County will sSupport appropriate private and public agencies in the study of the feasibility of using artificial reefs for the benefit of the commercial fishing industry. (Amended by Ordinance No. 99-15, Relocated by Ordinance No. 07-12)
- <u>OBJECTIVE 5.3</u> OBJECTIVE 121.1: The county will continue monitoring for estuarine water quality to monitor the health and population Support the sustainability of recreationally and commercially important fish and shellfish that depend on the estuaries. (Amended by Ordinance No. 00-22)
 - <u>POLICY 5.3.1</u> <u>POLICY 121.1.1</u>: The county will continue to cCompile and analyze data about the condition of commercial and sport fisheries, coordinated with DEP, USGS, SFWMD, and the Florida Marine Fisheries Commission state, federal, academic, and private agencies. (Amended by Ordinance No. 00-22)
 - <u>POLICY 5.3.2</u> <u>POLICY 121.1.2</u>: The county will mMake recommendations to appropriate agencies (such as state-level environmental and fisheries agencies) regarding the restoration and protection of commercial <u>and</u> sport fisheries. (Amended by Ordinance No. 00-22)
 - <u>POLICY 5.3.3</u> <u>POLICY 121.1.3</u>: The county will continue to <u>dD</u>esign and implement protective and incentive mechanisms to prevent adverse impacts to commercial and sport fisheries. (Amended by Ordinance No. 00-22)
 - <u>POLICY 5.3.4</u> <u>POLICY 121.1.4</u>: The county will develop <u>Support a state and federal</u> fisheries management programs to protect the long-term biological and economic productivity of commercial and sport fisheries. (Amended by Ordinance No. 00-22)
 - <u>POLICY 5.3.5</u> <u>POLICY 121.1.5</u>: The county will mMaintain the monitoring system for estuarine water quality and its impacts on the health of recreationally and commercially important fish and shellfish. (Amended by Ordinance No. 00-22, 07-12)
- GOAL 122: COMMERCIAL FISHING. To maintain, support and expand commercial fishing in the county.
 - <u>OBJECTIVE 5.4</u> <u>OBJECTIVE 122.1</u>: The county will conduct or sponsor, alone or in cooperation with private and/or public entities, economic base studies, reports on research, and assistance programs for commercial fishing. (Amended by Ordinance No. 00-22)
 - **POLICY 122.1.1:** In order to monitor the economic health of the commercial fishing industry, the county will conduct or sponsor, alone or in cooperation with private and/or public entities, an economic base study of the commercial fishing industry,

which will be conducted in five year intervals. The next such study will be completed before the end of 1994. (Amended by Ordinance No. 00-22)

POLICY 122.1.2: The staff of the Division of Natural Resources Management will deposit pertinent materials about the commercial fishing industry at the Lee County Public Library. (Amended by Ordinance No. 00-22)

<u>POLICY 5.4.1</u> <u>POLICY 122.1.3</u>: The county, alone or in cooperation with public or private entities, will eContinue to assist the commercial fishing industry to obtain information, technical assistance, and funding for projects such as developing fisheries, increasing catches of under-utilized species, developing new markets and marketing techniques, and exploring the feasibility of establishing aquaculture ventures for the commercial fishing industry. (Amended by Ordinance No. 00-22)

OBJECTIVE 124.5: OFFSHORE COMMERCIAL ACTIVITIES. The county will monitor, evaluate and update, as needed, the existing programs regulating offshore commercial activities. (Amended by Ordinance No. 00-22)

POLICY 124.5.1: The county staff will develop an ongoing program to monitor, evaluate and update, as needed, existing regulations on offshore commercial activities. (Amended by Ordinance No. 00-22)

GOAL 123: [RESERVED]

<u>GOAL 6</u> GOAL 124: MARINE AND NAVIGATION MANAGEMENT. To dDevelop and implement a comprehensive marine resources management program.

OBJECTIVE 6.1 OBJECTIVE 124.1: DREDGE SPOIL DISPOSAL. The county will continue to pParticipate with other responsible agencies in the location and placement of spoil material. (Amended by Ordinance No. 98-09)

<u>POLICY 6.1.1</u> <u>POLICY 124.1.1</u>: The county will coordinate with the U.S. Army Corps of Engineers on the location and placement of spoil material that result from maintenance dredging activities with use of <u>this compatible</u> material for beach renourishment where needed and financially feasible. (Amended by Ordinance No. 98-09)

<u>POLICY 6.1.2</u> <u>POLICY 124.1.2</u>: The county will <u>pP</u>articipate in and coordinate with the efforts of the West Coast Inland Navigation District to identify existing and future dredge spoil sites in Lee County. (Amended by Ordinance No. 98-09, 00-22)

<u>POLICY 6.1.3</u> <u>POLICY 124.1.3</u>: The county will, with recommendations from the Waterways Advisory Committee (or successor agency) and other affected agencies and persons, on an as needed basis, make application to the Army Corps of Engineers, and all other agencies as required, to maintain, where environmentally and

economically feasible, existing channels and passes to the Gulf of Mexico at their authorized and/or historic depths. The county will support the efforts of private individuals or groups to maintain established depths in private canals and waterways through the establishment of Municipal Service Benefit Units (MSBUs) to fund such private efforts, unless the county has determined such efforts to be detrimental to the environment. (Amended by Ordinance No. 98-09, 00-22)

<u>OBJECTIVE 6.2</u> <u>OBJECTIVE 124.2</u>: NAVIGATIONAL MARKERS. The county will continue its <u>marker designation</u> <u>aids to navigation</u> program and upkeep its computerized marker inventory. (Amended by Ordinance No. 00-22)

<u>POLICY 6.2.1</u> <u>POLICY 124.2.1</u>: The county, in coordination with the <u>appropriate</u> <u>state and federal agencies</u> <u>Florida Department of Environmental Protection and the U.S. Coast Guard</u>, will:

- a. Assess the conditions of unmarked channels and identify those used to traverse shallow in-shore waters (a practice that damages seagrass beds) and develop a program to mark these channels (if appropriate on the basis of the assessment) so as to reduce injury to seagrass beds (see also Policy 107.12.35.1.2).
- Study the feasibility of designating and enforcing a maximum draft for all boats in some waters and developing a rotating system whereby some areas containing valuable marine beds would be off limits to boat traffic.
- b. Assess the feasibility of instituting a private channel maintenance assessment on properties benefiting from the channels. (Amended by Ordinance No. 00-22)

<u>OBJECTIVE 6.3</u> OBJECTIVE 124.3: MARINE SANITATION. The county will provide for effective control of waste disposal by mMaintaining local marine sanitation regulations in the Land Development Code which that complements the Florida Clean Vessel Act and by cooperateing with local, state, and federal agencies supporting implementation of the Southwest Florida Regional Harbor Board to develop regional guidelines for marine sanitation systems. (Amended by Ordinance No. 94-30, 98-09, 07-12)

<u>POLICY 6.3.1</u> <u>POLICY 124.3.1</u>: The county will continue to a<u>A</u>ssist federal and state agencies to maintain an inventory and promote the public awareness of existing marine sanitation facilities. (Amended by Ordinance No. 94-30, 98-09)

<u>POLICY 6.3.2</u> <u>POLICY 124.3.2</u>: The county will continue and <u>eE</u>xpand, as needed, its <u>efforts</u> to coordinate with appropriate <u>coordination</u> with <u>law</u> enforcement and environmental agencies in designing enforcement and education measures for current and future marine sanitation laws. (Amended by Ordinance No. 94-30, 98-09)

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- <u>POLICY 6.3.3</u> <u>POLICY 124.3.3</u>: The county will provide regulations in the Land Development Code for Regulate marine sanitation and waste disposal in marinas, docks, wharfs, piers, seawalls, or other docking structures attached to real property. (Amended by Ordinance No. 98-09)
- <u>POLICY 6.3.4</u> POLICY 124.3.4: The county will coordinate Cooperate with the Southwest Florida Regional Harbor Board in the development of state agencies developing management standards for marine sanitation in anchorages. (Added by Ordinance No. 98-09)
- OBJECTIVE 124.4: LIVE-ABOARD VESSELS. The county will re evaluate the feasibility of establishing regulations to control vessel mooring upon the completion of the Southwest Florida Regional Harbor Board Management Plan. (Amended by Ordinance No. 94-30, 98-09)
 - **POLICY 124.4.1:** The county will coordinate with the Southwest Florida Regional Harbor Board to establish management standards for vessel mooring in anchorages. (Amended by Ordinance No. 00-22)
- OBJECTIVE 6.4 OBJECTIVE 124.6: MATANZAS HARBOR MANAGEMENT PLAN. The county will Cooperate with the Town of Fort Myers Beach to implement a the Matanzas Harbor Management Plan. (Amended by Ordinance No. 00-22)
 - **POLICY 124.6.1:** The Matanzas Harbor Management Plan will address the county's plans for use of the property the county acquired on San Carlos Island that is commonly known as the Murphy Oil site. (Amended by Ordinance No. 00-22)
 - **POLICY 124.6.2:** The county will apply to the state of Florida for a submerged land management agreement or a submerged land lease for the county-acquired property on San Carlos Island that is commonly known as the "Murphy Oil site". (Amended by Ordinance No. 00-22)
 - <u>POLICY 6.4.1</u> <u>POLICY 124.6.3</u>: Lee County will continue to <u>oOffer</u> support to governmental entities in the effort to manage Matanzas Harbor to protect marine resources and maximize the health, safety, and welfare of the estuarine and intertidal environment of waters <u>unique to Lee County</u>, particularly Estero Bay, Ostego Bay, and Hurricane Bay. (Amended by Ordinance No. 00-22, 07-12)
 - **POLICY 6.4.2 POLICY 124.6.4:** The Matanzas Harbor Management Plan will address public participation issues and must be consistent with the San Carlos Island Redevelopment Plan. (Amended by Ordinance No. 00-22)
 - <u>POLICY 6.4.3</u> POLICY 124.6.5: The county will implement the findings of the study completed Support the Town of Fort Myers Beach on concerning the

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POLICY 124.6.6: The county will prepare a preliminary study of the designation of special anchorage areas that would allow the mooring of live-aboard vessels. (Amended by Ordinance No. 00-22)

GOAL 125: WATER ACCESS. To develop and implement a public water access program.

<u>OBJECTIVE 6.5</u> OBJECTIVE 125.1: SCENIC WATERWAYS PROGRAM. Enhance access to Lee County's The county will develop and Implement a county scenic waterways program through the maintenance and implementation of beach and water accesses and the Great Calusa Blueway Paddling Trail system to provide for recreational, in order to enhance the opportunities for physical, visual, and interpretive, and scenic views on and along Lee County waterways and beaches access to the water. (Amended by Ordinance No. 00-22)

<u>POLICY 6.5.1</u> POLICY 125.1.1: The establishment of <u>Establish</u> vegetated buffer zones along Lee County waterways to prevent erosion of natural shorelines, establish additional wetlands habitat, and enhance the scenery will be preferred to the indiscriminate clearing of vegetation. These buffer zones will be evaluated in the review of planned developments and developments of regional impact, and also by specific county regulations (see Policy 2.3.2 61.3.9). These zones are not intended to interfere with existing or planned recreational opportunities. (Amended by Ordinance No. 00-22)

<u>OBJECTIVE 6.6</u> <u>OBJECTIVE 125.2</u>: WATER ACCESS IN PRIVATE DEVELOPMENTS. The county will eEncourage private landowners to provide some form of water access to the public. (Amended by Ordinance No. 00-22)

<u>POLICY 6.6.1</u> <u>POLICY 125.2.1</u>: The county staff will <u>dD</u>esign a programs that which would require and/or encourage new water-related developments to provide some form of water access (physical, visual or interpretive) to the public <u>and submit-The program will be submitted</u> to the Board of County Commissioners for formal consideration. (Amended by Ordinance No. 00-22)

OBJECTIVE 6.7 OBJECTIVE 125.3: Develop techniques to encourage development and expansion of water-dependent recreational uses in Lee County waterways. and dDiscourage any conversion of water-dependent uses to non-water-dependent uses. (Added by Ordinance No. 07-09)

<u>POLICY 6.7.1</u> <u>POLICY 125.3.1</u>: Identify areas suitable for water-dependent/water-related recreational uses and activities, such as canoe/kayak launch areas, boardwalks, <u>jogging multiple-use</u> paths, fishing platforms and waterside parks. (Added by Ordinance No. 07-09)

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GOAL 126: [RESERVED]

Staff recommends that Objective 128.3, Policy 128.3.1, Policy 128.3.2, and Policy 128.3.3 be deleted. The objective and subsequent policies direct Lee County to "compile and continuously update inventory of various shoreline uses." This activity has been completed, resulting in the 12 map series depicting the "Water Dependent Overlay Zones." Along with the recommendation to delete the objective and policies as shown below, staff also recommends adding a requirement to maintain and update as necessary the Water Dependent Overlay Zones in Goal 7.

GOAL 7 GOAL 128: SHORELINE MANAGEMENT. To eEncourage the maintenance and development of water-dependent shoreline uses and to avoid their displacement by non-water-dependent uses. Maintain and update the Water Dependant Overlay Zones as necessary.

OBJECTIVE 128.3: SHORELINE MANAGEMENT. By 1990 the county will have developed a shoreline management plan. The program will be submitted to the Board of County Commissioners for formal consideration. (Amended by Ordinance No. 00-22)

POLICY 128.3.1: County staff will compile and continuously update inventory of various shoreline uses by distinctive geographic shoreline areas. (Amended by Ordinance No. 00-22)

POLICY 128.3.2: County staff will compile a document analyzing and synthesizing the information in the inventory of shoreline uses by geographic areas. (Amended by Ordinance No. 00-22)

POLICY 128.3.3: The county will consider specific shoreline management programs based on identified needs. (Amended by Ordinance No. 00-22)

OBJECTIVE 7.1 OBJECTIVE 128.4: CRITERIA FOR PRIORITIZING SHORELINE USES. Give pPriority will be given to new and substantially expanded shoreline land uses consistent with as indicated in the following policies. (Amended by Ordinance No. 00-22)

<u>POLICY 7.1.1</u> <u>POLICY 128.4.1</u>: In water-dependent overlay zones, t<u>T</u>he special provisions contained under <u>Goal 8</u> of the Future Land Use element will also apply <u>in Water Dependent Overlay Zones</u> (see also Policies <u>7.3.1</u>128.1.1, <u>7.3.2</u>128.1.2, and 7.4.1128.2.1). (Amended by Ordinance No. 00-22)

<u>POLICY 7.1.2</u> <u>POLICY 128.4.2</u>: In all other non-wetland shoreline areas, <u>prioratize</u> water-dependent land uses will have priority over water-related uses and water-related land uses that provide some form of water access to the public will be

encouraged, particularly when the site has previously provided water access to the public. (This policy will not be interpreted as a prohibition of new land uses that which are only water-related, but instead as a reminder of the diminishing opportunities for water access in Lee County and the desirability of maintaining and increasing water such access.)

- a. Water-dependent uses: Land uses that are those for which water access is essential and which could not exist without water access.
- b. Water-related uses: Land uses that might be enhanced by proximity to the water, but for which water access is not essential. (Amended by Ordinance No. 00-22)

<u>POLICY 7.1.3</u> <u>POLICY 128.4.3</u>: <u>Lee County will dD</u>evelop, adopt, and implement performance standards for all shoreline developments. (Amended by Ordinance No. 00-22)

OBJECTIVE 7.2 OBJECTIVE 128.1: COMMERCIAL WATER-DEPENDENT USES. The county will continue to mMonitor and implement its programs to enhance and protect commercial water-dependent uses. (Amended by Ordinance No. 00-22)

<u>POLICY 7.2.1</u> <u>POLICY 128.1.1</u>: <u>Reclassify c</u>Commercial and government-operated multi-slip docking facilities indicated on the Future Land Use Map as having water-dependent overlay zones will be reclassified by the county to marina zoning categories to protect their rights to rebuild and expand and to prevent their conversion to non-water-dependent uses without a public hearing. (Amended by Ordinance No. 00-22)

<u>POLICY 7.2.2</u> <u>POLICY 128.1.2</u>: The Future Land Use Map will dDesignate water-dependent overlay zones over existing commercial fishing, port and docking sites and commercial marinas on the Future Land Use Map to protect their rights to rebuild and expand and to prevent their conversion to non-water-dependent uses without a public hearing. (Amended by Ordinance No. 00-22)

<u>POLICY 7.2.3</u> <u>POLICY 128.1.3</u>: The county will <u>eE</u>ncourage the maximum use of dry storage by multi-slip docking facilities when reviewing <u>development rezoning</u> and/or <u>development of regional impact</u> applications. (Amended by Ordinance No. 00-22)

<u>POLICY 7.2.4</u> <u>POLICY 128.1.4</u>: The county will mMaintain an inventory of all multi-slip docking facilities, including the name, location, and STRAP number of the facility, and, as feasible, the number of wet and dry storage spaces, boat ramp lanes, and other services provided. <u>Update t</u>This inventory will be updated as necessary needed. (Amended by Ordinance No. 00-22)

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<u>OBJECTIVE 7.3</u> <u>OBJECTIVE 128.2</u>: INDUSTRIAL WATER-DEPENDENT USES. The county will continue to mMonitor and implement its programs to enhance and protect industrial water-dependent uses. (Amended by Ordinance No. 00-22)

<u>POLICY 7.3.1</u> <u>POLICY 128.2.1</u>: <u>Reclassify i</u> Industrial water-dependent facilities indicated on the Future Land Use Map as having water dependent overlay zones will be reclassified by the county to industrial marine zoning categories to protect their rights to rebuild and expand and to prevent their conversion to non-water-dependent uses without a public hearing. (Amended by Ordinance No. 00-22)

<u>POLICY 7.3.2</u> <u>POLICY 128.2.2</u>: The county will mMaintain an inventory of all industrial water-dependent facilities, including the name, location, and STRAP number of the facility. <u>Update t</u>This inventory will be updated as <u>necessary</u> needed. (Amended by Ordinance No. 00-22)

OBJECTIVE 7.4 OBJECTIVE 128.5: MARINE FACILITIES SITING CRITERIA.

The county will consider the following criteria in eEvaluateing 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, 07-09)

<u>POLICY 7.4.1</u> <u>POLICY 128.5.1</u>: 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:

- a. Aquatic Preserve (DEP)
- b. Outstanding Florida Waters (DEP)
- c. Class I Waters (DEP)
- d. Marine or Estuarine Sanctuaries (NOAA)
- e. Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
- f. Approved or conditionally approved shellfish harvesting areas (DEP)
- g. Federal navigation channel setbacks (USCG, USACE)
- h. Bridge/road right-of-way easement (County DOT, State DOT)
- i. 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, 07-09)

<u>POLICY 7.4.2</u> <u>POLICY 128.5.2</u>: <u>Consider the c</u>Cumulative effects of several boat access facilities in a small area <u>will be considered</u> in the review of proposed projects. (Amended by Ordinance No. 00-22, 07-09)

<u>POLICY 7.4.3</u> <u>POLICY 128.5.3</u>: Boat access facilities must be consistent with the appropriate aquatic preserve management plan where applicable. (Amended by Ordinance No. 00-22, 07-09)

<u>POLICY 7.4.4</u> <u>POLICY 128.5.4</u>: Boat access facilities must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):

- a. <u>Prioritize</u> <u>Priority should be given to</u> the expansion of existing facilities, if environmentally sound, over new facilities.
- b. <u>Encourage mMarinas are encouraged</u> in previously disturbed areas and in areas that have historically been used for marina-related activities.
- c. Locate mMarinas should be located as close as possible to boating demand.
- d. <u>Encourage mMarinas should be encouraged</u> where adequate uplands are available to develop related support activities and to allow for possible future expansion.
- e. <u>Discourage the development of Location of marinas in highly productive marine habitats should be discouraged.</u>
- f. <u>Encourage the development Location</u> of marinas in or near well-flushed, deepwater areas should be encouraged.
- g. <u>Consider iImpacts</u> upon state-designed manatee sanctuaries should be considered. <u>Discourage Particular</u> marina locations or design features that which threaten manatees in these sanctuaries should be discouraged.

(Amended by Ordinance No. 00-22, 07-09)

<u>POLICY 7.4.5</u> <u>POLICY 128.5.5</u>: <u>Design nNew boat access facilities must be designed</u> to avoid erosion on adjacent shorelines. (Amended by Ordinance No. 00-22, 07-09)

<u>POLICY 7.4.6</u> POLICY 128.5.6: Evaluate pProposed 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, use the 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. (Amended by Ordinance No. 00-22, 07-09)

POLICY 7.4.7 POLICY 128.5.7: Boat access facilities, including multi-slip docking facilities and boat ramps which would disturb or destroy wetlands or <u>seagrass</u> beds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public. (Amended by Ordinance No. 07-09)

<u>POLICY 7.4.8 POLICY 128.5.8</u>: <u>Locate bB</u>oat access facilities <u>should be located</u> in areas of maximum physical advantage (e.g. adequate water depth). <u>Encourage aA</u>dequate existing water depths between the proposed facility and <u>any</u> navigational channels, inlets, or deep water, are preferred, as <u>Discourage</u> new dredging is <u>discouraged</u>. (Amended by Ordinance No. 07-09)

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- <u>POLICY 7.4.9</u> <u>POLICY 128.5.9</u>: Boat access facility locations should minimize natural shoreline disruption. (Amended by Ordinance No. 07-09)
- <u>POLICY 7.4.10</u> <u>POLICY 128.5.10</u>: <u>Discourage bBoat access facility construction</u> in dead-end canals are discouraged due to difficulty in meeting state water quality standards. (Amended by Ordinance No. 07-09)
- **POLICY 7.4.11 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, 07-09)
- <u>POLICY 7.4.12</u> <u>POLICY 128.5.12</u>: <u>Evaluate Rezoning and DRI</u> applications for boat access facilities <u>for will be evaluated in the context of</u> cumulative impacts on manatees and marine resources. (Amended by Ordinance No. 00-22, 07-09)
- <u>OBJECTIVE 7.5</u> OBJECTIVE 128.6: MARINA DESIGN CRITERIA. The county will uUtilize the following criteria in evaluating the design of new marinas and the redevelopment or expansion of wet slip facilities at of existing marinas) in order to minimize negative impacts; Consider the adoption of detailed regulations governing marina design, expansion, and development on these subjects may be contained in the county's development regulations. (Amended by Ordinance No. 00-22)
 - <u>POLICY 7.5.1</u> <u>POLICY 128.6.1</u>: <u>Require that bBoat maintenance activities in new or expanded marina sites must</u> 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. <u>Require that rRunoff</u> from boat maintenance activities <u>must</u> be collected and treated prior to discharge. (Amended by Ordinance No. 00-22)
 - <u>POLICY 7.5.2</u> <u>POLICY 128.6.2</u>: <u>Prefer oOpen</u> wet slips will be preferred to covered wet slips in marina design to reduce shading of water bodies <u>resulting which</u> results in lowered biological productivity. (Amended by Ordinance No. 00-22)
 - <u>POLICY 7.5.3 POLICY 128.6.3</u>: <u>Require f</u>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)
 - <u>POLICY 7.5.4</u> <u>POLICY 128.6.4</u>: <u>Require All</u> marinas serving the general public or live-aboards <u>to</u> <u>must</u> provide pump-out facilities if sanitary sewer service is available.
 - <u>POLICY 7.5.5</u> <u>POLICY 108.1.5</u>: <u>Require i</u> Installation of shoreside pumpout stations at marinas that serve live-aboards will be required to provide adequate facilities for subsequent transfer and treatment of boat sewage. The county will consider expanding this requirement to all marinas where central sewer service is available. (Amended by Ordinance No. 00-22)

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- <u>POLICY 7.5.6</u> <u>POLICY 128.6.5</u>: <u>Require All parking, dry storage, and non-water-dependent facilities to must</u> be built on existing uplands.
- <u>POLICY 7.5.7</u> <u>POLICY 128.6.6</u>: <u>Require developers of mMarinas and multi-slip</u> docking facilities <u>to must</u> prepare hurricane plans <u>with the assistance of the county which</u> describ<u>inge</u> measures to be taken to minimize damage to marina sites, neighboring properties, and the environment; this hurricane plan is subject to county approval. <u>Provide assistance in the preparation of hurricane plans.</u>(Amended by Ordinance No. 00-22)
- <u>POLICY 7.5.8</u> <u>POLICY 128.6.7</u>: Fueling facilities associated with marinas must be designed to preclude spills and must <u>have a plan in place be prepared</u> to contain any spills <u>that which</u> reach the water. (Amended by Ordinance No. 00-22)
- **POLICY 7.5.9 POLICY 128.6.8:** 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)
- <u>POLICY 7.5.10</u> <u>POLICY 128.6.9</u>: New fuel facilities must be located on the uplands of a marina site. <u>Require the pProper use and maintenance of fuel pump hoses and other fueling equipment is required.</u> (Amended by Ordinance No. 00-22)
- <u>POLICY 7.5.11</u> <u>POLICY 128.6.10</u>: <u>Utilize p</u>Piling construction and other non-dredge-and-fill techniques shall be utilized where possible to minimize habitat destruction.
- <u>POLICY 7.5.12</u> <u>POLICY 128.6.11</u>: <u>Require m</u>Mitigation or restoration to offset proposed adverse environmental effects will be required as a condition of approval for any new or expanded marina facilities. <u>Mitigation/restoration is not preferred over p</u>Preservation of existing resources is preferred over mitigation.
- <u>POLICY 7.5.13</u> <u>POLICY 128.6.12</u>: To reduce dredging, dDocks should extend to naturally deep waters to reduce dredging when possible. County regulations will specify the criteria for such extensions. (Amended by Ordinance No. 00-22)
- <u>POLICY 7.5.14</u> <u>POLICY 128.6.13</u>: <u>Encourage d</u>Dry storage of small boats should be encouraged, with dry storage structures located inland as far as feasible.
- <u>POLICY 7.5.15</u> <u>POLICY 128.6.14</u>: 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)

<u>POLICY 7.5.16</u> <u>POLICY 128.6.15</u>: <u>Use eE</u>xisting navigational channels will be used to access new marina sites where possible. (Amended by Ordinance No. 00-22)

<u>POLICY 7.5.17</u> <u>POLICY 128.6.16</u>: <u>Encourage eExpansion of dry storage capabilities will be strongly encouraged</u> to reduce dredging. (Amended by Ordinance No. 00-22)

<u>OBJECTIVE 7.6</u> <u>OBJECTIVE 128.7</u>: The Regional Planning Council will be the lead agency addressing the need for adequate sites for water-dependent uses on a regional basis.

<u>POLICY 7.6.1</u> <u>POLICY 128.7.1</u>: The county will <u>eC</u>ooperate with the Regional Planning Council in addressing the need for water-dependent sites on a regional basis.

B. STAFF RECOMMENDATION

County staff recommends that the Board of County Commissioners **transmit** the proposed Conservation and Coastal Management Element of the Lee Plan.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: June 25, 2012

A.	LOCAL PLANNING AGENCY REVIEW
В.	LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY
	1. RECOMMENDATION:
	2. BASIS AND RECOMMENDED FINDINGS OF FACT:
C.	VOTE:
	NOEL ANDRESS
	WAYNE DALTRY
	JIM GREEN
	MITCH HUTCHCRAFT
	RONALD INGE
	ANN PIERCE
	ROGER STRELOW

ATTACHMENT 1 CPA2011-04

Conservation and Coastal Management

Lee County's coastal location and abundant natural resources and features contribute significantly to the desired character of the county and to the quality of life of county residents. These environmental features contribute to the sustainability of Lee County by providing groundwater recharge areas, natural flood and storm protection, and indigenous species habitat. Environmental and coastal features also contribute to the county's recreation, education, cultural and economic opportunities as a result of its appeal for tourism and as a second home destination. The Conservation and Coastal Management Element guides the management, protection, and use of Lee County's environmental and coastal features.

Sub-Element A: Environmental Conservation

GOAL 1: RESOURCE PROTECTION. Manage the county's coastal, wetland and upland ecosystems and natural resources to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.

OBJECTIVE 1.1: Participate with adjacent county natural resource protection agencies and state and federal environmental agencies in regular staff intergovernmental coordination meetings.

POLICY 1.1.1: Participate in an intergovernmental task force consisting of representatives from Lee County and incorporated municipalities to address stormwater runoff, wastewater discharge, and development management policies aimed at protecting and enhancing estuarine water quality and unusual vegetative communities.

POLICY 1.1.2: Participate with other governments to prepare and implement water management plans, including the Estero Bay Agency on Bay Management, Charlotte Harbor National Estuary Program, the Charlotte Harbor Management Plan, the Water Management District Surface Water Improvement and Management (SWIM), Caloosahatchee River Watershed Protection plans, DEP Basin Management Action Plans, DEP aquatic preserve management plans, water supply plans, and other water resource management plans.

POLICY 1.1.3: Re-evaluate and amend as needed county policies for protecting and enhancing natural resources upon a review of natural resource management plans that are newly adopted or revised by other agencies.

Attachment 1 for June 15, 2012 CPA2011-04 Page 1 of 29 **OBJECTIVE 1.2: RESOURCE MANAGEMENT PLAN.** Implement a resource management program that ensures 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.

POLICY 1.2.1: County agencies implementing the natural resources management program will be responsible for the following:

- a. Identifying upland and wetland habitats/systems most suitable for protection, enhancement, reclamation, and conservation.
- b. Recommending standards for development and conservation that will protect and integrate wetlands and significant areas of Rare and Unique upland habitats as defined in this plan.
- c. Preparing standards for wetland and rare and unique upland mitigation.
- d. Conduct a sensitive lands acquisition program, consisting of the following elements (see also Policy 1.3.8):
 - 1. A comprehensive inventory of environmentally sensitive lands will be maintained and expanded as new data becomes available.
 - 2. Environmentally sensitive lands will include wetlands; important plant communities; critical habitat for listed wildlife species; environmentally sensitive coastal planning areas; natural waterways; important water resources; storm and flood hazard areas; and Rare and Unique uplands, all as defined in this plan.
 - 3. The county will continue to evaluate the effectiveness of the Conservation 20/20 Program, a program to acquire and manage lands critical to water supply, flood protection, wildlife habitat, and passive recreation. A minimum of ten percent of the funds will be used to manage the lands acquired.
 - 4. Take 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 Fish and Wildlife Commission and by participating in state land acquisition programs such as the Save Our Rivers program and the Conservation and Recreational Lands program. Priority should be given to acquiring and otherwise protecting properties adjacent to or in close proximity to existing preservation areas, with emphasis on maintaining opportunities for a regional greenways system that may include a

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- mix of flow ways, areas subject to flooding, native habitats, recreational trails and wildlife corridors.
- 5. 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 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 maintenance funding.
- 6. Encourage the establishment of and provide assistance to community-based land trusts, whose purpose is the preservation and protection of the County's natural resources.
- 7. Build upon the Conservation 20/20 program to fund a green infrastructure and natural functions program, which will be within the County CIP program.
- e. A central clearinghouse for all environmental studies and recommendations by both public and private organizations.
- f. Compiling, maintaining and regularly updating county maps of vegetation communities; listed species habitat and sitings; and water resources including watersheds, floodplains, wetlands, aquifers, and surface water features.
- g. Preparing recommendations for maintaining or restoring the desired seasonal base flows and water quality after reviewing monitoring data.
- h. 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.
- i. 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.
- j. Providing on an as needed basis a report to the County Commission on the status of wetlands and rare and unique uplands.

POLICY 1.2.2: To increase protection of natural resources, the County will promote the coordination of area wide conservation easements. (Added by Ordinance No. 07-16)

- **POLICY 1.2.3:** Pursue Mutual Aid Agreements to plan and pool resources and equipment.
- **OBJECTIVE 1.3: PLANT COMMUNITIES.** Maintain and routinely update an inventory of natural plant communities and protect at various suitable locations remnant tracts of important and representative natural plant communities.
 - **POLICY 1.3.1:** Coordinate with state and regional agencies to exchange updated natural resources information.
 - **POLICY 1.3.2:** Continue to provide regulations and incentives to prevent incompatible development in and around environmentally sensitive lands.
 - **POLICY 1.3.3:** Prevent water management and development projects from altering or disrupting the natural function of significant natural systems.
 - **POLICY 1.3.4:** Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.
 - **POLICY 1.3.5:** Maintain regulations to control the clearing of natural vegetation, including tree removal and clearing of understory, prior to the development of property or its conversion to agricultural uses.
 - **POLICY 1.3.6:** Avoid needless destruction of upland vegetation communities including coastal and interior hammocks through consideration during the site plan review process of alternative layouts of permitted uses.
 - **POLICY 1.3.7:** Require inventories and assessments of the impacts of development in environmentally sensitive lands.
 - **POLICY 1.3.8:** Promote the long-term maintenance of natural systems through conservation easements, transfer of development rights, restrictive zoning, public acquisition, and other means.
 - **POLICY 1.3.9:** Maintain regulations, incentives, and programs for preserving and planting native plant species and for controlling invasive exotic plants, particularly within environmentally sensitive areas.
 - **POLICY 1.3.10:** Criteria for preserving and planting native vegetation will include consideration of Southwest Florida specific needs, such as attention to nutrient contents of available irrigation water, nutrient content and drainage of soils, and ability to utilize low nutrient fertilizers.
 - **POLICY 1.3.11:** Development adjacent to aquatic and other nature preserves, wildlife refuges, and recreation areas must be designed to protect the natural character

- and public benefit of these areas including, but not limited to, scenic values for the benefit of future generations.
- **POLICY 1.3.12:** Prohibit the planting of invasive exotic plants in landscaping requirements for land development projects. Identify prohibited invasive exotic plant species in the Land Development Code.
- **POLICY 1.3.13:** To ensure that adequate protection of mangroves is maintained, the county will re-evaluate and amend, if necessary, its mangrove protection regulations whenever state mangrove protection regulations are revised. The county will oppose any efforts of other agencies to reduce or eliminate regulations relating to the protection of mangroves and other wetland areas.
- **POLICY 1.3.14:** Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning. (Added by Ordinance No. 07-16)
- **POLICY 1.3.15:** Coordinate exotic eradication, management, and compliance plan. Involve private land owners, with incentives for exotics removal.
- **OBJECTIVE 1.4: WILDLIFE.** Maintain and enhance the fish and wildlife diversity and distribution for the benefit of a balanced ecological system.
 - **POLICY 1.4.1:** Encourage preservation to provide habitat diversity and promote wildlife conservation.
 - **POLICY 1.4.2:** Participate with the Southwest Florida Regional Planning Council and the Florida Game and Fresh Water Fish Commission in the development of a regional plan that identifies and protects areas utilized by wildlife, including panthers and bears so as to promote the continued viability and diversity of regional species.
 - **POLICY 1.4.3:** Require new development in Non-Urban areas to prepare a human—wildlife coexistence plan.
 - **POLICY 1.4.4: ENDANGERED AND THREATENED SPECIES IN GENERAL.** 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. To protect endangered and threatened species Lee County will do the following:
 - a. 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 Fish and Wildlife Commission, as periodically updated. Enforce Protected Species regulations to protect habitat of listed species that are vulnerable to development.

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- b. Conserve habitat of rare and endangered plant and animal species through development review, regulation, incentives, and acquisition.
- c. Require detailed inventories and assessments of the impacts of development where it threatens habitat of endangered and threatened species and species of special concern.
- d. 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 within Lee County.

POLICY 1.4.5: SEA TURTLES. Continue the sea turtle protection program to minimize the disorientation of sea turtles along the Gulf beaches. The sea turtle protection program includes at least the following activities:

- a. Distribute a guide for homeowners and builders which explains the detrimental effects of night-time beachfront lighting on hatchling sea turtles.
- b. Continue to examine public light sources (streetlights, security lights, beach access lights, etc.) and prepare a plan to minimize the amount of harmful light from such sources onto the beach during the nesting season.
- c. Continue to conduct an educational program to persuade residents to reduce lighting levels on the beach and to publicize other hazards to turtles from activities of people, pets, and vehicles.
- d. Continue to provide and enforce sea turtle regulations to prevent inappropriate lighting along beaches during the nesting season.

POLICY 1.4.6: SOUTHERN BALD EAGLES. The county will continue to monitor Southern bald eagle nesting activity and offer incentives to conserve buffer areas around Southern bald eagle nests. To protect the Southern Bald Eagle, Lee County will do the following:

- a. Maintain negotiations with owners of land surrounding eagle nests to provide an optimal management plan for land subject to imminent development. Management plans will include measures to protect and enhance critical eagle nesting habitat.
- b. The county Eagle Technical Advisory Committee will continue to conduct nest monitoring through the nesting season for all known eagle nests in Lee County. Information from these assessments will be used to modify, as needed, the

- adopted nest guidelines and to adopt guidelines for new eagle nests documented in Lee County.
- c. The Committee will inform land owners and the general public of proper practices to minimize disturbances to eagle nests.

POLICY 1.4.7: 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. This broad based approach will include the following features:

- a. Characterize and map important manatee habitats; identify and evaluate potential threats to important habitats; and consider management alternatives to protect such habitats.
- b. Coordination with Federal and State agencies and law enforcement officers to routinely evaluate the effectiveness of vessel regulations and sign posting for reducing manatee injuries and mortality.
- c. Inform and educate the public through sign posting, lectures, and regulations about manatee protection.
- d. 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.
- e. Evaluate the construction and expansion of boat access facilities with a capacity of five vessels or more for consistency with the marine facility siting criteria in the Manatee Protection Plan approved on June 29, 2004.
- f. Cooperate with Federal, State, local, and private interests to implement and update as necessary the Manatee Protection Plan.
- g. Provide a permanent funding source to assist in the enforcement of vessel regulations for manatee protection.

POLICY 1.4.8: GOPHER TORTOISES. Restore and maintain secure, viable populations of Gopher Tortoises Lee County through the following measures:

a. Enforce the protected species regulations and coordinate with the Florida Fish and Wildlife Conservation Commission to determine the appropriate mitigation to ensure protection.

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- b. Operate and maintain, in coordination with the Florida Fish and Wildlife Conservation Commission, the Hickey Creek Mitigation Park.
- c. Protect gopher tortoise burrows wherever they are found. If unavoidable conflicts make on-site protection infeasible, allow off-site mitigation in accordance with Florida Fish and Wildlife Conservation Commission requirements.

POLICY 1.4.9: RED-COCKADED WOODPECKER. Coordinate with the Florida Fish and Wildlife Conservation Commission to determine on a case-by-case basis the appropriate mitigation for the protection of the red-cockaded woodpecker's habitat. Mitigation may include on-site preservation, on-site mitigation, off-site mitigation, and associated habitat management. Document other possible red-cockaded woodpecker sites during routine site inspections.

POLICY 1.4.10: WOODSTORK. Maintain regulatory measures to protect the wood stork's feeding and roosting areas and habitat including:

- a. Maintain regulations that include wood storks as a Lee County Listed Species. Require surveys for and protection of wood stork habitat. Maintain an inventory of documented feeding, roosting, and rooking areas for the wood stork to ensure that those areas are included in surveys submitted under the Protected Species Ordinance.
- b. Require management plans for existing wood stork feeding, roosting, and rooking areas to utilize "Habitat Management Guidelines for the Wood Stork in the Southeast Region" (U.S Fish and Wildlife Service, 1990).
- c. Encourage the creation of wood stork feeding areas in mandatory littoral shelf design, construction, and planting.
- d. Identify wood stork flight patterns from roosting and rooking areas to feeding areas. Evaluate the impact of existing tall structures on wood storks within significant flight areas and consider adoption of regulations if appropriate. Include significant wood stork roosting, rooking, and feeding areas in the inventory of environmentally sensitive lands for potential acquisition (see Policy 1.2.1).
- e. Permit communication towers in excess of 100 feet only by special exception. Evaluate the impacts of such towers on woodstorks in the review of these applications.

POLICY 1.4.11: FLORIDA PANTHER. Develop measures to protect the Florida panther through greenbelt and acquisition strategies.

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- a. Ensure panther habitat needs are incorporated in the planning of new roads and road expansion projects.
- b. Provide education and outreach to increase public understanding of panthers and support for panther conservation
- c. Promote connectivity of preserves to ensure safe passage of panthers and work with land owners to protect known panther corridors.
- d. Coordinate with regulatory agencies to maintain and update data on sitings and habitat for the Florida panther.
- e. Encourage state land acquisition programs to include and restore known panther corridors identified by least-cost pathways analysis. The corridor boundaries will include wetlands, upland buffers, and nearby vegetative communities beneficial to the Florida Panther.
- f. Inform neighboring counties of corridor acquisition projects to encourage a regional approach to corridor acquisition.
- g. Protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway, a regionally significant greenway with priority panther habitat, through continued participation in land acquisition programs, incentive programs to restore and enhance habitat, and land management activities and through Land Development Code buffer and open space requirements.
- h. Restoration projects for land acquired due to environmental sensitivity will include plant species that provide forage for the prey of the Florida panther, where appropriate.

POLICY 1.4.12: FLORIDA BLACK BEAR: Maintain sustainable black bear populations in suitable habitats and promote connectivity between subpopulations through land use planning, acquisitions and easements, waste management, and conflict resolution by:

- a. Promoting connectivity within and among Florida black bear subpopulations by maintaining, improving, or creating landscape connectivity.
- b. Promoting the Bear Smart Community (BSC) program and encouraging facilities/developments within known bear habitat to secure waste and other attractants using authorized bear proof containers.
- c. Increasing public understanding of bears and support for bear conservation through public education and outreach.

- d. Participate in the Black Bear Assistance Group (BBAG) within the South Bear Management Unit.
- **GOAL 2: WATER RESOURCES.** To conserve, manage, and protect natural hydrologic systems to ensure continued water resource availability. Coordinate with the South Florida Water Management District and private developers to ensure new development maximizes stormwater recharge, retention and treatment. Review new upland development for impacts on watersheds and downstream estuarine systems.
 - **OBJECTIVE 2: WATER SUPPLIES.** Ensure water supplies of sufficient quantity and quality to meet the present and projected demands of consumers and the environment, based on the capacity of the natural systems.
 - **POLICY 2.1.1:** Identify, protect, and manage natural water system features which are essential for retention, detention, purification, runoff, recharge, and maintenance of stream flows and groundwater levels.
 - **POLICY 2.1.2:** Recognize and encourage water and wastewater management practices that does not exceed the natural assimilative capacity of the environment or applicable health standards. Appropriate water and wastewater management includes, but is not limited to, aquifer recharge, aquifer storage and recovery, reclaimed water, reverse osmosis, dual water systems, use of low volume irrigation systems, use of water-conserving vegetation, and other conservation and recycling techniques.
 - **POLICY 2.1.3:** Manage freshwater resources to maintain adequate freshwater supplies during dry periods and to conserve water.
 - **POLICY 2.1.4:** Development must be designed to maintain surface water flows, groundwater levels, and lake levels at or above existing conditions.
 - **POLICY 2.1.5:** Collaborate with the United States Geological Survey, South Florida Water Management District, and state agencies to develop an area-wide water resources plan emphasizing planning and management of water resources on the basis of drainage basins; and addressing the needs of the existing and potential built environment, natural hydrologic system requirements, and freshwater flow impacts on estuarine systems.
 - **POLICY 2.1.6:** Support monitoring programs of existing baseline conditions of water resources.
 - **POLICY 2.1.7:** Cooperate with emergency water conservation measures of the South Florida Water Management District.

- **POLICY 2.1.8:** Support the acquisition and protection of the Flint Pen Strand as a major water retention and aquifer recharge area. (See also Policy 1.4.11.)
- **POLICY 2.1.9:** Encourage Florida Friendly landscaping techniques for new development in the Land Development Code.
- **POLICY 2.1.10:** Educate water conservation through creative landscaping, and promote the conservation and use of native plant species through Florida Friendly landscaping techniques. The county will establish local guidelines that will assist in efforts to reduce landscape irrigation water use to the lowest and most efficient, practical level.
- **POLICY 2.1.11:** Utilize the recommendations made in the Water Supply Facilities Work Plan and the Lower West Coast Water Supply Plan as a guide to potable water facilities planning, potable water resources, and water conservation as well as expanding potable water facilities consistent with Table 6, the 10 Year Water Supply Development Projects Table.
- **OBJECTIVE 2.2: WATER QUALITY AND WASTEWATER.** To ensure that water quality is maintained or improved for the protection of the environment and people of Lee County. Maintain high water quality, meeting or exceeding state and federal water quality standards.
 - **POLICY 2.2.1:** Sources of water pollution will be identified, controlled, and eliminated where feasible.
 - **POLICY 2.2.2:** New development and additions to existing development must not degrade surface and ground water quality.
 - **POLICY 2.2.3:** The design, construction, and maintenance of artificial drainage systems must provide for retention or detention areas and vegetated swale systems that minimize nutrient loading and pollution of freshwater and estuarine systems.
 - **POLICY 2.2.4:** Require that developments with the potential of lowering existing water quality below state and federal water quality standards provide standardized monitoring data.
 - **POLICY 2.2.5:** Garbage or untreated sewage may not be discharged into coastal and interior surface waters.
 - **POLICY 2.2.6:** Initiate a wellfield protection program to prevent the contamination of shallow wells by pollutant generating development including surface water runoff (see Goal 63).

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- **POLICY 2.2.7:** Require valid permits and inspections prior to and subsequent to drilling operations for wells, elevator shafts, foundation holes, and test borings.
- **POLICY 2.2.8:** Plug improperly constructed wells detrimental to groundwater resources.
- **OBJECTIVE 2.3: SURFACE WATER** Develop a surface water management program that is multi-objective in scope and is geographically based on basin boundaries.
 - **POLICY 2.3.1:** Examine steps necessary to restore principal flow-way systems, to assure the continued environmental function, value, and use of natural surface water flow-ways and associated wetland systems.
 - **POLICY 2.3.2:** Identify and map flow-ways as part of the County Surface Water Management Plan that includes a general depiction of watersheds and their trunk and major tributaries. As new information is assembled, the Plan will be updated for public use. Due to its magnitude and need for site specific information, not all flowways will be shown.
 - **POLICY 2.3.3:** Conduct additional public hearings to incorporate each phase of the Surface Water Management Master Plan. These amendments will specifically address:
 - a. incorporating the additions to the database into the Lee Plan;
 - b. modifying the interim level-of-service standards; and
 - c. modifying the Future Land Use, Community Facilities and Services, and Capital Improvements elements as necessary to incorporate the study's initial findings.
 - **POLICY 2.3.4:** Lee County will provide sufficient performance and design standards for development protective of the function of natural drainage systems.
 - a. Maintain land development regulations that require the installation of proper stormwater management systems when land is redeveloped. Provide exemptions for individual residential structures and for historic districts. Provide modified stormwater management standards for publicly sponsored projects within community redevelopment areas (as defined by Chapter 163, Part III, Florida Statutes). This policy will not be interpreted to waive concurrency or level-ofservice standards.
 - b. Adopt performance and design standards to require post-development runoff to approximate the total characteristics of the natural flow prior to development.
 - c. Manage floodplains to minimize the potential loss of life and damage to property by flooding.

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- d. Avoid obstructions to floodways.
- e. Restore natural flow patterns when restoration is of significant public or environmental benefit.
- f. Maintain regulations for the management and protection of floodplains, that are consistent with state and federal regulations.
- g. Require development to provide an adequate surface water management system, acceptable programs for operation and maintenance, and post-development runoff conditions that reflect the natural surface water flow rate, direction, quality, hydroperiod, and drainage basin. Adopt detailed regulations integrated with other county development regulations.
- h. Channelization of natural streams and rivers is prohibited; channelization of other natural watercourses is discouraged.
- i. The banks of wet retention and detention areas must be sloped to promote growth of vegetation and safeguard against accidents.
- j. The county will adopt regulations to protect the natural functions of riparian systems from incompatible development practices.
- k. Prohibit new artificial drainage systems from channeling runoff directly into natural waterbodies.
- 1. Runoff must be routed through retention or detention areas and vegetated swales in order to reduce flow velocity, allow for percolation, and trap and remove suspended solids and pollutants.
- m. The design of shorelines of retention and detention areas and other excavations must be sinuous rather than straight.
- n. Installation of erosion control devices for development activities adjacent to waterbodies, water courses, and wetlands will be required. Such control devices must be maintained to ensure operational effectiveness.
- o. Artificial watercourses must be designed so as to reduce velocity of runoff and prevent erosion.

POLICY 2.3.5: Incorporate green infrastructure into surface water management systems to improve water quality, air quality, water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment.

- a. Encourages new developments to design surface water management systems to incorporate best management practices including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flowways.
- b. Encourages new developments to design surface water management system to incorporate existing wetland systems.
- c. Encourage preservation of existing natural flow-ways and the restoration of historic natural flow-ways.
- d. Require surface water management systems that protect or enhance the groundwater table as a possible source of potable water.
- e. Incorporate, utilize, and where practicable, restore natural surface water flow-ways and associated habitats.

POLICY 2.3.6: Support a surface water management strategy that relies on natural features (flow ways, sloughs, strands, etc.) and natural systems to receive and manage storm and surface water.

- a. Development proposals outside future urban areas must recognize areas where soils, vegetation, hydrogeology, topography, and other factors indicate that water flows or ponds; these areas must be utilized to the maximum extent possible, without significant structural alteration, for on-site stormwater management; and be integrated into area-wide coordinated stormwater management schemes.
- b. Where no natural features of flow or ponding exist on a site outside the future urban areas, require that water management structures be designed and constructed as to mimic the functions of natural systems. Incorporate special engineering and design standards into development regulations.
- c. Outside the future urban areas where traditional drainage structures exist (ditches, canals, dikes, etc.), the county may permit their continued existence and maintenance, but discourage expansion or extension.
- d. Encourage surface water management plans that mimic the functions of natural systems, notwithstanding the type or intensity of development.
- e. This policy is not intended to prohibit any permittable surface water management solution that is consistent with good engineering practices and adopted environmental criteria.

f. Maintain reclamation standards for future excavation that mimic natural systems through techniques that improve water quality, wildlife utilization, and enhance groundwater recharge.

OBJECTIVE 2.4: ESTUARINE WATER QUALITY. Manage estuarine ecosystems to maintain or improve water quality and wildlife diversity; reduce or maintain current pollution loading and system imbalances to conserve estuarine productivity; and provide the best use of estuarine areas.

POLICY 2.4.1: Maintain an ongoing water quality monitoring program. Communicate with local, state, and federal estuarine water quality studies to ensure that the latest data and recommendations are available.

- a. Monitor estuarine water quality and:
 - 1. Establish and operate a network of water quality sampling sites to fill in gaps in the state sampling program, especially in Estero Bay.
 - 2. Maintain liaisons with local, state, and federal agencies engaged in water quality monitoring, and review their data, conclusions, and recommendations.
 - 3. Develop a system for reporting on water quality conditions and trends on a regular basis.
 - 4. Recommend actions intended to maintain or improve water quality in the estuaries to meet the Department of Environmental Protection's criteria for the water body and preserve the "approved for shellfish harvesting" classification where applicable. Attempt to return viable "closed" (due to water quality) shellfishing areas to an "approved" status.
- b. Require development affecting coastal and estuarine water resources to maintain or enhance the biological and economic productivity of those resources.
- c. Cooperate with the South Florida Water Management District, local utilities, and other appropriate agencies for monitoring and review of freshwater discharge affecting estuarine areas, to maintain the biological and chemical balances necessary for ecosystem sustainability.
- d. Cooperate with state and federal agencies to enforce pollution control standards for marinas, marine dumping, and illegal discharges from water craft.
- e. Encourages the on-going efforts by the SFWMD to establish a Caloosahatchee Water Management Plan for the Caloosahatchee River that recognizes public, environmental and agricultural uses of the river through participation in the Southwest Florida

Comprehensive Watershed Plan, Northern Everglades and Estuary Protection Plan, Caloosahatchee River Watershed Protection Plan, Lower East Coast and Lower West Coast Regional Water Supply Plans, Minimum Flows and Levels, and the development of maximum flows and discretionary release protocols for Lake Okeechobee.

POLICY 2.4.2: ESTUARINE WATERSHED MANAGEMENT PLANS. Review new upland development for impacts on estuarine systems. Coordinate with the South Florida Water Management District and the Florida Department of Environmental Protection to ensure new development will maximize stormwater retention and treatment.

- a. Prepare management plans for estuarine watersheds, with priority to the watershed of Estero Bay, a critical estuary undergoing development impacts.
- b. Require enhanced stormwater controls in basins that discharge into waterways with special State or Federal designation of environmental significance such as Outstanding Florida Waters (OWF), Impaired Waters, or Estuaries of National Concern.
- c. Review the feasibility of changing canal patterns and retrofitting existing stormwater collection systems to reduce the impact of freshwater on estuaries.
- d. Assess the adequacy of disaster preparedness plans for coastal oil storage facilities.
- e. Review the Comprehensive Conservation and Management Plan for the Greater Charlotte Harbor Watershed to identify key action plans, objectives and policies that relating to Pine Island Sound, Matlacha Pass, the Estero Bay, the tidal Caloosahatchee and attendant watersheds. Assess County upland and coastal development management practices and public land acquisition programs as they related to the findings and recommendations of the Charlotte Harbor Plan. Particular emphasis will be placed on evaluating the effectiveness and improvement of County watershed programs as they relate to watershed conservation and public land acquisition programs, watershed management needs prioritization and water quality monitoring.

GOAL 3: ENVIRONMENTALLY CRITICAL AREAS. Manage and regulate environmentally critical areas to conserve and enhance their natural functions. Environmentally critical areas include wetlands (as defined Objective 3.3), areas critical for surface water management, and Rare and Unique upland habitats.

OBJECTIVE 3.1: AREAS CRITICAL FOR SURFACE WATER MANAGEMENT Establish and maintain regulations to protect the unique environmental and water resource values of the Six Mile Cypress Basin, Impaired Waters, and the Density Reduction/Groundwater Resource land use category.

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- **POLICY 3.1.1:** Maintain regulations that reduce or eliminate the exemptions allowable in the Six Mile Cypress Basin.
- **POLICY 3.1.2:** The county will maintain the elimination of the exemptions in its development regulations within the "critical areas for surface water management" and will continue to subject these uses to an appropriate review process.
- **OBJECTIVE 3.2: RARE AND UNIQUE UPLAND HABITATS** Limit Development in Rare and Unique upland habitats, which include, but are not limited to: sand scrub (320); coastal scrub (322); those pine flatwoods (411) which can be categorized as "mature" due to the absence of severe impacts caused by logging, drainage, and exotic infestation; slash pine/midstory oak (412); tropical hardwood (426); live oak hammock (427); and cabbage palm hammock (428). The numbered references are to the Florida Land Use Cover and Forms Classification System (FLUCFCS) Level III (FDOT, 1985). (See also Policy 4.1.4.)
 - **POLICY 3.2.1:** Preserve rare and unique upland habitats through land acquisition.
- **OBJECTIVE 3.3: WETLANDS.** Protect and conserve the natural functions of wetlands and wetland systems by enforcing wetland protection regulations and the goals, objectives, and policies in this plan. "Wetlands" include all lands, whether shown on the Future Land Use Map or not, that are identified as wetlands in accordance with F.S. 373.019(17) through the use of the unified state delineation methodology described in FAC Chapter 17-340, as ratified and amended by F.S. 373.4211.
 - **POLICY 3.3.1:** Ensure that development in wetlands is consistent with the Wetlands future land use category. In Future Limerock Mining areas only (see Map 14), impacts to wetlands resulting from mining will be allowed by Lee County when those impacts are offset through appropriate mitigation, preferably within Southeast Lee County (see also Policy 33.1.3). Appropriate wetland mitigation may be provided by preservation of high quality indigenous habitat, restoration or reconnection of historic flowways, connectivity to public conservation lands, restoration of historic ecosystems or other mitigation measures as deemed sufficient by the Division of Environmental Sciences. It is recommended that, whenever possible, wetland mitigation be located within Southeast Lee County. The Land Development Code will be revised to include provisions to implement this policy.
 - **POLICY 3.3.2:** Maintain wetlands protection regulations consistent with the following:
 - a. The county will not undertake an independent review at the Development Order stage of the impacts to wetlands resulting from development in wetlands that is specifically authorized by a DEP or SFWMD dredge and fill permit or exemption.

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- b. No development in wetlands regulated by the State of Florida will be permitted by Lee County without the appropriate state agency permit or authorization.
- c. The terms and conditions of state permits will be incorporated into county permits. The County will prosecute violations of permit conditions through its code enforcement procedures.
- d. Minimize or avoid adverse impacts on wetlands through clustering of development and other site planning techniques. On- or off-site mitigation will only be permitted in accordance with state standards.
- e. Mitigation banks and the issuance and use of mitigation bank credits will be permitted to the extent authorized by applicable state agencies.
- f. Wetland density will be determined by the jurisdictional wetland line. Impacted wetlands may not be calculated at the underlying upland density rate. Density calculations for impacted wetlands must be at 1 dwelling unit per 20 acres.

POLICY 3.3.3: Maintain sufficient setback requirements for the placement of fill adjacent to existing mangroves. In the alternative, require development designs that address the interface of fill areas with existing mangroves to eliminate impacts from fill sloughing or washing into mangrove areas. Techniques to accomplish this may include: setbacks; stabilized slopes; retaining walls; rip rap revetments; and, other measures.

POLICY 3.3.4: Update the Future Land Use Map to reflect the approximate boundaries of wetlands based on the definitions in this plan and new information. If the Future Land Use Map is incorrect due to a clear factual error, or if an exact boundary determination is desired, an administrative process is set out in Chapter XIII of this plan to establish the precise boundary of the wetland.

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- **GOAL 4: COASTAL PLANNING AREAS.** Conserve, maintain, and enhance the natural balance of ecological resources and functions in the coastal planning area, with emphasis on protection of beach and dune systems to retain their contribution to storm protection, protection of the FEMA designated Special Flood Hazard Area, natural resources, resiliency to impacts of rising sea level, and economic development.
 - **OBJECTIVE 4.1: COASTAL PLANNING AREA IN GENERAL.** Manage the coastal planning area to provide a balance among conservation of resources, public safety capabilities, and development.
 - **POLICY 4.1.1:** Protect coastal areas with significant public value for water retention and purification, wildlife habitat, and primary productivity through the development permitting process and enforcement of codes and regulations.
 - **POLICY 4.1.2:** Development within the coastal planning area must be compatible with protection of natural systems.
 - **POLICY 4.1.3:** Prohibit construction of vehicular access to, and paved roads or commercial marinas on, undeveloped barrier islands as mandated by the Charlotte Harbor Management Plan.
 - **POLICY 4.1.4:** Maintain undeveloped barrier islands predominantly in their natural state. Limit public expenditures for infrastructure to public parks.
 - **POLICY 4.1.5:** Protect and conserve the following environmentally sensitive coastal areas: wetlands, estuaries, mangrove stands, undeveloped barrier islands, beach and dune systems, aquatic preserves and wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, and marine grass beds.
 - **POLICY 4.1.6:** Gather and utilize available technical criteria and supporting information to formulate plans, ordinances, and regulations to ensure that development in the coastal planning area is compatible with the continued or improved functioning of natural coastal systems.
 - **POLICY 4.1.7:** Levels of service for facilities and services within the coastal planning area will be the same as those established for the remainder of the county, except for undeveloped barrier islands. The county's Concurrency Management System will apply in full within the coastal planning area.
 - **OBJECTIVE 4.2: SHORELINE STABILIZING SYSTEMS.** Encourage the construction of environmentally compatible shoreline stabilizing systems where needed.

- **POLICY 4.2.1:** Construction of environmentally compatible shoreline stabilizing systems will be allowed along the active gulf beach where necessary for the protection of shorelines from erosion.
- **POLICY 4.2.2:** Vertical seawalls must not be constructed along natural waterways except where such a wall is the most reasonable alternative (using criteria established by ordinance), and vertical seawalls along artificial canals will not be permitted unless an adequate littoral zone consistent with the surrounding environment is provided. Seawalls in artificial canals where 50% of the canal or greater is seawalled or for seawalls of less than 300 feet where both adjoining properties are seawalled, will be exempt from this requirement.
- **POLICY 4.2.3:** Encourage planting of mangroves or placement of rip-rap in artificial and natural canal systems to replace existing seawalls in need of repair.
- **POLICY 4.2.4:** Prohibit build-back of vertical seawalls along natural waterbodies if one or more of the following conditions exist:
- Build-back would cause excessive shoreline erosion or endanger shorelines of surrounding properties.
- Build-back would threaten wetland resources.
- Build-back would be a threat to public safety or block access to state-owned submerged lands.
- Build-back would be waterward of the existing seawall alignment on adjacent shorelines.

OBJECTIVE 4.3: BEACH AND DUNE SYSTEMS. Implement a beach preservation and management plan.

POLICY 4.3.1: Maintain a beach and dune management program that provides for:

- a. The preparation of beach and dune management plans, with priority to areas designated by the Florida Department of Environmental Protection as critically eroded in the report entitled Critically Eroded Beaches in Florida.
- b. Coordination with local municipalities and the Captiva Erosion Prevention District in preparing beach and dune management plans.
- c. The collection of information on available sources of beach-quality sand for restoration and nourishment, concentrating on areas that will have minimal impacts on the county's aquatic resources or coastal processes.
- d. The preparation of restoration and nourishment plans for eroding areas where public facilities and access exist, including areas designated by the Florida

- Department of Environmental Protection as critically eroded in the report entitled Critically Eroded Beaches in Florida.
- e. Regulations and policies to restrict hardened coastal engineering structures such as groin fields and seawalls, protect eroding coastal areas and sand dunes, and discourage development of undeveloped coastal barriers.
- f. The maintenance of a central clearinghouse for information on beach and dune studies and recommendations by public and private organizations.
- g. Educating citizens and developers about the costs and benefits of beach and dune conservation approaches.
- h. The maintenance of beach quality sand within the littoral system is the preferred option for coastal navigation dredging projects and protecting offshore sand sources.
- i. Participation in the Federal Shore Protection Project as the local sponsor, and coordinating beach restoration and nourishment activities for the Estero Island segment with the Town of Fort Myers Beach.
- j. The pursuit of all available sources of funding, including state and federal funding, for implementation of beach and dune projects.
- k. The installation of dune vegetation as a component of County funded beach restoration and nourishment projects.
- **POLICY 4.3.2:** The costs of beach restoration and nourishment programs will be borne by the beneficiaries of those programs. As long as title to accreted lands remains public funding mechanisms for the restoration and nourishment may include parks impact fees, public metered parking proceeds, tourist development taxes, Municipal Service Benefit Units (MSBUs), and beachfront property assessments.
- **POLICY 4.3.3:** Support the restoration and nourishment of beaches through environmentally responsible methods.
- **GOAL 5: FISHERIES MANAGEMENT.** Preserve the ecosystem that nourishes and shelters the commercial and sport fisheries.
 - **OBJECTIVE 5.1: MARINE PRODUCTIVITY.** Support maintenance and improvement of marine fisheries productivity, and promote the conservation of fishery resources through the protection and restoration of finfish and shellfish habitat.

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- **POLICY 5.1.1:** Support state and federal fisheries management programs that protect and enhance the long-term biological and economic productivity of coastal and estuarine waters and their sources for commercial and sport fisheries.
- **POLICY 5.1.2:** Unmarked channels or passages that have been used to traverse shallow in-shore waters may be marked to reduce injury to marine seagrass beds if appropriate (subject to obtaining necessary permit approvals).
- **OBJECTIVE 5.2: ARTIFICIAL REEF PROGRAM.** Create durable fisheries habitat by building and maintaining artificial reefs in coordination with state, federal, and private organizations.
 - **POLICY 5.2.1:** Coordinate with the appropriate regulatory agencies and user groups on the location and construction of artificial reefs.
 - **POLICY 5.2.2:** Support appropriate private and public agencies in the study of the feasibility of using artificial reefs for the benefit of the commercial fishing industry.
- **OBJECTIVE 5.3:** Support the sustainability of recreationally and commercially important fish and shellfish that depend on the estuaries.
 - **POLICY 5.3.1:** Compile and analyze data about the condition of commercial and sport fisheries, coordinated with state, federal, academic, and private agencies.
 - **POLICY 5.3.2:** Make recommendations to state-level environmental and fisheries agencies regarding the restoration and protection of commercial and sport fisheries.
 - **POLICY 5.3.3:** Design and implement protective and incentive mechanisms to prevent adverse impacts to commercial and sport fisheries.
 - **POLICY 5.3.4:** Support state and federal fisheries management programs to protect the long-term biological and economic productivity of commercial and sport fisheries.
 - **POLICY 5.3.5:** Maintain the monitoring system for estuarine water quality and its impacts on the health of recreationally and commercially important fish and shellfish.
- **OBJECTIVE 5.4:** Conduct or sponsor, alone or in cooperation with private and/or public entities, economic base studies, reports on research, and assistance programs for commercial fishing.
 - **POLICY 5.4.1:** Continue to assist the commercial fishing industry to obtain information, technical assistance, and funding for projects such as developing fisheries, increasing catches of under-utilized species, developing new markets and

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GOAL 6: MARINE AND NAVIGATION MANAGEMENT. Develop and implement a comprehensive marine resources management program.

OBJECTIVE 6.1: DREDGE SPOIL DISPOSAL. Participate with other responsible agencies in the location and placement of spoil material.

POLICY 6.1.1: Coordinate with the U.S. Army Corps of Engineers on the location and placement of spoil material that result from maintenance dredging activities with use of compatible material for beach renourishment where needed and financially feasible.

POLICY 6.1.2: Participate and coordinate with the West Coast Inland Navigation District to identify existing and future dredge spoil sites in Lee County.

POLICY 6.1.3: The county will, with recommendations from the Waterways Advisory Committee (or successor agency) and other affected agencies and persons, on an as needed basis, make application to the Army Corps of Engineers, and all other agencies as required, to maintain, where environmentally and economically feasible, existing channels and passes to the Gulf of Mexico at their authorized and/or historic depths. The county will support the efforts of private individuals or groups to maintain established depths in private canals and waterways through the establishment of Municipal Service Benefit Units (MSBUs) to fund such private efforts, unless the county has determined such efforts to be detrimental to the environment.

OBJECTIVE 6.2: NAVIGATIONAL MARKERS. The county will continue its aids to navigation program and upkeep its computerized marker inventory.

POLICY 6.2.1: The county, in coordination with the appropriate state and federal agencies will:

- a. Assess the conditions of unmarked channels and identify those used to traverse shallow in-shore waters (a practice that damages seagrass beds) and develop a program to mark these channels (if appropriate on the basis of the assessment) so as to reduce injury to seagrass beds (see also Policy 5.1.2).
- b. Assess the feasibility of instituting a private channel maintenance assessment on properties benefiting from the channels.

OBJECTIVE 6.3: MARINE SANITATION. Maintain local marine sanitation regulations in the Land Development Code that complements the Florida Clean Vessel

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- **POLICY 6.3.1:** Assist federal and state agencies to maintain an inventory and promote the public awareness of existing marine sanitation facilities.
- **POLICY 6.3.2:** Expand, as needed, coordination with law enforcement and environmental agencies in designing enforcement and education measures for marine sanitation laws.
- **POLICY 6.3.3:** Regulate marine sanitation and waste disposal in marinas, docks, wharfs, piers, seawalls, or other docking structures.
- **POLICY 6.3.4:** Cooperate with state agencies developing management standards for marine sanitation in anchorages.
- **OBJECTIVE 6.4:** MATANZAS HARBOR MANAGEMENT PLAN. Cooperate with the Town of Fort Myers Beach to implement the Matanzas Harbor Management Plan.
 - **POLICY 6.4.1:** Offer support to governmental entities to manage Matanzas Harbor to protect marine resources and maximize the health, safety, and welfare of the estuarine and intertidal environment of waters, particularly Estero Bay, Ostego Bay, and Hurricane Bay.
 - **POLICY 6.4.2:** The Matanzas Harbor Management Plan will address public participation issues and must be consistent with the San Carlos Island Redevelopment Plan.
 - **POLICY 6.4.3:** Support the Town of Fort Myers Beach on the designation of special anchorage areas to allow the mooring of live-aboard vessels, especially in the Matanzas Harbor area.
- **OBJECTIVE 6.5: SCENIC WATERWAYS PROGRAM.** Enhance access to Lee County's waterways through the maintenance and implementation of beach and water accesses and the Great Calusa Blueway Paddling Trail system to provide for recreational, interpretive, and scenic views on and along Lee County waterways and beaches.
 - **POLICY 6.5.1:** Establish vegetated buffer zones along Lee County waterways to prevent erosion of natural shorelines, establish additional wetlands habitat, and enhance scenery will be preferred to the indiscriminate clearing of vegetation. These buffer zones will be evaluated in the review of planned developments and developments of regional impact, and also by specific county regulations (see Policy 2.3.2). These zones are not intended to interfere with existing or planned recreational opportunities.

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- **OBJECTIVE 6.6: WATER ACCESS IN PRIVATE DEVELOPMENTS.** Encourage private landowners to provide water access to the public.
 - **POLICY 6.6.1:** Design programs that encourage new water-related developments to provide water access (physical, visual or interpretive) to the public and submit to the Board of County Commissioners for formal consideration.
- **OBJECTIVE 6.7:** Develop techniques to encourage development and expansion of water-dependent recreational uses in Lee County waterways. Discourage conversion of water-dependent uses to non-water-dependent uses.
 - **POLICY 6.7.1:** Identify areas suitable for water-dependent/water-related recreational uses and activities, such as canoe/kayak launch areas, boardwalks, multiple-use paths, fishing platforms and waterside parks.
- **GOAL 7: SHORELINE MANAGEMENT.** Encourage the maintenance and development of water-dependent shoreline uses and avoid displacement by non-water-dependent uses.
 - **OBJECTIVE 7.1: CRITERIA FOR PRIORITIZING SHORELINE USES.** Give priority to new and substantially expanded shoreline land uses consistent with the following policies.
 - **POLICY 7.1.1:** The special provisions contained under Goal 8 of the Future Land Use element will also apply in Water Dependant Overlay Zones (see also Policies 7.3.1, 7.3.2, and 7.4.1).
 - **POLICY 7.1.2:** In all other non-wetland shoreline areas prioritize water-dependent land uses over water-related uses and water-related land uses that provide water access to the public, particularly when the site has previously provided water access to the public. (This policy will not be interpreted as a prohibition of new land uses that are only water-related, but instead as a reminder of the diminishing opportunities for water access in Lee County and the desirability of maintaining and increasing water access.)
 - a. Water-dependent uses: Land uses that could not exist without water access.
 - b. Water-related uses: Land uses that might be enhanced by proximity to the water, but for which water access is not essential.
 - **POLICY 7.1.3:** Develop, adopt, and implement performance standards for shoreline developments.
 - **OBJECTIVE 7.2: COMMERCIAL WATER-DEPENDENT USES.** Monitor and implement programs to enhance and protect commercial water-dependent uses.

- **POLICY 7.2.1:** Reclassify commercial and government-operated multi-slip docking facilities indicated on the Future Land Use Map as having water-dependent overlay zones to marina zoning categories to protect the rights to rebuild and expand and to prevent conversion to non-water-dependent uses without a public hearing.
- **POLICY 7.2.2:** Designate water-dependent overlay zones over existing commercial fishing, port and docking sites and commercial marinas on the Future Land Use Map to protect their rights to rebuild and expand and to prevent conversion to non-water-dependent uses without a public hearing.
- **POLICY 7.2.3:** Encourage the maximum use of dry storage by multi-slip docking facilities when reviewing development applications.
- **POLICY 7.2.4:** Maintain an inventory of multi-slip docking facilities, including the name, location, and STRAP number of the facility, and, as feasible, the number of wet and dry storage spaces, boat ramp lanes, and other services provided. Update this inventory as necessary.
- **OBJECTIVE 7.3: INDUSTRIAL WATER-DEPENDENT USES.** Monitor and implement programs to enhance and protect industrial water-dependent uses.
 - **POLICY 7.3.1:** Reclassify industrial water-dependent facilities to industrial marine zoning categories to protect the rights to rebuild and expand and to prevent conversion to non-water-dependent uses without a public hearing.
 - **POLICY 7.3.2:** Maintain an inventory of industrial water-dependent facilities, including the name, location, and STRAP number of the facility. Update this inventory as necessary.
- **OBJECTIVE 7.4: MARINE FACILITIES SITING CRITERIA.** Evaluate requests for new and expanded marinas, other wet slip facilities, dry slip facilities with launches, and boat ramps to make efficient use of limited shoreline locations and minimize environmental impacts.
 - **POLICY 7.4.1:** 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:
 - a. Aquatic Preserve (DEP)
 - b. Outstanding Florida Waters (DEP)
 - c. Class I Waters (DEP)
 - d. Marine or Estuarine Sanctuaries (NOAA)
 - e. Manatee Sanctuaries or Critical Manatee Habitats (DEP, USFWS, USACE)
 - f. Approved or conditionally approved shellfish harvesting areas (DEP)
 - g. Federal navigation channel setbacks (USCG, USACE)

- h. Bridge/road right-of-way easement (County DOT, State DOT)
- i. 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 7.4.2:** Consider the cumulative effects of several boat access facilities in a small area in the review of proposed projects.
- **POLICY 7.4.3:** Boat access facilities must be consistent with the aquatic preserve management plan where applicable.
- **POLICY 7.4.4:** Boat access facilities must be consistent with the following recommendations of the DNR Blue Ribbon Marina Committee (Final Report, January 1983):
- a. Prioritize the expansion of existing facilities, if environmentally sound, over new facilities.
- b. Encourage marinas in previously disturbed areas and in areas that have historically been used for marina-related activities.
- c. Locate marinas as close as possible to boating demand.
- d. Encourage marinas where adequate uplands are available to develop related support activities and to allow for possible future expansion.
- e. Discourage the development of marinas in highly productive marine habitats.
- f. Encourage the development of marinas in or near well-flushed, deep-water areas.
- g. Consider impacts upon state-designed manatee sanctuaries. Discourage marina locations or design features that threaten manatees.
- **POLICY 7.4.5:** Design new boat access facilities to avoid erosion on adjacent shorelines.
- **POLICY 7.4.6:** Evaluate proposed boat access facilities and expansion of existing facilities in accordance with the Manatee Protection Plan (MPP). Specifically use the Marine Facility Siting Requirements to determine the appropriate number of slips as defined by the MPP for each new project or expansion.
- **POLICY 7.4.7:** Boat access facilities, including multi-slip docking facilities and boat ramps which would disturb or destroy wetlands or seagrass beds must demonstrate a pressing need for the proposed facility and must provide for continued use by the general public.
- **POLICY 7.4.8:** Locate boat access facilities in areas of maximum physical advantage (e.g. adequate water depth). Encourage adequate existing water depths between the proposed facility and navigational channels, inlets, or deep water. Discourage new dredging.

- **POLICY 7.4.9:** Boat access facility locations should minimize natural shoreline disruption.
- **POLICY 7.4.10:** Discourage boat access facility construction in dead-end canals due to difficulty in meeting state water quality standards.
- **POLICY 7.4.11:** 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.
- **POLICY 7.4.12:** Evaluate applications for boat access facilities for cumulative impacts on manatees and marine resources.
- **OBJECTIVE 7.5: MARINA DESIGN CRITERIA.** Utilize the following criteria in evaluating the design of new marinas and the redevelopment or expansion of wet slip facilities of existing marinas) to minimize negative impacts. Consider the adoption of detailed regulations governing marina design, expansion, and development.
 - **POLICY 7.5.1:** Require that boat maintenance activities in new or expanded marina sites 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. Require that runoff from boat maintenance activities be collected and treated prior to discharge.
 - **POLICY 7.5.2:** Prefer open wet slips to covered wet slips in marina design to reduce shading of water bodies resulting in lowered biological productivity.
 - **POLICY 7.5.3:** Require fuel and oil containment facilities or contingency at all new marina sites and in marina expansion proposals.
 - **POLICY 7.5.4:** Require marinas serving the general public or live-aboards to provide pump-out facilities if sanitary sewer service is available.
 - **POLICY 7.5.5:** Require installation of shoreside pumpout stations at marinas that serve live-aboards to provide adequate facilities for subsequent transfer and treatment of boat sewage.
 - **POLICY 7.5.6:** Require parking, dry storage, and non-water-dependent facilities to be built on existing uplands.
 - **POLICY 7.5.7:** Require developers of marinas and multi-slip docking facilities to prepare hurricane plans describing measures to be taken to minimize damage to marina sites, neighboring properties, and the environment; this hurricane plan is subject to county approval. Provide assistance in the preparation of hurricane plans.

- **POLICY 7.5.8:** Fueling facilities associated with marinas must be designed to preclude spills and must have a plan in place to contain any spills that reach the water.
- **POLICY 7.5.9:** 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.
- **POLICY 7.5.10:** New fuel facilities must be located on the uplands of a marina site. Require the proper use and maintenance of fuel pump hoses and other fueling equipment.
- **POLICY 7.5.11:** Utilize piling construction and other non-dredge-and-fill techniques where possible to minimize habitat destruction.
- **POLICY 7.5.12:** Require mitigation or restoration to offset proposed adverse environmental effects as a condition of approval for new or expanded marina facilities. Preservation of existing resources is preferred over mitigation.
- **POLICY 7.5.13:** Docks should extend to naturally deep waters to reduce dredging. County regulations will specify the criteria for such extensions.
- **POLICY 7.5.14:** Encourage dry storage of small boats should be encouraged, with dry storage structures located inland as far as feasible.
- **POLICY 7.5.15:** Marina designs must not reduce water quality in adjacent natural water bodies to accommodate an increase in water quality in the marina basin.
- **POLICY 7.5.16:** Use existing navigational channels will be used to access new marina sites where possible.
- **POLICY 7.5.17:** Encourage expansion of dry storage capabilities to reduce dredging.
- **OBJECTIVE 7.6:** The Regional Planning Council will be the lead agency addressing the need for adequate sites for water-dependent uses on a regional basis.
 - **POLICY 7.6.1:** Cooperate with the Regional Planning Council in addressing the need for water-dependent sites on a regional basis.