

I. GOALS, OBJECTIVES, AND POLICIES

GOAL #20 – To protect and enhance the recovery of the West Indian (Florida) manatee to a viable self-sustaining population.

Manatee-Human Overlap

Objective 20.1 The County recognizes that human activities in Citrus County coastal waters may conflict with manatee activities and that such conflict can directly or indirectly result in manatee harassment, injury, or death. To prevent the occurrence of manatee/human interaction, which results in manatee harassment, injury, or death, the County will implement and enforce FWC /USFWS approved site specific protective measures.

Site Specific Protective Measures

Policy 20.1.1 Implement and enforce the Site Specific Protective Measures on Citrus County waters which have been approved by FWC/USFWS, and adopted by state rule or local ordinance.

Policy 20.1.2 The County/Manatee Plan Committee will evaluate the effectiveness of the Site Specific Protective Measures to prevent the occurrence of manatee harassment, injury, and death.

Policy 20.1.3 Maintain the informational and regulatory signage necessary to enforce DEP-installed protective speed zones.

Policy 20.1.4 On at least an annual basis, evaluate and conduct necessary actions to ensure that: worn out/illegible speed zone signs are replaced, signs located properly, and signs are consistent with State standards throughout the coastal water area.

Harassment

Policy 20.1.5 In recognition of the increasing population of manatees using Kings Bay as warm water refugia, the County will continue to monitor the sanctuary designation process and to participate as a member of the Manatee Advisory Committee.

Law Enforcement

Policy 20.1.6 Concentrate enforcement activities seasonally as appropriate in County waters.

Policy 20.1.7 Conduct an annual meeting of the Sheriff's Department Marine Enforcement Unit, the Florida Marine Patrol, and USFWS enforcement personnel prior to the beginning of the manatee wintering season (10/31 – 3/31). These meetings shall address enforcement strategies and critical enforcement periods for each coastal water body.

Policy 20.1.8 The County will implement a program to patrol areas of critical concern of the habitat of the manatee through the local Sheriff's Department and encourage the Florida Marine Patrol to do the same.

Land Development

Marina/Boat Facilities

Objective 20.2 Require new marina/boat facilities and boat ramps in the coastal waters of Citrus County to be located on sites which:

- Minimize manatee/boat overlap
- Minimize the disturbance of wetlands.

Sites which meet both criteria have been identified as suitable sites for new facilities in Figure 13-11 of this Plan. If a site meets Criteria 1 but does not meet Criteria 2, then mitigation of wetlands in compliance with Chapter Four of the Land Development Code (LDC) will be required to protect natural resources as stated in this Plan. Any area which does not meet Criteria 1 may not be developed for marina/boat facilities and boat ramps.

Policy 20.2.1 Support development of the Cross Florida Greenway and Barge Canal to be consistent with the Greenway Master Plan, Comprehensive Plan, and with existing resource protection plans, which limits specific and cumulative impacts on water quality and living marine resources, and restricts activities known to adversely affect the survival of the manatee under their jurisdiction.

Policy 20.2.2 New boat ramps may be permitted on locations which do not meet the siting criteria if the location is not in an Essential Habitat area (Figure 13-13) and an existing boat ramp facility of similar capacity within an Essential Habitat Area is permanently closed. Nothing in this policy shall be construed to prohibit safety improvements to existing public boat ramps.

Policy 20.2.3 Utilize brochures, signage, and other public relation tools to encourage boaters whose destination is the Gulf, to use boat ramps

which reduces their potential boat/manatee overlap to a minimum, instead of unnecessarily navigating critical habitats or other coastal rivers in which manatees are known to congregate.

Residential Dock Density

- Objective 20.3 In an effort to limit the number of areas where boating activities and manatee activities overlap, new or expanded residential dock facilities in the coastal waters of Citrus County shall be limited to a density of one boat slip per 100 feet of owned-shoreline when such waters are located in Essential Habitat Areas as defined by this Plan and depicted in Figure 13-12 of this Plan. Vested existing multifamily projects within Essential Habitat Areas may include multi-slip docks having a density no greater than two boat slips per 100 feet owned-shoreline. Outside essential habitat areas, residential projects may include multi-slip docks having a density of no more than two boat slips per 100 feet of owned-shoreline.
- Policy 20.3.1 The residential docking facilities criteria in this plan should not be interpreted to allow more boat slips than is prudent upon consideration of affected wetlands, navigability, depth of water, and other siting limitation as deemed appropriate by regulatory agencies.
- Policy 20.3.2 Development of residential docks shall conform to all other comprehensive plan policies, County codes, and other agency regulations.

Residential Dock Design

- Objective 20.4 Docks, mooring pilings, and other such structures proposed for location in the coastal waters of Citrus County shall be built in a manner which reduces or eliminates the impact of these structures on the manatee and the physical and biological resources on which it depends. This will be accomplished through the enforcement of construction standards which limit dock intrusion into waterways; eliminate dredge and fill related to residential dock construction; and require submerged structures to be designed in a manner which will prevent injury to manatees, as identified in this Plan.
- Policy 20.4.1 Docks, mooring pilings, or other such structures shall not extend within 100 feet of a federal navigation project channel as defined in subsection 253.03(10), Florida Statutes, or a channel marked by any governmental agency.

- Policy 20.4.2 Docks, mooring pilings, or other such structures shall be placed in locations having adequate water depth. Docking facilities shall be located in waters having adequate depths for boat mooring, turning basin, access channels, and other such areas which will accommodate the proposed boat use in order to ensure that a minimum of one foot clearance is provided between the deepest draft of a vessel and the bottom at mean low water.
- Policy 20.4.3 No dock shall extend waterward of the mean or ordinary high water line more than 200 feet over sovereignty, submerged land, or more than 25 percent of the width of the waterway at that particular location, whichever is less.
- Policy 20.4.4 Docks, mooring pilings, conveyance structures, or other such structures shall be designed to prevent entrapment or injury to manatees (adult, juvenile, or calf).
- Policy 20.4.5 No residential docking facility shall be approved which requires either dredging or filling to provide access by canal, channel, road, or any other means.
- Policy 20.4.6 Single family docks shall conform to the following criteria:
- Applicable state and federal regulations; and
 - The dock decking design and construction will ensure maximum light penetration, with full consideration of safety and practicality.
- Policy 20.4.7 Multi-slip residential docks shall conform to the following criteria:
- Applicable state and federal regulations; and
 - The dock decking design and construction will ensure maximum light penetration, with full consideration of safety and practicality.
- Policy 20.4.8 Because of the variety of types of shorelines in Citrus County, dock design standards should be based on location specific criteria, which recognize the levels of shoreline and aquatic vegetation, local boat traffic, local water depths, and the manatee habitat importance of a given area.

Water Quality and Vegetation

- Water Quality Restoration

- Objective 20.5 Manatees are aquatic herbivores and may be susceptible to a variety of water contaminants including pesticides, herbicides, industrial byproducts, and pathogens associated with human sewage (Packard, 1983). Maintain or improve ambient water quality in the coastal waters, in coordination with the Crystal River/Kings Bay Surface Water Improvement and Management Plan, at or above levels which ensure that no manatee mortality can be attributed to surface or groundwater pollution.
- Policy 20.5.1 Support and assist in the implementation of the programs and projects called for by the Crystal River/Kings Bay Surface Water Improvement and Management Plan (SWIM) intended to improve water quality in Crystal River/Kings Bay by providing SWIM with local information and reviewing studies and proposals for research and water quality improvement projects.
- Policy 20.5.2 Implement surface water quality programs and plans for the Homosassa, Chassahowitzka, and Withlacoochee Rivers as called for by the Conservation Element and Coastal, Lakes, and River Management Element of the Comprehensive Plan.
- Policy 20.5.3 Develop specific recommendations to improve and sustain surface water quality in Citrus County.
- Policy 20.5.4 With the assistance of SWFWMD, DEP and SWIM, investigate and establish criteria for maximum acceptable levels of water contaminants including pesticides, herbicides, industrial byproducts, and pathogens associated with human sewage, which have been shown to have a detrimental effect on manatees.
- Policy 20.5.5 With the assistance of SWFWMD, DEP and SWIM, monitor levels of water contaminants which have been shown to have a detrimental effect on manatees.

- Aquatic Plant Control

- Objective 20.6 Food sources utilized by manatees may be directly affected by aquatic weed control (Packard, 1983). Continue to develop and use techniques for aquatic weed control in the coastal waters which will reduce levels of toxicity in manatee food sources such that no manatee mortality can be attributed to toxicosis from weed control herbicides.
- Policy 20.6.1 Aquatic vegetation shall be retained in essential manatee foraging areas through the use of mechanical harvesting and other alternate means. This policy shall not be construed to prohibit the use of a

combination of DEP/USFWS approved herbicide and mechanical treatments during non-winter months (April through September), in accordance with the Summer/Winter Treatment Plan and local representatives from USFWS, ACOE, DEP, MTAC, and DAS-Citrus County.

Policy 20.6.2 Continue to hold annual meetings, which include local representatives from USFWS, ACOE, DEP, MTAC, and the Citrus County Division of Aquatic Services to evaluate the effectiveness of the Summer/Winter Treatment Plan for Citrus County coastal waters in preserving adequate food resources for manatees. Any changes to the Treatment Plan between annual meetings should be reviewed by the aforementioned representatives.

Policy 20.6.3 In the event of a significant decrease in the quantity of aquatic weeds due to natural phenomena or new chemical controls, ensure that manatee food resources in Essential Habitat Areas are maintained at levels recommended by the USFWS.

Policy 20.6.4 All citizen-initiated aquatic plant control activities shall be channeled through the Florida DEP, Aquatic Plant Management office in Floral City.

Habitat Protection

Objective 20.7 In order to ensure that manatees can continue to use the physical and biological resources essential to keeping them free from harm and harassment, acquire or establish protective status for all areas of the habitat system in Citrus County which are essential to the survival and recovery of the manatee.

Policy 20.7.1 Incorporate provisions into the LDC which provide for incentives for mitigation of disturbed habitat resources where redevelopment of coastal properties occur.

Policy 20.7.2 Incorporate provisions in the LDC which provide for conservation of habitat through fee simple donations and conservation easements.

Policy 20.7.3 Actively support and assist in the evaluation of the Homosassa, Salt, Withlacoochee, and Chassahowitzka Rivers and the St. Martins Marsh as designated Critical Habitats (Federal designation) or Essential Habitats (State designation) of the Florida Manatee and Kings Bay/Crystal River as an Aquatic Preserve by

submitting petitions, by initiation of commission resolutions, and by monitoring these federal and state designation processes.

- Policy 20.7.4 With assistance from State and/or Federal agencies, select and purchase essential habitat coastal property on the Withlacoochee River, Crystal River, and/or the Homosassa River, which will preserve manatee habitat resources, accommodate manatee education facilities, and provide passive recreation opportunities to Citrus County residents.
- Policy 20.7.5 The Manatee Plan Committee/Manatee Advisory Committee shall review and assess the habitat recommendation needs for the manatee. The evaluation and recommended needs shall include, at a minimum, conservation acquisitions, critical habitat designation evaluations, and conservation easements. This set of evaluations shall be conducted annually.

Warm Water Refugia

Volume and Salinity of Spring Water

- Objective 20.8 The quantity or salinity of water flowing from natural springs in Kings Bay or Homosassa River may be altered by increased water withdrawals from the aquifer or the reduction of recharge areas. If the volume of water flowing from springs decreases, water temperature around springs may drop, increasing manatees' exposure to cold waters and its associated health risks (Packard, 1983). Changes in slow rates could also result in changes to the aquatic vegetative community composition and volume, which could, in turn, impact manatee survival/use of the area. In coordination with Southwest Florida Water Management District (SWFWMD), regulate and monitor consumptive water withdrawals, which would result in a decrease of the average winter water temperature or an increase in the level of salinity in the springs that manatees depend upon for warm water habitat.
- Policy 20.8.1 Require, by local ordinance, the monitoring of the water quality of all Florida Safe Drinking Water Act (FSDWA) public wells and consumptive water use of all major public well heads.
- Policy 20.8.2 Support the establishment of a monitoring program for coastal spring water flow, warm water refugia, and sanctuary water salinity by providing assistance with data collection to SWFWMD, DEP, and USFWS.

Policy 20.8.3 In coordination with SWIM, the County shall evaluate the potential for restoring historical flows from springs and sinks within the coastal river basins.

Artificial Refugia

Objective 20.9 Reporting requirements for power plant retirements, shutdowns, and outages shall be handled through the National Pollution Discharge Elimination System (NPDES) permit process.

Education and Awareness

Objective 20.10 In an effort to eliminate harassment of and injury to manatees and to create additional public support for their protection and recovery, provide support to organizations and agencies sponsoring manatee education and awareness programs through the distribution of information, participation in activities, and the development of interpretive materials and signs, as identified in this Plan.

Policy 20.10.1 Distribute manatee-related documents and materials to all organizations and individuals who request them.

Policy 20.10.2 Support the establishment of an additional USFWS/DEP Interpretive/Education Center in the Crystal River area by aiding in the evaluation of prospective sites and assisting with planning documents.

Policy 20.10.3 The County shall incorporate manatee awareness and protection materials into its public education program on the protection of estuarine, river, and lake natural resources and in emergency management materials distributed to Citrus and Levy County coastal residents. All new manatee protection educational materials prepared by the County shall be reviewed by FWC or USFWS for accuracy and appropriateness.

Policy 20.10.4 Manatee protection/awareness information shall be posted at each public access to Essential Habitat waters and at private /commercial access points where permission of the owner is obtained. Other informational delivery systems such as radio broadcasts will also be used when possible.

Policy 20.10.5 Install interpretive signs/public notice boards throughout the coastal area, including all coastal area, private, and public shorelines and water-use access sites. Include information on

what constitutes harassment of manatees and what the penalties for committing harassment are.

- Policy 20.10.6 Provide manatee protection information and materials to Chambers of Commerce and other groups and businesses which request it.
- Policy 20.10.7 Provide waterfront residents with DEP literature on laws and penalties regarding unpermitted application of herbicides.
- Policy 20.10.8 Support the development of manatee education sites on the Internet.

Governmental Coordination

- Objective 20.11 To ensure that the development-related policies of this plan are implemented, incorporate the provisions and references necessary to implement this plan into the appropriate administrative and substantive sections of the County's ordinance. This shall be accomplished through adoption of this plan as the Manatee Protection Element of the Comprehensive Plan and the subsequent ordinance to bring it into compliance with this element.
- Policy 20.11.1 Prior to the issuance of a local permit, assure that all proposed waterfront development has complied with the permitting procedures and standards with ACOE, DEP, FWC, USFWS, and SWFWMD.
- Policy 20.11.2 The Manatee Plan Committee and/or Manatee Advisory Committee shall review proposed changes in the Manatee Protection Ordinance, which are related to manatee protection.
- Policy 20.11.3 Support a boat traffic and recreational use capacity study for Kings Bay and the Crystal River and determine whether the projected levels of recreational use of these waters will conflict with manatee recovery. The Manatee Plan Committee and/or Manatee Advisory Committee will use the findings of this study to determine if additional protection measures to assure manatee recovery are not inhibited or needed.
- Objective 20.12 Through the Manatee Advisory Committee and/or Manatee Plan Committee, provide a forum in which the implementation and amendment of this plan may be reviewed, monitored, and coordinated with other organizations and agencies involved in manatee protection and regulation.

- Policy 20.12.1 Implementation of this plan shall be coordinated with the Manatee Advisory Committee of Citrus County and the various regulatory agencies.
- Policy 20.12.2 Conduct at least one meeting per year of the Manatee Plan Committee and/or Manatee Advisory Committee of Citrus County to review and prepare recommendations on changes to the Manatee Protection Plan at a time which allows for such recommendations to be completed before the deadline for the following Comprehensive Plan amendment process.
- Policy 20.12.3 The Florida Manatee Recovery Plan is a document prepared for the USFWS by the multi-organization Florida Manatee Recovery Team, which explains the actions necessary to permit the Florida Manatee population to build-up to a point of recovery. This Citrus County Manatee Protection Plan reflects those elements of the Recovery Plan, which the County believes it is capable of implementing. On an annual basis, the Manatee Plan Committee shall review the Manatee Protection Plan and the County's implementation efforts to determine if they are consistent with the Florida Manatee Recovery Plan and recommend any actions necessary to achieve consistency.

GLOSSARY

Aquatic Preserve - An exceptional area of submerged lands and associated waters which are to be maintained in its natural condition in accordance with Florida State Statutes.

Boat Slip - For the purposes of marina/dock facilities and multifamily and single family docks, a boat slip is a component of a docking facility, which can permanently accommodate no more than one boat or vessel.

Conveyance Structure - Any ditch, pipe, or culvert in which a manatee, adult or infant, could become trapped.

Critical Habitat - Federally designated areas which, pursuant to the Endangered Species Act of 1973, have been determined to include physical and/biological features that are essential to the survival of an endangered species (such as the manatee), which may require special management considerations or protection. Kings Bay and the Crystal River are currently the only designated Manatee Critical Habitats in Citrus County. The Homosassa, Chassahowitzka, and Withlacoochee Rivers are being considered by USFWS for this designation.

Designated Channel - A navigational channel designated by ordinance or rule which would allow an exemption to slow speed within the channel.

Down-Listing - In order to down-list the manatee from an “endangered” to a “threatened” species, population modeling must indicate that the population is growing or is stable and that mortality is at acceptable levels or are decreasing, and that habitats are secure and threats to them are controlled or decreasing.

Endangered Species - Any species which is in danger of extinction throughout all or a significant portion of its range.

Essential Habitat - A criteria for determining areas where dock facilities should be limited. Essential Habitat is any land or water area constituting elements necessary to the survival and recovery of the manatee population from endangered status which may require special management considerations and protective measures. The constituent elements include, but are not limited to: space for individual and population growth and for normal behavior; available food sources with adequate water depth and quality; warm and fresh water sources; sites for breeding and rearing of offspring; and habitats protected from disturbances that are representative of the geographical and seasonal distribution of the species.

Florida Safe Drinking Water Well Act - Public drinking water systems that serve at least 25 people a day, 60 days per year as defined in Chapter 403.852 Florida Statutes.

Idle Speed Zone - A zone in which boats create no wake and are not permitted to go any faster than necessary to be steered.

LD-50 - A term used by the chemical industry to denote the lethal dose of a chemical for a particular species.

Marina/Boat Facilities - Any facility used for the wet or dry storage, loading, unloading, and/or launching of boats, which is not provided for the sole use of residences of a residential land use adjacent to a coastal water body. Marina/boat facilities include, but are not limited to, commercial marinas, commercial docking structures, and public and private boat launching facilities/boat ramps.

Multi-slip Docking Facilities - Any dock which includes more than one boat slip.

Optimum Sustainable Population Level - The level of population at which mortality and injury have been reduced to a point such that a species can be considered viable and self-sustaining. This level can only be determined when appropriate methodology and data are available to develop adequate population models.

Recovery - For the Florida manatee, as required by the Marine Mammal Protection Act of 1972, recovery will be achieved when “the health and stability of the marine ecosystem” can be maintained and then “optimum sustainable population” levels can be determined and maintained (USFWS, 1989). (See “Optimum Sustainable Population Level” definition above.)

Refuge - A manatee protection area in which the U.S. Fish and Wildlife Service has determined that certain waterborne activity would result in the taking of one or more manatees, or that certain waterborne activities must be restricted to prevent the taking of one or more manatees, including but not limited to, taking by harassment.

Residential Docking Facilities - Docks and wet slips provided for the sole use of the residents of a residential land use/development adjacent to a coastal water body.

Sanctuary - A manatee protection area in which the U.S. Fish and Wildlife Service has determined that any waterborne activity would result in the taking of one or more manatees, including but not limited to, taking by harassment. Sanctuaries areas are reserved exclusively for the manatees, where they may conduct activities such as: breeding, nursing, and resting free from any harassment by humans.

Slow Speed with Designated Channel Exemption - A zone which allows a designated navigation channel to be exempt from the Slow Speed zone along the course of the waterway. Any vessel leaving the designated channel would be required to travel at "Slow Speed".

Slow Speed Zone - A minimum-wake zone where boats must not be on plane, must be level in the water, and in no case shall they exceed a speed of seven miles per hour.

Surface Water Quality Committee - A seven-member committee appointed by the Citrus County Board of County Commissioners to review surface water quality needs of Citrus County.

Vested Multifamily Project - A project which has received a final development order from the County for multifamily development which has commenced and is continuing in good faith at the time of adoption of this Plan.

Warm Water Refugia - A natural or manmade warm water habitat which maintains a temperature equal to or greater than minimum required for manatees' survival (approximately 66°F or 19°C). In Citrus County, warm water refugia include Kings Bay, the portion of the Homosassa River upstream from Price Creek, and the Progress Energy discharge (effluent) canal.

Water Use Access Site - Includes privately and publicly operated boat launching facilities which the public can use to enter the Citrus County coastal waters.