

## CONSERVATION & COASTAL MANAGEMENT ELEMENT GOALS, OBJECTIVES, AND POLICIES

### Goal 5-1: Protection and Conservation of Natural Resources.

Sebastian is home to a diverse collection of natural resources and habitats and as such shall conserve, protect, promote, and appropriately manage the City's natural resources in order to enhance the quality of natural systems and the sustainability of the community.

Objective 5-1.1: Protection of Wildlife and Habitats. Protect the City's natural resources, wildlife, and habitats to improve the health of the natural environment.

**Policy 5-1.1.1: Protection of Natural Resources, Wildlife, and Habitats.** The City's land development code (LDC) shall include:

- a. Performance criteria that protects the City's natural resources, wildlife, and habitats of endangered or threatened species from the adverse impacts of development by regulating the location, density, and intensity of those activities which cause the adverse impact.
- b. Standards which increase conservation incentives during development to further protect and preserve the City's natural resources.
- c. Provisions which recognize the rights of property owners to use their lands in a manner consistent with the rules, policies, and guidelines of the St. Johns River Water Management District (SJRWMD), Florida Fish and Wildlife Conservation Commission (FWC) and the United States Fish and Wildlife Service (USFWS).

**Policy 5-1.1.2: Wildlife Protection.** The City shall utilize the LDC and review processes to ensure that development projects evaluate potential environmental impacts and provide mitigation for negative impacts. Development shall not adversely impact any threatened or endangered species or species of special concern without appropriate permitting and/or mitigation.

**Policy 5-1.1.3: Endangered or Threatened Species.** The City shall protect threatened or endangered native species by requiring that proposed new development and redevelopment (where applicable) be examined for location of Listed Species. The City through its LDC and review processes, will:

- a. Coordinate with the County, Federal, and State agencies for the identification and protection of endangered and threatened species
- b. Require applicants to consult with the appropriate agencies, to use recognized surveying techniques to identify listed species, and to provide documentation of such coordination and compliance prior to City approval to conduct any activities that could disturb listed species or their habitat
  - If endangered species, threatened species, or species of special concern are found, such species' habitat shall be identified on the proposed site plan and a plan for mitigation shall be discussed in the site plan narrative
  - Such information shall be addressed through the project staff report
- c. Promote connectivity and minimize habitat fragmentation

**Policy 5-1.1.4: Designation of Environmentally Sensitive Areas.** This Element's DIA specifically includes areas reserved for conservation uses or restricted development. All conservation land uses identified shall either remain undeveloped or shall undergo "restricted development." "Restricted development" shall be regulated through performance criteria adopted and maintained within the LDC.

**Policy 5-1.1.5: Wildlife Corridors.** Consistent with **Policy 5-1.9.6** and **Policy 5-1.1.6**, the City shall encourage the provision of contiguous conservation easements and preservation areas to maintain wildlife corridors and minimize the fragmentation of habitat.

**Policy 5-1.1.6: Open Space Corridor System.** Through the LDC and land development review process, the City shall continue to identify opportunities to:

- a. Provide an interconnected open space corridor system that links existing open spaces, greenways, public right of ways, and trails including new open space corridors
- b. Provide connections from adjacent development to existing or planned open space corridors
- c. Connect parks and civic resources (i.e., Community Center)

- d. Provide low-impact natural activities such as walking trails, benches, picnic areas, and canoe/kayak launches
- e. Connect the City and County's open space corridors
- f. Require that open space corridors minimize the fragmentation of significant wildlife habitat. Corridor widths shall be defined based on the natural range of targeted habitat/species; however, are generally considered to be a minimum of 25 feet in width

**Policy 5-1.1.7: Open Space Crossings.** The City shall consider road construction, reconstruction or other similar improvements encroaching or crossing an open space corridor, encourage crossing design features, and consider alternative roadway design standards. Crossings shall be designed in accordance with the recommendations of the Florida Fish and Wildlife Conservation Commission.

**Policy 5-1.1.8: Native Habitats Inventory and Assessment.** The City will update its inventory and assess significant native habitat remaining within the City limits. The City will also require development and redevelopment to determine the existence of any significant native habitats and such information will be added to the inventory.

**Policy 5-1.1.9: Restoration Efforts.** The City shall encourage the restoration of degraded sensitive habitat in order to reestablish natural diversity and encourage connectivity of vital habitats.

**Policy 5-1.1.10: Open Space.** The City's LDC shall include an open space requirement which:

- a. As density of development increases, the percentage of open space shall increase as well; and
- b. Open space shall be limited to a certain percentage of the stormwater retention area to ensure that native habitat is being conserved.

**Policy 5-1.1.11: Protection of Vegetative Communities.** The City's LDC, including the adopted Tree Protection and Landscaping Regulations, shall be used in managing and protecting the impacts of development on major vegetative communities. These regulations shall mandate restoration in order to compensate for unauthorized removal of vegetation and to enhance stabilization of fragile slopes and/or shorelines impacted by development.

**Policy 5-1.1.12: Protection of Native Habitats.** The City shall limit the disturbance of and protect significant native habitats through its LDC and review process including the following:

- a. Preserve existing native vegetation and natural areas including threatened native habitats;
- b. Encourage development forms that provide protection of significant native habitats such as clustered development and alternative roadway designs (i.e., reduced rights-of-way);
- c. Development shall first avoid impact to significant native habitats;
- d. Mitigate adverse impacts whenever areas of native habitats are involved in the development of property;
- e. Require development to first impact lower quality habitats and resources before impacts to higher quality habitats and resources are considered and used;
- f. Native habitat shall be used whenever possible to fulfill open space requirements; and
- g. Protect environmentally sensitive/significant areas (i.e., floodplain, watersheds, water recharge areas, etc.).

**Policy 5-1.1.13: Preservation of Native Vegetative Communities.** The City's LDC shall include an open space requirement and mandate that new development set aside a minimum 25% of each native vegetative community including trees as identified in **Policy 5-1.1.11**. The ordinance shall provide incentives for increased conservation of native vegetative communities determined to be regionally rare or endangered. The City may require payment of a fee in lieu of or participation in a tree bank (as may be adopted by the City) for the described mandatory "set aside" of habitat. Such cash payment may be in the form of an impact fee in lieu of habitat preservation to be accumulated from development for the purchase of upland habit preservation off-site rather than on-site. Other adjustments may only be granted where compensatory mitigation is provided through revegetation with native vegetative species compatible with existing vegetative communities.

**Policy 5-1.1.14: Florida Friendly Landscaping.** The City shall encourage the use of Florida Friendly landscaping which uses low-maintenance plants and environmentally sustainable practices.

**Policy 5-1.1.15: Removal of Undesirable Exotic Vegetation.** The LDC shall require that, prior to the issuance of a certificate of occupancy for a new development; the owner/applicant shall remove all nuisance and invasive exotic vegetation as defined by the Florida Exotic Pest Plant Council

(FLEPPC) on the subject property.

**Policy 5-1.1.16: Invasive Exotic Vegetation and Wildlife.** The City should help prevent the spread of non-native invasive exotic vegetation and wildlife and protect the health and well-being of the native environment through:

- a. Removal of existing invasive exotic species in coordination with City initiated work projects and replacement with native Florida plant species;
- b. Prohibition of the use of invasive exotic species;
- c. Public awareness about the harmful impacts of non-native species into the environment; and
- d. Regional, state, and federal partnerships on efforts to eradicate invasive exotic species

**Policy 5-1.1.17: Tree Protection.** The City shall continue to maintain the Tree Protection and Landscaping Ordinance within the LDC to address, at a minimum, tree protection and removal standards, historic trees, mangroves, undesirable exotic vegetation, suitable trees for planting, and residential/commercial development tree requirements.

**Policy 5-1.1.18: Urban Tree Canopy.** The City shall focus on preserving and promoting its urban tree canopy and consider the addition and enhancement of trees and landscaping within specific public rights-of-way and other public areas. The City shall maintain their Tree City USA designation through the Arbor Day Foundation.

**Objective 5-1.2: Protection of Surface Waters.** Implement policies that limit adverse impacts or alterations to surface waters to the greatest extent possible.

**Policy 5-1.2.1: Protect the City's Natural Lakes and Rivers.** The City's LDC shall include performance criteria designed to regulate against land development activities which adversely impact water quality, contribute to shoreline erosion and sedimentation, or otherwise threaten the long-term existence of the City's surface waters.

**Policy 5-1.2.2: Required Dedication of Conservation Easements or Reservations.** The City shall maintain regulations that provide for the dedication of conservation easements or reservations where the City finds that the dedication is reasonable in order to protect the value and function of a wetland or other surface water.

**Policy 5-1.2.3: Wetland Protection.** Wetlands shall be defined as set by 373.421 F.S. and 373.019(27) F.S. and shall be protected from physical or hydrologic alterations in order to maintain natural functions. The City shall maintain LDC performance standards designed to protect, conserve, and enhance wetlands by directing incompatible land uses away from wetlands. The LDC shall also prohibit any development within the wetland shoreline or adjacent buffer area, with the exception of water dependent native shoreline vegetation programs, approved pervious or elevated accessways, or other uses approved by the City pursuant to other City regulations.

**Policy 5-1.2.4: Establishing the Wetland Line.** No non-water dependent uses shall be permitted on submerged lands or wetlands. The LDC shall include a requirement that any development conduct a delineation of the landward extent of wetlands and other surface waters. The landward extent of wetlands and other surface waters shall be field delineated and flagged by a professional biologist provided by the applicant and formally approved by the SJRWMD, the Florida Department of Environmental Protection (FDEP), and/or the US Army Corps of Engineers (USACE).

**Policy 5-1.2.5: Wetland Transition Area:** Development on uplands adjacent to wetlands shall preserve a wetland transition area which will act as a buffer between wetlands and upland development or other land alteration activities. The LDC shall require this buffer to be in accordance to the minimum standards set by SJRWMD. The specific boundary of a wetland transition area shall be established by field investigation and must be indicated on site plans for development. The purpose of the transition area is to ensure the continuing function of respective wetland communities.

**Policy 5-1.2.6: Administration of Wetland Development Restrictions.** The City shall coordinate with state and federal regulatory agencies in regard to the development rights to be permitted on wetlands and/or lands under the jurisdiction of the state or federal government. The developer of the parcel of environmentally sensitive land shall be responsible for obtaining permits or exemptions from SJRWMD, FDEP, and the USACE, as may be appropriate, prior to obtaining a development order or development plan review approval from the City. Regardless of permitting by Federal or State permitting agencies, the City shall reserve the right to determine the appropriate land use, density/intensity, and special mitigation measures including, but not limited

to, the construction of culverts or other means.

**Policy 5-1.2.7: Development Requirements.** The City's LDC shall include standards that require that the applicant shall bear the burden of proof in determining that development shall not adversely impact wetlands, transitional wetlands, and other environmentally fragile natural systems. The applicant shall prove that the type, value, function, size, and condition of the wetland will not be adversely impacted, such determinations shall be based on physical and biological data obtained from specific site investigations by a biologist, an engineer or by another professional competent in producing data and analysis necessary to support impact assessments. Applicants shall have an opportunity to demonstrate that any wetland designations within the confines of their property no longer function as wetlands.

**Objective 5-1.3: Protection of Marine Resources.** Protect and appropriately manage the City's marine resources and living marine organisms.

**Policy 5-1.3.1: Protect Living Marine Resources, Coastal Marsh, Estuarine Water Quality, and Seagrass Beds.** The City shall maintain the LDC to include performance criteria which shall regulate against adverse impacts of development on estuarine areas such as living marine organisms, seagrass, coastal marsh, and mangroves. The LDC shall require that plans for development impacting marine resources be coordinated with state agencies having jurisdiction. The applicant shall bear the burden of demonstrating that potential adverse impacts on estuarine resources have been or shall be prevented. The review process for all proposed development that fronts on Indian River Drive shall involve all local, state, and regional entities with regulatory authority. Impacts to be considered shall include the following but not be restricted to:

- a. Prevent estuarine pollution;
- b. Control surface water run off;
- c. Reduce exposure to natural hazards;
- d. Protect seagrasses and other living marine resources;
- e. Ensure adequate public access; and
- f. Ensure adequate sites and standards for regulating water-dependent and water-related uses.

**Policy 5-1.3.2: Manage Impact of Coastal Development on Tidal Flushing and Circulation Patterns.** The City's LDC shall include standards that require that tidal flushing and circulation patterns shall not be altered by development activities. No development shall produce changes in the tidal flushing and circulation patterns unless the City and other public agencies having jurisdiction have granted requisite permits. No such permit shall be granted by the City unless all other agencies having jurisdiction have granted clearance and the applicant has submitted hydrographic information sufficient to clearly demonstrate that no adverse environmental impacts shall be occasioned by the proposed changes in tidal flushing and circulation patterns. No alteration in tidal flow shall be permitted which causes stagnation or siltation.

**Policy 5-1.3.3: Protection of Manatee Habitat.** The City shall promote protection of manatees and manatee habitat in a manner consistent with applicable state guidelines and Indian River County's Manatee Protection and Boating Safety Comprehensive Management Plan (August 2004).

**Policy 5-1.3.4: Conservation Easements.** The City shall work with private property owners to implement conservation easements to protect sensitive natural resources such as mangroves, dune systems, and coastal tidal areas.

**Objective 5-1.4: Improve Water Quality and Quantity.** Maintain policies and regulations to protect and improve the City's water quality and quantity.

**Policy 5-1.4.1: Water Quality.** Water run-off and introduction of nutrients shall be regulated through effective water quality management criteria. In order to protect the water quality of the Aquatic Preserve, no new point source pollution shall be permitted to discharge into the lagoon or into ditches or canals flowing into the lagoon. In addition, in order to reduce non-point source pollutants, the LDC shall comply with FDEP, SJRWMD, and the Indian River Lagoon Comprehensive Conservation and Management Plan.

**Policy 5-1.4.2: Requirements.** In order to protect water quality the City's LDC shall require the following for new development or redevelopment:

- a. The use of Low Impact Development (LID) strategies and best management practices shall be encouraged including as part of the stormwater fee credit program;

- b. Erosion control consistent with **Objective 5-1.7** and its related policy;
- c. Surface water management systems shall be designed and constructed to retain or detain with filtration, as a minimum the storm water run-off generated from the first one-inch of rainfall over the entire site;
- d. Landscaped buffer areas shall be required in accordance with the minimum buffer requirements established by SJRWMD;
- e. A vegetated and functional littoral zone shall be established as part of the surface water management system of lakes occurring on all property. Littoral zone plantings shall be encouraged in commercial and residential subdivision stormwater ponds including as part of the stormwater fee credit program. Prior to construction of the surface water management system for any phase of a project, the developer shall prepare a design and management plan for the wetland/littoral zone that will be developed as part of these systems;
- f. Require sewage pump-out facilities at all marinas and for facilities which sell petroleum products require adequate fuel spill containment facilities measures; and
- g. No new Planned Unit Developments (PUDs) may have septic.

**Policy 5-1.4.3: Class II Waters.** Class II Waters (i.e., coastal waterbodies which currently do or have potential for supporting shellfish harvesting) shall be protected by incorporating and maintaining the following provisions in the City's LDC:

- a. Dredging activities shall be limited to approved maintenance dredging and shall minimize adverse impacts on shellfish propagation or harvesting. The City shall require that fill and dredging activities comply with all applicable local, state, and federal permitting requirements;
- b. Ensure good water quality by coordinating with the FDEP and the SJRWMD in monitoring the quality of storm water run-off. The City's LDC shall provide performance criteria designed to ensure that new development provides effective and adequate storm-water management improvements concurrent with the impacts of new development;
- c. Continue to assess needs for retrofitting stormwater outfalls without adequate treatment;
- d. Limit the use of Class II waters to water dependent activities that are not contrary to the public interest and satisfy a community need; and
- e. Limit modification of grass beds only to those cases involving overriding public interest.

**Policy 5-1.4.4: Regulate Agricultural Activities to Preserve Water Quality.** The City's LDC shall include stipulations requiring that agricultural activities shall:

- a. Not be conducted adjacent to existing waterways and surface water management activities and shall comply with all applicable policies of FDEP, SJRWMD, and other agencies having appropriate jurisdiction as well as State laws, including administrative rules governing the Indian River Lagoon Aquatic Preserve. Such activities shall not threaten the water quality of the City's rivers and waterbodies;
- b. Maintain natural drainage patterns;
- c. Promote the use of surface water supplies for irrigation purposes;
- d. Prohibit the expansion of agricultural activities into wetland areas; and
- e. Use best management principles and practices in order to reduce pesticide and fertilizer run-off, prevent soil erosion, and preserve water quality.

**Policy 5-1.4.5: Protect Deep Aquifer Water Resources.** In order to protect the quality and quantity of deep aquifer water resources, the City shall coordinate with SJRWMD and other applicable regulatory agencies in identifying the existence and location of free flowing deep aquifer wells and in requiring corrective measures, including capping, plugging, or installing regulatory devices which control the discharge of water from the deep aquifer pursuant to the SJRWMD policies.

**Policy 5-1.4.6: Surficial Aquifer Recharge Area Protection.** The City shall protect surficial aquifer recharge areas from impacts that would significantly alter their ability to function. The City's LDC shall include standards that restrict development within surficial aquifer recharge areas and that require retention of open space for all development in order to:

- a. Preserve the quality and quantity of water resources within the surficial aquifer;
- b. Promote improved surface water management; and
- c. Create natural or landscaped urban green space for enhanced community aesthetics and passive pedestrian activities.

**Policy 5-1.4.7: Protection and Conservation of Potable Water Supply.** The City shall continue to require the LDC to incorporate performance criteria for public potable water wellfield protection. In addition, administrative procedures shall require applicants for development to coordinate with the SJRWMD in obtaining consumptive use permits. In order to comply with potable water conservation policies of the SJRWMD and achieve a reduction in the current rates of water consumption, the City's LDC shall incorporate the following performance standards:

- a. Where reclaimed water is available, potable water supplies may not be used to meet irrigation needs;
- b. Encourage the use of water-saving plumbing fixtures on all new development; and
- c. In order to reduce demand for irrigation water (which in turn often places greater demand upon potable water sources), at least 30% of all landscaping material obtained from off-site sources for use on any site should be native plants. Further, at least 50% of trees used in landscaping shall be native species in order to lessen water demand.

**Policy 5-1.4.8: Emergency Conservation of Water Sources.** The City shall coordinate with the SJRWMD in implementing emergency water conservation measures based on the SJRWMD plans for management of the region's water resources.

**Policy 5-1.4.9: Managing Land Use Surrounding Water Well Cones of Influence.** The City's LDC shall contain performance criteria designed to protect potable water supply and quality by restricting land development within public water well cones of influence in order to avoid potential adverse impacts on potable water resources.

**Policy 5-1.4.10: Resiliency.** The City is susceptible to impacts of future sea level rise and combined rain events that would cause flooding based on data outlined in the City's Coastal Resiliency Plan. Best management practices to address flooding level of service violations and water quality shall be devised and, given the hydrology of the area, it is encouraged that there be the development of a pollutant load model. It is also encouraged that there be the hardening of pump-stations in order to increase resiliency against flooding events.

**Policy 5-1.4.11: Stormwater Management.** Consistent with **Policy 4-1.4.2** of the **Infrastructure Element**, the City shall pursue the development of an update to the 2013 Stormwater Management Master Plan. The plan shall provide a basis for adopting regulatory measures for enhancing water quality and shall identify capital improvements needed to improve the storm water management system.

**Policy 5-1.4.12: Illicit Discharge.** Consistent with the Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) generic permit requirements for regulated municipal separate stormwater systems (MS4), the City shall implement a stormwater management program to reduce the contamination of stormwater runoff and prohibit and eliminate illicit discharges to the MS4. The City's regulations related to illicit discharge detection and elimination will be informed by the Best Management Practices as established by FDEP. The City shall also continue to follow the regulatory requirements for the NPDES MS4 permit, as set forth in Chapter 62-624, F.A.C.

**Policy 5-1.4.13: Septic to Sewer Conversion.** Consistent with **Policy 4-1.2.3** of the **Infrastructure Element**, the conversion of septic tanks to centralized sewer services is critical, considering the location of existing septic tanks within environmentally sensitive areas and areas vulnerable to the impacts of flooding and sea level rise. The City shall continue to support the implementation of the Sebastian CRA Septic to Sewer Conversion Program and Indian River County initiatives to expand sanitary sewer service within the City such as the North Sebastian Septic to Sewer Phase I Conversion Project.

**Policy 5-1.4.14: Total Maximum Daily Loads (TMDLs).** The City shall continue to support the Basin Management Action Plan (BMAP) for the Central Indian River Lagoon in meeting the Florida Department of Environmental Protection (FDEP) adopted nutrient total maximum daily loads (TMDLs) for the main stem of the Indian River Lagoon Basin.

**Objective 5-1.5: Protect Air Quality.** Protect and improve air quality by ensuring development meets or exceeds state and federal air quality standards and establishing regulatory programs to prevent and/or minimize non-point and ambient sources of air pollution.

**Policy 5-1.5.1: Combat Erosion and Generation of Dust Particles.** The City's LDC shall incorporate performance standards which combat erosion and generation of fugitive dust particles. The regulations shall require that measures be taken on building sites or cleared areas which assure that exposed, destabilized, or other altered soil is expeditiously covered with an acceptable erosion

control material.

**Policy 5-1.5.2: Air Pollution and Land Use Regulations.** The City's LDC, including adopted soil erosion and sedimentation controls as well as nuisance abatement standards, shall continue to protect against loss of air quality by maintaining land use controls which promote only activities compatible with existing land uses and natural systems and prohibit activities which generate air pollutants and other adverse impacts on the environmentally fragile coastal ecosystem. The City shall also promote the function of trees in improving air quality through the Tree Protection and Landscaping Ordinance, consistent with **Objective 5-1.9.**

**Policy 5-1.5.3: Land Use and Transportation.** Consistent with the **Land Use Element and Transportation & Mobility Element,** the City shall promote the reduction of vehicle emission by supporting land uses that promote walking, biking, transit, and alternative modes of transportation, and encourage urban infill development that limits the need for automobile use, increases trip capture, and reduces traffic congestion in a cost-effective manner.

**Objective 5-1.6: Protection of Shoreline and Public Access to Shoreline.** Protect and preserve the City's shorelines and public access to water based facilities and natural resources. Promote post-development shoreline stabilization methods that mimic a natural shoreline and support native habitat.

**Policy 5-1.6.1: Public Access to Waterfront Areas.** The City shall encourage developers to provide public waterfront access adjacent to the waterfront. Such access may include walkways, bikeways, water taxis, canoeing/kayaking, public spaces, dining areas, and the like.

**Policy 5-1.6.2: Florida Native Vegetation and Features.** The City shall require the use of native Florida vegetation and protection of natural features in coastal and waterfront development.

**Policy 5-1.6.3: Public Access to Indian River Lagoon.** The City's LDC shall require shoreline access to the Indian River Lagoon to be promoted in order to maintain accessways along the shoreline. State assistance shall be enlisted to achieve land required to appropriately store vehicles, provide rest room facilities, and accessways designed in a manner compatible with the shoreline ecosystem.

**Policy 5-1.6.4: Waterfront Planning.** The City's LDC shall include criteria for regulating water-dependent and water-related shoreline land uses. No structures which constrict water circulation in all flowing surface waters shall be permitted.

**Policy 5-1.6.5: Shorelines and Submerged Lands Planning.** The City's LDC shall require all applicants proposing development activities along the City's shorelines or within submerged areas to submit a site plan which demonstrate how the development shall incorporate features designed to protect against potential adverse impacts to shoreline vegetation and stabilization, water quality, native habitat, and shoreline access. The City shall require surveys of existing conditions, specifications of planned site improvements, and the techniques to be used in constructing, operating, and maintaining the land use. No shoreline development permit or development order shall be approved until the applicant has demonstrated that potentially adverse impacts shall be prevented or that compensatory mitigation shall occur.

**Policy 5-1.6.6: Prioritizing Shoreline Uses and Public Shoreline Access.** The City's LDC shall include the following criteria for prioritizing shoreline uses and public shoreline access:

- a. In reviewing applications for shoreline development First Priority shall be directed to non-structural shoreline protection uses (ex: native shoreline revegetation programs) and approved water-dependent shoreline uses (ex: pervious accessways, duly permitted dock facilities, and commercial marinas). Priority shall be directed to water dependent uses which are available for public use.
- b. In reviewing applications for shoreline development Second Priority shall be directed to water-related uses such as parking facilities for shoreline access, residential structures which comply with the building code for structures within the State coastal building zone, and recreational facilities which comply with applicable codes.

**Policy 5-1.6.7: Water Dependent Shoreline Uses.** The City shall require that water dependent shoreline uses obtain requisite permits from all environmental permitting agencies prior to obtaining City approval. Docks or marina improvements shall not be approved by the City until the applicant demonstrates compliance with all applicable federal and state laws and administrative rules governing Aquatic Preserves as well as applicable policies of regional agencies. The City's LDC

shall require site plans for all docks and marinas and no commercial marina facilities shall be permitted on the St. Sebastian River. Site plans must demonstrate to the City's satisfaction that the facilities shall not adversely impact natural marine resources.

**Policy 5-1.6.8: Water Related Shoreline Uses.** The City's LDC shall require that all water-related uses be built on uplands landward of the floodway. Within the state coastal building zone all construction activities shall be predicated on plans compliant with applicable state and local building codes. Dredging and filling of wetlands or open water in order to accommodate water-related uses shall not be permitted unless the City approves such activity pursuant to provisions of the wetland protection ordinance, the storm water management ordinance, and all other relevant site plan review criteria.

**Policy 5-1.6.9: Hardening of the Shoreline.** Hardening of the shoreline with rip-rap, bulkheads or other similar devices shall not be allowed unless erosion constitutes a critical peril to upland property and the use of vegetation has failed to stabilize the shoreline. The City's LDC shall include design specifications of any shoreline hardening structure. Such shoreline hardening structures shall generally not be vertical seawalls or bulkheads. The specific location and design of such structures shall be approved by the City as well as by other public entities having jurisdiction in the matter. The LDC shall require an environmental impact study and a special City Council variance for any sea wall construction. The City shall require the compliance with state and federal permitting requirements in the removal and/or modification of protected shoreline vegetation.

**Policy 5-1.6.10: Protect, Stabilize, and Enhance the Shoreline.** The City shall promote natural shoreline systems by utilizing the site and development process to promote the installation of native vegetation and living shorelines and the removal of existing hardening structures. The City's LDC shall stipulate that no native vegetation shall be removed from the shoreline without a duly authorized City land clearing permit. Similarly, criteria shall be included in the LDC which requires an applicant for development along the shoreline to be required to revegetate, stabilize, and enhance damaged shorelines by planting native vegetation.

**Objective 5-1.7: Minimize Soil Erosion.** Reduce the incidence of soil erosion caused by land clearing, breaches in stabilized shorelines, and lands having exposed soil without vegetative cover.

**Policy 5-1.7.1: Implementing Erosion Control.** The City's LDC shall require that appropriate measures be taken during land clearing and building operations to ensure that exposed, destabilized or otherwise altered soil is expeditiously covered with an acceptable erosion control material. The City's LDC shall require compliance with regulatory requirements and the City's NPDES MS4 permit, including consistency with **Policy 5-1.4.2.** The City's regulations related to soil erosion will be informed by the Best Management Practices as established by SJRWMD, FDEP, FDOT, Florida Cooperative Extension Service, Florida Department of Agriculture and Consumer Services, Institute of Food and Agricultural Sciences, and Natural Resources Conservation Service.

**Objective 5-1.8: Mining and Mineral Excavation Activities.** Prevent the adverse effects of the extraction of mineral resources within the City.

**Policy 5-1.8.1: Prohibition Against Mining Activities.** The LDC shall prohibit mining activities, except for existing sand mining operations, to protect the City's ecosystems.

**Objective 5-1.9: Green Infrastructure and Sustainability.** Consider sustainability and environmental-consciousness in the City's operations and promote the utilization of green infrastructure.

**Policy 5-1.9.1: Sustainability.** The City shall support the Sustainable Sebastian Initiative and Resolution in order to promote sustainability principles and encourage adaptation strategies.

**Policy 5-1.9.2: Sustainability Action Plan.** The City shall consider the development of a Sustainability Action Plan to include long-term objectives and short-term actions to guide the City in areas including, but not limited to, improving quality of life and community/individual health; energy conservation/independence; air quality, water quality, and natural systems; and economic sustainability.

**Policy 5-1.9.3: Green Jobs.** Consistent with the **Economic Development Element,** the City shall explore strategies to leverage the City's natural and economic assets to attract 'green jobs' and related nature based industries.

**Policy 5-1.9.4: Integrated Pest Management Plan.** The City shall implement its 2020 Integrated Pest Management Plan in order to promote the most sustainable pest management methods which

aim to minimize risks to human and environmental health through the limited use of chemicals, while also remaining economically feasible.

**Policy 5-1.9.5: Green Building Design.** Consistent with **Policy 1-2.3.4** of the **Land Use Element** the City shall encourage energy conservation in building and construction. The City shall encourage green building design (i.e. LEED) which promotes energy and resource efficiency, waste reduction, pollution prevention, respects natural topography, and improves occupant health and productivity.

**Policy 5-1.9.6: Green Infrastructure.** Green infrastructure provides for wildlife habitat, stormwater management, and recreational opportunities. The City shall plan for and manage its green infrastructure including its parks, greenways, and protected conservation lands. The City shall also coordinate local open space plans with regional green infrastructure plans in order to promote connectivity, investment, and maximize the ecological and public benefits of green infrastructure.

**Goal 5-2: Coastal Management and Resiliency.** The coastal community of Sebastian shall limit public expenditures in areas subject to destruction by flood risk and natural disasters.

**Objective 5-2.1: Coastal High-Hazard Area.** The Coastal High Hazard Area (CHHA) is an area particularly vulnerable to the effects of coastal flooding from tropical storm events and is defined by section 163.3178(2)(h)9, Florida Statutes, as the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model (See **Map 5-7**). The City shall enforce development restrictions within the CHHA and any area found to have historically experienced destruction or severe damage from storm driven, wind, water, or erosion. The City has identified the high velocity storm surge area as indicated on the Federal flood insurance rate maps as the only such area.

**5-2.1.1: Coastal High Hazard Area Application:** The following shall apply for purposes of evaluating applications for development within the City, specifically comprehensive plan land use amendments, map and text, and rezoning:

- a. If 50 percent or more of a parcel of land is located within the Coastal High Hazard Area, then the entire parcel shall be considered within the Coastal High Hazard Area
- b. Isolated areas that are defined by the SLOSH computerized storm surge model to be at higher elevations, and are surrounded by the CHHA or by the CHHA and a body of water, shall be considered within the CHHA
- c. For purposes of evaluating development proposals or site plans, if any portion of the proposed building footprint is in the CHHA, then the entire parcel shall be considered within the CHHA

**Policy 5-2.1.2: Limiting Public Subsidy of Development in the Coastal High-Hazard Area.** The City shall limit public expenditures that subsidize development permitted in the CHHA to restoration or enhancement of natural resources and public services for water dependent uses. The only exception to this regulation shall be that existing mobile homes within the CHHA shall be grandfathered in, thereby may be repaired and/or replaced as long as the density does not increase. The City shall aim to minimize the impact of natural hazards such as flooding and sea level rise to the community by directing development away from the CHHA as defined by State Statute §163.3178(2)(f), F.S. This policy shall not be interpreted as prohibiting the extension of sewer lines to replace failed septic tank systems identified in **Policy 5-2.1.2** and **Policy 5-2.1.3** below.

**Policy 5-2.1.3: CHHA Infrastructure.** Consistent with **Policy 4-1.2.3** of the **Infrastructure Element**, the City shall support septic to sewer efforts in order to preserve environmental integrity and protect the health of residents. Enhanced septic systems which include additional treatments may be allowed in the CHHA for areas not serviced by wastewater facilities.

**Policy 5-2.1.4 Infrastructure Extensions:** The City shall encourage the extension of wastewater facilities to replace failing septic tank systems in areas subject to flooding as a means to protect ground water quality.

**Policy 5-2.1.5: Existing Infrastructure in the CHHA.** The City shall establish a priority list of infrastructure facilities located in the CHHA which could be relocated, mitigated or replaced should state funding become available for such activities. Additional infrastructure and assets are inventoried in the City's Coastal Resiliency Plan.

**Policy 5-2.1.6: Public Investments in CHHA.** Except as provided in Policies above, publicly funded

facilities shall not be built in the CHHA, unless the facility is for public access, resource restoration, adequate evacuation, or service to water dependent activities. These facilities may face inundation and be impacted if they are outdoor facilities according to the City's Coastal Resiliency Plan. The City is encouraged to consider a funding source for purchasing CHHA properties and creating low impact/ low risk re-use of the property.

**Policy 5-2.1.7: Hazard Mitigation and CHHA.** The City shall maintain LDC's which contain performance standards regulating development activities in a manner which minimizes the danger to life and property occasioned by natural hazard events including:

- a. Non-residential construction within the CHHA shall meet storm and floodproofing standards exceeding those required for a one hundred (100) year storm; and
- b. If a structure located within the CHHA receive storm damage in excess of fifty (50) percent of its physical size, all such damaged structures shall be required to meet all current laws and ordinances, including those enacted since construction of the subject structure.

**Policy 5-2.1.8: Avoid Population Concentrations in CHHA.** The City shall restrict development and not increase or support densities or intensities beyond those depicted on the Future Land Use Map in the CHHA in order to minimize danger to life and property caused by hurricane events, flooding, or sea level rise. The City shall direct population concentrations away from CHHA.

**Policy 5-2.1.9: Restrict Development in CHHA.** The City shall incorporate policies in the LDC in order to direct population concentrations away from known or predicted areas in the CHHA. Also, the City shall direct population concentrations away from known areas that are vulnerable to flooding inundation and sea level rise as established in the City's Coastal Resiliency Plan. Development principles and strategies that eliminate unsafe development in the CHHA must be used as defined by §163.3178(2)(f), F.S. The following provisions shall restrict development within the CHHA:

- a. Water and sewer treatment plants, industrial holding ponds and other potential point pollution sources within the coastal high-hazard area are prohibited;
- b. Require construction within the hurricane flood zone to meet storm and flood proofing standards exceeding those required for a 100-year storm; and
- c. Residential development and/or redevelopment in the CHHA shall not exceed existing residential densities for that property.

**Objective 5-2.2: Maintenance of Floodplain.** Protect the natural functions, including flood- carrying and flood storage capacity, of the 100-year floodplain.

**Policy 5-2.2.1: Enforce Policies to Maintain Floodplain.** The City shall continue to enforce its surface water management and flood damage prevention regulations including the following:

- a. New development encroaching into the floodplain shall incorporate flood protection measures sufficient to protect against the 100-year flood. New development encroaching into areas subject to sea level rise, storm surge, and flood inundation shall incorporate flood protection measures as defined in the City's Coastal Resiliency Plan.
- b. The City's Storm Water Management and Flood Protection Ordinance shall maintain consistency with program policies of the Federal Insurance Administration including the National Flood Insurance Program (NFIP) Community Rating System (CRS). The City shall monitor new cost-effective programs for minimizing flood damage. Such programs may include compensatory storage for loss of floodplain or modification to construction setback requirements, or other site design techniques, as well as upgraded building and construction techniques.
- c. The City shall encourage the use of best management practices for development strategies that result in reducing flood risk and the removal of coastal real property from flood zone designations established by the Federal Emergency Agency as required by §163.3178(2)(f), F.S.

**Policy 5-2.2.2: Purchase of Floodplain.** The City shall identify and recommend to the State and FDEP purchase of floodplains that would comply with program guidelines established under the Florida Forever Program.

**Objective 5-2.3. Emergency Management.** Ensure City preparedness in the case of a natural disaster or emergency.

**Policy 5-2.3.1 Emergency Preparedness:** Consistent with **Objective 1-2.5** of the **Land Use**

**Element and Policies 4-1.1.10 and 4-1.1.11 of the Infrastructure Element.** The City shall include emergency management criteria into the LDC to mitigate the impacts of natural disasters or emergency events, including fires, pandemics/epidemics, terrorism and other disasters in order to protect public health and safety.

**Policy 5-2.3.2: Hurricane Evacuation.** The City shall coordinate with Indian River County in attaining a hurricane evacuation time of less than twelve (12) hours. There is the potential to put into place early warning notifications for elderly residents who are potentially more vulnerable as recommended in the City's Coastal Resiliency Plan. According to the Coastal Resiliency Plan, inundation caused by flooding and sea level rise is predicted to impact evacuation routes on Sebastian Boulevard and this vulnerability should be addressed to increase resilience.

**Policy 5-2.3.3: Removal of Trees Causing Safety Hazard.** The City's LDC shall require that trees, such as Australian Pines, that are prone to wind damage and blockage of evacuation routes be removed from areas deemed by the City to be critical corridors for evacuation purposes. In addition, the City shall consider the feasibility of imitating a similar program to remove any trees on public property which impose a critical threat to evacuation routes.

**Policy 5-2.3.4: Hurricane Evacuation Logistical Support.** In order to prevent unnecessary evacuees crowding roads and shelters, the City shall coordinate with Indian River County in disseminating information concerning the need of residents to evacuate at various hurricane threat levels, flood events, and sea level rise events. The City shall coordinate with the County and the Indian River County Emergency Management Director in assisting the implementation of the County's campaign to educate the general citizenry regarding emergency preparedness plans, including specific citizen directives.

**Policy 5-2.3.5: Future Coordination with the County in Emergency Preparedness.** In order to provide for safe and efficient evacuation of the residents of the City of Sebastian and other communities in the event of a hurricane or other disaster,

- a. The City shall enforce its Emergency Management Plan and continue to coordinate with Indian River County in annual updates of the County's Comprehensive Emergency Management Plan addressing future populations and responses (response times, evacuation times, shelter capacity, etc).
- b. The City's LDC shall mandate that new development maintain a density threshold which is consistent with the County's Comprehensive Emergency Management Plan. This stipulation will assure that future density thresholds may be accommodated without adversely impacting hurricane evacuation time. The City shall also coordinate with the County in updating hurricane evacuation shelter assignments as well as other policy formulation surrounding land use and emergency preparedness.

**Policy 5-2.3.6: Coordinate Update of the Hazard Mitigation Plan.** The City shall coordinate with the County in updating the hazard mitigation component of the County's Comprehensive Emergency Management Plan pursuant to the five (5) year interval schedule adopted by the County. Updates of the Plan shall identify specific actions that may be implemented to reduce exposure to natural hazards, include strategies for post-disaster recovery operations, and incorporate interagency hazard mitigation reports as such reports are generated in the future. The City shall also maintain, update, and enforce the City of Sebastian's Emergency Management Plan to ensure preparedness in the case of a natural disaster.

**Objective 5-2.4: Post-disaster Redevelopment.** Coordinate with Indian River County in providing immediate response to post-disaster situations.

**Policy 5-2.4.1: Post-Hurricane Assessments.** The City Council shall appoint a Recovery Task Force (RTF) comprised of the City Manager, the Building Official, and others as determined by the City Council. The RTF shall be responsible for assessing the conditions following a hurricane or other similar disasters such as flooding events and shall propose strategic actions necessary to establish order and re-establish communication and basic service delivery systems necessary for health, safety, and welfare. Within ninety (90) days after appointment of the Recovery Task Force, the Task Force shall meet to determine a management framework for resolving issues confronted in times of a natural disaster. The management framework shall be reviewed with the County Civil Defense Officer for compliance with the County's Comprehensive Emergency Management Plan and

shall be presented to the City Council for review and approval. The management plan should provide a basis for executing the following activities during times of natural disaster:

- a. Establishing a temporary moratorium on building activity;
- b. Reviewing and deciding upon emergency building permits;
- c. Coordinating with State and Federal officials to prepare disaster assistance applications;
- d. Analyzing and recommending to the City Council hazard mitigation options, including reconstruction or relocation of damaged public facilities;
- e. Developing a redevelopment plan including limitations on redevelopment in areas of repeated damage; and
- f. Recommending amendments to the Local Peacetime Emergency Plan and other appropriate policies and procedures.

**Policy 5-2.4.2: Repair and Clean-up.** In planning post-disaster redevelopment activities, factors to be considered in order to protect the public health and safety shall include:

- a. Repairs to potable water, wastewater and power facilities;
- b. Removal of debris;
- c. Stabilization or removal of structures in a perilous condition; and
- d. Minimal repairs to make structures habitable.

These considerations shall receive first priority in determining the appropriateness of emergency building permits. Long term redevelopment activities shall be postponed until the Recovery Task Force has coordinated immediate repair and clean-up operations.

**Policy 5-2.4.3: Redevelopment Activities.** The LDC shall require the redevelopment of any structure within the City that received storm-damage in excess of fifty (50%) percent of its appraised value to meet all current laws and ordinances, including those enacted since construction of the subject structure. The city shall require that new development and redevelopment in areas that are at high risk of flooding to use best practices, strategies, and engineering solutions that may reduce risk and losses due to storms, flooding and sea level rise as defined by §163.3178(2)(f), F.S.

**Policy 5-2.4.4: Establish Public Facilities Review Committee.** The City Council shall designate the Recovery Taskforce as the City's designated Public Facilities Review Committee charged with the responsibility for reviewing available alternatives for managing damaged public facilities following a hurricane event. The Committee shall evaluate future options for such facilities, including, but not limited to, abandonment repair in place, relocation, and reconstruction, with structural modifications. The Committee shall consider these options based on the following considerations:

- a. Cost to construct;
- b. Impacts on the environment;
- c. Cost to maintain;
- d. Public sector;
- e. Recurring damages;
- f. Impacts on land use; and
- g. Other relevant factors.

**Objective 5-2.5: Establish an Adaptation Action Area Overlay District.** To minimize future risk, establish an Adaptation Action Area (AAA) Overlay District for areas that are vulnerable to coastal flooding and the impacts of sea level rise, based on the data and modeling outlined within the City's Coastal Resiliency Plan and compliant with §163. 3178, F.S.

**Policy 5-2.5.1: Adaptation Action Area (AAA).** Within the LDC, the City of Sebastian shall establish criteria for Low Impact Design and Flood Resistant Design for new development and redevelopment within the AAA. Development within this overlay district must comply with coastal development best practices including but not limited to construction engineering solutions and low impact development techniques that utilize vegetation and natural features to minimize surface runoff and reduce flood risk.

**Policy 5-2.5.2: Transfer of Development Rights Program.** The City shall utilize the Transfer of Development Rights (TDR) program identified in **Land Use Policy 1-1.5.1** to incentivize the preservation of natural resources and habitats including those within vulnerable areas and also those identified within but not limited to the City's Coastal Resiliency Plan. The City shall designate parcels

within the established CHHA or proposed AAA Overlay District as sending zones for development rights, and less vulnerable parcels outside of the established CHHA or proposed AAA as receiving sites for density and intensity transferred through the TDR program. This allows development at higher densities in low risk areas and encourages less intense development in the City's floodplains and natural areas.

**Objective 5-2.6: Continuing Evaluation of the Conservation & Coastal Management Element Effectiveness.** Evaluate the effectiveness of the **Conservation & Coastal Management Element.**

**Policy 5-2.6.1: Review the Impact of Changing Conditions on Coastal Management and Conservation Policy.** The City shall monitor and evaluate significant changes in the characteristics of natural coastal resources and natural resources within the City. Policy implications of such changes shall be examined, and corrective measures shall be pursued. Coastal management and conservation policies shall be refined as needed in order to remain responsive to evolving problems and issues.

**Policy 5-2.6.2: Schedule, Budget and Implement Programmed Activities.** The timely scheduling, programming, budgeting and implementation of programmed coastal management activities and conservation activities identified in this Element shall be evidence of the City's effectiveness in carrying out a systematic program for implementing coastal management and conservation goals, objectives, and policies.

**Policy 5-2.6.3: Coordinate with Public and Private Sectors.** While continually implementing and evaluating the **Conservation & Coastal Management Element**, the City shall maintain a process of intergovernmental coordination as well as coordination, with private sector groups interested in coastal management and conservation policy and programs. The effectiveness of this approach shall be evaluated by the success of coordination mechanisms in resolving coastal management and conservation problems and issues.

**Policy 5-2.6.4: Achieve Effective Resolution of Coastal Management and Conservation Goals, Objectives and Policies.** The effectiveness of the **Conservation & Coastal Management Element** shall be measured by the City's success in achieving coastal management and conservation goals, objectives and policies. The **Conservation & Coastal Management Element** incorporates a systematic planning process for identifying coastal management and conservation problems and issues and implementing corrective actions.

**Policy 5-2.6.5: Intergovernmental Coordination.** Specific Objectives and Policies regarding intergovernmental coordination and this Element are provided and identified in the **Governance & Implementation Element.**

## CHAPTER 5: COASTAL MANAGEMENT (reference §9J-5.012(3), F.AC.)

~~§5-1 COASTAL MANAGEMENT GOALS, OBJECTIVES, AND IMPLEMENTATION POLICIES. This section~~

~~stipulates goals, objectives, and implementing policies for the Coastal Management Element pursuant to '1163.3177(6)(g) and '1163.3178, F.S., and §9J-5.012(3), F.AC..~~

~~GOAL 5-1: COASTAL MANAGEMENT. RESTRICT DEVELOPMENT ACTIVITIES THAT WOULD DAMAGE OR DESTROY COASTAL RESOURCES AND PROTECT HUMAN LIFE AND LIMIT PUBLIC EXPENDITURES IN AREAS SUBJECT TO DESTRUCTION BY NATURAL DISASTERS.~~

~~OBJECTIVE 5-1.1: PROTECT COASTAL RESOURCES, WETLANDS, ESTUARY, LMNG MARINE RESOURCES, AND WILDLIFE HABITATS. Beginning in January 1998, the City shall maintain land development regulations including performance standards designed to protect, conserve, and enhance wetlands and other natural resources, including estuarine environmental quality, by:~~

~~a. Preventing potentially adverse impacts of development and redevelopment on wetlands and estuaries;~~

- ~~b. Maintaining or improving estuarine environmental quality by improving stormwater management by commencing the stormwater management plan identified in Policy 4-2.1d.1. The plan shall provide a basis for adopting regulatory measures for enhancing estuarine water quality and shall identify capital improvements needed to improve the stormwater management system. The regulatory measures recommended in the stormwater management plan shall be incorporated in the land development regulations and the recommended capital improvements shall be incorporated in the Comprehensive Plan capital improvement schedule.~~
- ~~c. Minimizing potential adverse impacts of development along the Indian River Lagoon, including estuarine resources such as living marine organisms, seagrasses, coastal marsh, and mangroves together with adjacent environmentally sensitive transition areas; and~~
- ~~a. Regulating the impacts of development on wildlife habitats. These objectives shall be accomplished as herein below cited as well as through coordination with the St. Johns River Water Management District and through the Indian River Lagoon SWIM program.~~

~~Policy 5-1.1.1: Development Restrictions in Wetlands. The City shall enforce its wetland protection ordinance which shall restrict development within wetlands and shall require consideration of dedication of conservation easements by applicants for upland development who also own title to adjacent wetlands.~~

~~By December 31, 1998, the City shall amend its land development code to include performance criteria which prohibits development of wetlands. Wetlands shall be defined as set forth in Rule 9J-5.003 (149), FAC.~~

~~Policy 5-1.1.2: Protect the Indian River Lagoon. By December 31, 1998, the City shall adopt amended land development regulations which include performance criteria mandating that the potential impacts of proposed shoreline development be analyzed as part of the process and prior to approval of a development permit or development order. The applicant shall bear the burden of demonstrating that potential adverse impacts on estuarine resources have been or shall be prevented. The review process for all proposed development that fronts on Indian River Drive shall involve all local, State, and regional entities with jurisdictional authority. Impacts to be considered shall include the following but not be restricted to:~~

- ~~prevent estuarine pollution; \_\_\_\_\_ • control surface water run off; reduce exposure to natural hazards;~~
- ~~• ensure adequate public access; and ensure adequate sites and standards for regulating water dependent and water related uses. protect living marine resources;~~

~~The City shall not approve a development order or development permit for the area that fronts on Indian River Drive until the City has considered the potential impacts identified by the applicant and other public entities having jurisdiction over the impacted resources.~~

~~Policy 5-1.1.3: Protect, Stabilize, and Enhance the Estuarine Shoreline. By December 31, 1998, the City shall incorporate criteria within the land development regulations which stipulate that no native vegetation shall be removed from the estuarine shoreline without a duly authorized City land clearing permit. Similarly, criteria shall be included in the land development regulations which require that applicants for development along the estuarine shoreline shall be required to revegetate, stabilize, and enhance damaged estuarine shorelines by planting native vegetation, including mangrove and/or other native estuarine plant species which:~~

- ~~a. Contribute to marine productivity and water quality;~~
- ~~b. Offer protection from erosion and flooding; and~~
- ~~c. Contribute to the natural soil building process.~~

~~Hardening of the estuarine shoreline with rip-rap, bulkheads or other similar devices shall not be allowed unless erosion constitutes a critical peril to upland property and the use of vegetation has failed to stabilize the shoreline. Such shoreline hardening structures shall generally not be vertical seawalls or bulkheads and shall comply with performance standards herein cited in Policy 5-1.2.1(2)(c). The specific location and design of such structures shall be approved by the City as well as by other public entities having jurisdiction in the matter. Land development regulations shall incorporate the following performance criteria governing the location and design of such structures:~~

~~Comply with best management principles and practices and be accomplished by use of the least environmentally damaging methods and designs possible;~~

~~Avoid a vertical slope which generates erosive tendencies, especially to adjacent unprotected shoreline properties. Pervious interlocking tile systems, filter mats, and similar stabilization methods shall be used in lieu of vertical walls whenever feasible;~~

~~Not be located within 10 feet of the mean high water line except when it is shown to be in the public interest;~~

~~City approval shall be conditioned upon the applicant receiving approval from other public agencies having jurisdiction; and~~

- ~~• Incorporate a program of shoreline vegetation or revegetation in order to build, enhance, and stabilize a natural shoreline.~~

~~Policy 5-1.1.4: Protect Living Marine Resources, Coastal Marsh, and Seagrass Beds. By December 31, 1997 the City shall adopt land development regulations which include performance criteria which shall regulate against adverse impacts of development on seagrass beds and coastal marsh areas. Since these areas are sensitive to increased turbidity and other forms of pollution, water run-off and introduction of nutrients shall be regulated through effective water quality management criteria. The land development regulations shall require that plans for development impacting marine resources be coordinated with state agencies having jurisdiction. The City's approval shall be conditioned upon the applicant receiving approval from other public agencies having jurisdiction~~

~~Policy 5-1.1.5: Manage Impact of Coastal Development on Tidal Flushing and Circulation Patterns. Tidal flushing and circulation patterns generally shall not be altered by development activities. No development shall produce changes in the tidal flushing and circulation patterns unless the City and other public agencies having jurisdiction have granted requisite permits. No such permit shall be granted by the City unless all other agencies having jurisdiction have granted clearance and the applicant has submitted hydrographic information sufficient to clearly demonstrate that no adverse environmental impacts shall be occasioned by the proposed changes in tidal flushing and circulation patterns. Finally, no alteration in tidal flow shall be permitted which causes stagnation or siltation.~~

~~Policy 5-1.1.6: Promote Propagation of Fish and Wildlife. The City shall incorporate criteria in the land development regulations which requires consideration of the impact of development on submerged lands and other habitats for fish and wildlife. The criteria shall be implemented to ensure maintenance of essentially natural conditions in order to further the propagation of fish and wildlife as well as public recreation opportunities.~~

~~OBJECTIVE 5-1.2: SHORELINE USES AND PUBLIC ACCESS TO SHORELINE. The City shall maintain land development regulations which include performance criteria ensuring implementation and enforcement of the Comprehensive Plan land use policies for prioritizing shoreline uses. This objective shall be measured through the implementation of the following policies:~~

~~Policy 5-1.2.1(1): Criteria for Prioritizing Shoreline Uses and Public Shoreline Access. In reviewing applications for shoreline development first priority shall be directed to the following shoreline uses:~~

- ~~n. Non structural shoreline protection uses such as native shoreline revegetation programs;~~
- ~~b. Approved water dependent estuarine shoreline uses such as: pervious accessways and duly permitted dock facilities and commercial marinas. All such facilities shall satisfy all provisions of the City's land development code and obtain requisite permits from all environmental permitting agencies prior to obtaining City approval. Newly proposed marinas shall not be approved unless the applicant demonstrates that the marina site is consistent with the City's conservation and coastal management policies. Priority shall be directed to water dependent uses which are available for public use.~~

~~These facilities shall demonstrate during site plan review compliance with performance standards stipulated in Policy 5-1.2.1(2) in order to prevent adverse impacts to natural features. Second priority shall be directed toward water related uses such as:~~

- ~~n. Parking facilities for shoreline access;~~
- ~~b. Residential structures which comply with the building code for structures within the State coastal building zone; and~~
- ~~c. Recreation facilities which comply with applicable codes.~~

~~The City of Sebastian has no beach or dune system, and therefore, shoreline protection policies apply only to the estuarine shoreline.~~

~~Policy 5-1.2.1(2): Implementing Policies for Shoreline Land Uses. Land development regulations shall stipulate provisions implementing shoreline land use priorities, including criteria for regulating water-dependent and water-related shoreline land uses. The regulations shall address the following:~~

- ~~a. Protecting Living Coastal Marine Life. The City shall continue to enforce land development regulations which protect species with special status from the adverse impacts caused by development
 
  - ~~i. All applicants proposing development activities along the estuarine shoreline or within submerged areas shall be required to submit a site plan pursuant to site plan review regulations. Such site plan shall provide sufficient information describing marine life potentially impacted by proposed uses as well as related construction activity. The plan shall stipulate assurances that the proposed project shall not adversely impact marine life or water quality. For instance, water quality control techniques such as the use of weirs for purposes of managing turbidity may be required by the City. In addition, the City shall require surveys of existing conditions, specifications of planned site improvements, and techniques to be used during construction as well as in operating and maintaining the land use in order to prevent damage to living marine organisms.~~~~
- ~~b. Water-Related Uses in State Coastal Building Zone. All water-related uses shall be built on uplands landward of the floodway. Within the State coastal building zone all construction activities shall be predicated on plans compliant with applicable State and local building codes. Dredging and filling of wetlands or open water in order to accommodate water-related uses shall not be permitted unless the City approves such activity pursuant to provisions of the wetland protection ordinance, the stormwater management ordinance, and all other relevant site plan review criteria.~~
- ~~c. Estuarine Shoreline Structures/Water-Dependent Uses. Within the wetland estuarine shoreline, no development other than water dependent native shoreline revegetation programs, approved pervious or elevated accessways, and other uses approved by the City pursuant to the Stormwater Management and Flood Protection Ordinance shall be permitted. Hardening of the lagoon shoreline shall not be permitted unless the upland property is critically imperiled and the use of vegetation has failed to stabilize the shoreline. The design specifications of any shoreline~~

hardening structure shall:

- ~~i. Comply with best management principles and practices and be accomplished by use of the least environmentally damaging methods and designs possible;~~
- ~~ii. Avoid a vertical slope which generates erosive tendencies, especially to adjacent unprotected shoreline properties. Pervious interlocking tile systems, filter mats, and similar stabilization methods shall be used in lieu of vertical walls whenever feasible;~~
- ~~iii. Not be located waterward of the mean high water line except when it is shown to be in the public interest;~~
- ~~iv. City approval shall be conditioned upon the applicant receiving approval from other public agencies having jurisdiction; and~~
- ~~v. Incorporate a program of shoreline vegetation or revegetation in order to build, enhance, and stabilize natural shoreline.~~

~~d. Land Use Restrictions in Submerged Lands and Wetlands. No non-water dependent uses shall be permitted on submerged lands or wetlands. Development on uplands adjacent to wetlands shall preserve a buffer known as the wetland transition area, as defined in the Stormwater Management and Flood Protection Ordinance. The specific boundary of a wetland transition area shall be established by field investigation. Similarly, no structures which constrict water circulation in the lagoon shall be permitted.~~

~~e. Deck Facilities. Docks or marina improvements shall not be approved by the City until the applicant demonstrates compliance with all applicable federal and State laws and administrative rules, including §160.20.04(5), F.A.C., governing Aquatic Preserves as well as applicable policies of regional agencies. No commercial marina facilities shall be permitted on the Sebastian River. The City shall require site plans for all docks and marinas. These plans must demonstrate to the City's satisfaction that the facilities shall not adversely impact natural marine resources, including, but not limited to, seagrasses, estuarine waters, manatees and other living marine organisms. The plans shall indicate:~~

- ~~i. Location relative to all impacted natural marine resources.~~
- ~~ii. Structural specifications.~~
- ~~iii. Description of all impacted natural marine resources, including their location and physical characteristics.~~
- ~~iv. Multi-slip dock or marina facilities shall be located so as to prevent or minimize dredging and shall not disturb seagrass beds or adjacent wetlands.~~
- ~~v. Availability and location of sewage pump-out facilities.~~
- ~~vi. Hurricane contingency plans.~~
- ~~vii. Mitigation techniques proposed to compensate for any potential environmental disruption.~~

~~f. Estuarine Water Quality. In order to protect the water quality of the Aquatic Preserve, no new point source pollution shall be permitted to discharge into the lagoon or into ditches or canals flowing into the lagoon. In addition, in order to reduce non-point source pollutants and comply with the Indian River Lagoon SWIM Plan, Indian River Lagoon Act, and the Indian River Lagoon Comprehensive Conservation and Management Plan, the City shall require the following:~~

- ~~i. Surface water management systems shall be designed and constructed to retain or detain with filtration, as a minimum, the stormwater run-off generated from the first one inch of rainfall over the entire site. The stormwater design shall be predicated on the following:~~

~~Off-site: 25-year, 24 hour design storm On-site: 10 year, 24 hour design storm.~~

- ~~ii. A vegetated and functional littoral zone shall be established as part of the surface water management system of lakes occurring on all property. Prior to construction of the surface water~~

management system for any phase of ~~the~~ project, the developer shall prepare a design and management plan for the wetland/littoral zone that will be developed as part of these systems. The plan should:

- (a) Include typical cross sections of the surface water management system showing the average water elevation and the 3-foot contour (i.e., below average elevation);
- (b) Specify how vegetation is to be established within this zone, including the extent, method, type and timing of any planting to be provided; and
- (c) Provide a description of any management procedures to be followed in order to assure the continued viability and health of the littoral zone. The littoral zone as established should consist entirely of native vegetation and should be maintained permanently as part of the water management system. As a minimum, 10 square feet of vegetated littoral zone per linear foot of Inke shoreline should be established as part of the surface water management plan.

~~iii. The City shall coordinate with the St Johns Water Management District in developing and adopting an ordinance regulating installation of underground storage tanks for petroleum products.~~

~~iv. The City shall coordinate with the St Johns Water Management District in reviewing issues and appropriate enforcement activities surrounding safe yield for water withdrawals from the surficial aquifers near the Indian River Lagoon in order to avoid impacts on the estuary.~~

~~g. Shoreline Access. Shoreline access to the Indian River Lagoon shall be promoted in order to maintain accessways at approximately one-half mile intervals along the shoreline. State assistance shall be enlisted to achieve land required to appropriately store vehicles, provide rest room facilities, and accessways designed in a manner compatible with the shoreline ecosystem. The location of access points and related improvements shall be consistent with the City's Riverfront Study as enacted.~~

~~The City has no beaches and, therefore, beach access policies of the State are not applicable; however, the City shall consider as part of the Riverfront Study ways to ensure public access and provide the necessary infrastructure to support waterfront activities.~~

~~h. Signage along the Indian River Lagoon. At the time land development regulations are amended in order to comply with the adopted comprehensive plans, the City shall consider restricting commercial signage along the Indian River, to only those signs deemed essential for water dependent facilities. The City shall coordinate with jurisdictional agencies to develop uniform signage and criteria to further this policy. The City's sign regulations in the area east of the railroad tracks from the north City limit to the south City limit shall be consistent with the recommendations in City's Riverfront Study as enacted.~~

#### ~~OBJECTIVE 5-1.3: LIMITING PUBLIC SUBSIDY OF DEVELOPMENT IN THE COASTAL HIGH-HAZARD~~

~~AREA. Upon adoption of the Comprehensive Plan, the City shall limit public expenditures that subsidize development permitted in coastal high-hazard areas to restoration or enhancement of natural resources and public services for water dependent uses.~~

~~Policy 5-1.3.1: Public Investments in Coastal High-Hazard Area. Public funded facilities shall not be built in the coastal high-hazard area, unless the facility is for public access, resource restoration, or service to water dependent activities.~~

#### ~~OBJECTIVE 5-1.4: AVOID POPULATION CONCENTRATIONS IN COASTAL HIGH-HAZARD AREAS.~~

~~Beginning in January 1998, the City shall restrict development in Coastal High Hazard Areas (CHHA) in order to minimize danger to life and property occasional by hurricane events. The City shall direct population concentrations away from CHHA. The CHHA shall be defined as those~~

~~areas located within the Category I evacuation zone established in the Treasure Coast Regional Hurricane Evacuation Study.~~

~~Policy 5-1.4.1: Restrict Development in Coastal High-Hazard Areas. The City shall incorporate appropriate policies in the land development regulations in order to direct population concentrations away from known or predicted coastal high-hazard areas which are areas located within the category I evacuation zone established in the Treasure Coast Regional Hurricane Evacuation Study. The following provisions shall restrict development within the coastal high-hazard area:~~

- ~~a. Water and sewer treatment plants, industrial holding ponds and other potential point pollution sources within the coastal high-hazard area are prohibited.~~
- ~~b. Require construction within the hurricane flood zone to meet storm and floodproofing standards exceeding those required for a 100-year storm.~~
- ~~c. Residential development and/or redevelopment in the CHHA shall not exceed existing residential densities for that property.~~

~~OBJECTIVE 5-1.5: HURRICANE EVACUATION. The City shall coordinate with Indian River County in attaining a hurricane evacuation time of less than twelve (12) hours.~~

~~Policy 5-1.5.1: Hurricane Evacuation Logistical Support. In order to prevent unnecessary evacuees crowding roads and shelters, the City shall coordinate with Indian River County in disseminating information concerning the need of residents to evacuate at various hurricane threat levels. The City shall coordinate with the County and the Indian River County Emergency Management Director in assisting the implementation of the County's campaign to educate the general citizenry regarding emergency preparedness plans, including specific citizen directives.~~

~~Policy 5-1.5.2: Future Coordination with the County in Emergency Preparedness. In order to provide for safe and efficient evacuation of the residents of the City of Sebastian and other communities in the event of a hurricane, the City shall continue to coordinate with Indian River County in annual updates of the County Peacetime Emergency Plan. This update shall enable the County and incorporated municipalities to plan for future population densities which will neither adversely impact the efficiency of the evacuation plan nor increase evacuation times.~~

~~In order to ensure that future developments are consistent with the Peacetime Emergency Plan and amendments thereto, the City's land development regulations shall mandate that new development maintain a density threshold which is consistent with the Peacetime Emergency Plan. This stipulation will assure that future density thresholds may be accommodated without adversely impacting hurricane evacuation time. The City shall also coordinate with the County in updating hurricane evacuation shelter assignments as well as other policy formulation surrounding land use and emergency preparedness.~~

~~OBJECTIVE 5-1.6: HAZARD MITIGATION AND COASTAL HIGH-HAZARD AREAS. Beginning in January~~

~~1998, the City shall maintain land development regulations which contain performance standards regulating development activities in a manner which minimizes the danger to life and property occasioned by hurricane events including:~~

- ~~1. Storm and Floodproofing Standard for Non-residential Structures. Non-residential construction within the coastal high-hazard area shall meet storm and floodproofing standards exceeding those required for a one hundred (100) year storm.~~
- ~~2. Restrictions of Redevelopment. If a structure located within the high hazard area receive storm damage in excess of fifty (50) percent of its appraised value, all such damaged structures shall be required to meet all current laws and ordinances, including those enacted since construction of the subject structure.~~

~~Policy 5-1.6.1: Coastal High-hazard Area Defined. The coastal high hazard area (CHHA) consists of the Category I evacuation zone established in the Treasure Coast Regional Hurricane Evacuation Study. The only areas within the City limits identified in the Category I evacuation zone are the City's mobile home parks. The City shall enforce development restrictions, identified in Policy 5-1.4.1, within the CHHA and any area found to have historically experienced destruction or severe damage from storm-driven wind, water, or erosion. The City has identified the high-velocity storm surge area as indicated on the Federal flood insurance rate maps as the only such area.~~

~~Policy 5-1.6.2: Coordinate Update of the Hazard Mitigation Plan. The City shall coordinate with the County in updating the hazard mitigation annex of the Local Peacetime Emergency Plan pursuant to the five (5)-year interval schedule adopted by the County. Updates of the Plan shall identify specific actions that may be implemented to reduce exposure to natural hazards. The current Plan contains no inter-agency hazard mitigation component. The Comprehensive Plan shall incorporate interagency hazard mitigation reports as such reports are generated in the future.~~

~~Policy 5-1.6.3: Implementing General Hazard Mitigation. By December 31, 1998 the City shall adopt land development regulations which require that no development other than shoreline stabilization activities and water dependent recreation activities shall be allowed within the coastal high hazard area. The only exception to this regulation shall be that existing mobile homes within the CHHA shall be grandfathered in, thereby may be repaired and/or replaced as long as the density does not increase. The performance criteria shall stipulate the need to reduce exposure of human life and property to natural hazards.~~

~~Policy 5-1.6.4: Existing Infrastructure in the CHHA. The City shall establish by January 1999 a priority list of infrastructure facilities located in the CHHA which could be relocated, mitigated or replaced should state funding become available for such activities.~~

~~OBJECTIVE 5-1.7: POST-DISASTER REDEVELOPMENT. Beginning in January 1998, the City shall continue to coordinate with the County in providing immediate response to post-hurricane situations pursuant to policy directives cited below.~~

~~Policy 5-1.7.1: Recovery Operations. The City shall coordinate with Indian River County in modifying the Local Peacetime Emergency Plan in order to establish compliance with this objective. The update of the Plan shall include strategies for post-disaster recovery operations.~~

~~Policy 5-1.7.2: Post-Hurricane Assessments. By December 31, 1998 the City Council shall appoint a Recovery Task Force comprised of the City Manager, the Building Official and others as determined by the City Council. The Recovery Task Force shall be responsible for assessing the conditions following a hurricane or other similar disaster and shall propose strategic actions necessary to establish order and re-establish communication and basic service delivery systems necessary for health, safety, and welfare. Within ninety (90) days after appointment of the Recovery Task Force, the Task Force shall meet to determine a management framework for resolving issues confronted in times of a natural disaster. The management framework shall be reviewed with the County Civil Defense Officer for compliance with the Local Peacetime Emergency Plan and shall be presented to the City Council for review and approval. The management plan should provide a basis for executing the following activities during times of natural disaster.~~

- ~~a. Establishing a temporary moratorium on building activity;~~
- ~~b. Reviewing and deciding upon emergency building permits;~~
- ~~c. Coordinating with State and Federal officials to prepare disaster assistance applications;~~
- ~~d. Analyzing and recommending to the City Council hazard mitigation options, including reconstruction or relocation of damaged public facilities;~~
- ~~e. Developing a redevelopment plan including limitations on redevelopment in areas of repeated damage; and~~

~~f. Recommending amendments to the Local Peacetime Emergency Pinn and other appropriate policies and procedures.~~

~~Policy 5-1.7.3: Repair and Clean-up. In planning post-disaster redevelopment activities, factors to be considered in order to protect the public health and safety shall include:~~

- ~~a. Repairs to potable water, wastewater and power facilities;~~
- ~~b. Removal of debris;~~
- ~~c. Stabilization or removal of structures in a perilous condition; and~~
- ~~d. Minimal repairs to make structures habitable.~~

~~These considerations shall receive first priority in determining the appropriateness of emergency building permits. Long term redevelopment activities shall be postponed until the Recovery Task Force has coordinated immediate repair and clean-up operations.~~

~~Policy 5-1.7.4: Hazard Mitigation and Comprehensive Plan Amendments. The Recovery Task Force shall propose any needed Comprehensive Plan amendments which reflect the recommendations contained in any inter-agency hazard mitigation reports or other reports prepared pursuant to §406, Disaster Relief Act of 1974 (PL 93-288).~~

~~Policy 5-1.7.5: Redevelopment Activities. Beginning in January 1998, the LDRs shall require the redevelopment of any structure within the City that received storm damage in excess of fifty (50%) percent of its appraised value to meet all current laws and ordinances, including those enacted since construction of the subject structure.~~

~~Policy 5-1.7.6: Establish Public Facilities Review Committee. By December 31, 1998, the City Council shall designate the Recovery Taskforce as the City's designated Public Facilities Review Committee charged with the responsibility for reviewing available alternatives for managing damaged public facilities following a hurricane event. The Committee shall evaluate future options for such facilities, including, but not limited to, abandonment, repair in place, relocation, and reconstruction, with structural modifications. The Committee shall consider these options based on the following considerations:~~

- ~~a. Cost to construct;~~
- ~~b. Impacts on the environment;~~
- ~~c. Cost to maintain;~~
- ~~d. Public sector, and e. Recurring damages;~~
- ~~f. Other relevant factors. d. Impacts on land use;~~

~~OBJECTIVE 5-1.8: HISTORIC RESOURCES. The City shall assure that there shall be no loss of historic resources on City owned property and land development regulations shall assure that historic resources on private property shall be protected, preserved, or re-used in a manner sensitive to the historic properties of the site and/or structure. The City's Historic Resources are listed in Appendix B of the Housing Element.~~

~~Policy 5-1.8.1: Promote Identification of the City's Historic, Archaeological, and Cultural Resources. The City shall coordinate with the State Division of Historic Resources and the Sebastian River Historical Society in continuing to identify, protect, analyze, and explain the City's historical, archaeological, and cultural resources. Such efforts shall include determination of their worth and vulnerability, as well as determination of specific applicable preservation management policies.~~

~~Policy 5-1.8.2: Performance Standards for Protecting Sites of Historic or Archaeological Significance. Land development regulations shall include precautions necessary to prevent the~~

following adverse impacts to historic or archaeological sites of significance:

- ~~a. Destruction or alteration of all or part of such site;~~
- ~~b. Isolation from, or alteration of the surrounding environment;~~
- ~~c. Introduction of visual, audible, or atmospheric elements that are out of character with a property or alter its setting;~~
- ~~d. Transfer or sale of the site of significance without adequate conditions or restrictions regarding preservation, maintenance, use, or re-use;~~
- ~~e. Vegetation removal shall not be permitted on a historic or archaeological site unless the vegetation to be removed is a part of a duly authorized scientific excavation, or is a part of an approved development plan; and~~
- ~~f. Other forms of neglect resulting in resource deterioration.~~

~~Policy 5-1.8.3: Alternatives to Preserving Historic or Archaeological Sites. As an alternative to preserving historic or archaeological sites, the owner of impacted lands may allow excavation of the site by the Division of Historic Resources or another State approved entity prior to development. Should a site be scientifically excavated in this manner, development may proceed following completion of the scientific excavation by the approved entity.~~

~~OBJECTIVE 5-1.9: PUBLIC SERVICES IN COASTAL AREA. The level of service standards, service areas, and proposed phasing stipulated in other elements of the Comprehensive Plan for facilities in the coastal area and additional standards under this objective shall be applied whenever development orders or permits are requested. This objective shall be measured through the implementation of the following policies.~~

~~Policy 5-1.9.1: Ensure Available Infrastructure and Coordinate Timing and Staging of Public Facilities with Private Development By December 31, 1998, the City shall have adopted land development regulations which shall ensure that future development is directed only to those areas where public facilities which meet the City's adopted level of service standards are available concurrent with the impacts of the development. In order to assure appropriate timing and staging no occupancy permit shall be granted until infrastructure and services required by respective developments are in place and available for use concurrent with the impacts of development. The infrastructure shall be designed in a manner consistent with the existing and projected future demands generated by development projected in the future land use element. The infrastructure shall also be consistent with applicable local, regional and State coastal resource protection policies.~~

~~OBJECTIVE 5-1.10: INTERGOVERNMENTAL COORDINATION WITHIN THE COASTAL AREA. Establish an intergovernmental coordination mechanism in order to manage coastal resources within the jurisdiction of more than one local government or public agency and assist in implementing appropriate portions of existing multi-jurisdictional resource planning and management plans addressing the coastal area, including the Indian River Lagoon and other natural systems within the City.~~

~~POLICY 5-1.10.1: IMPLEMENTING POLICIES FOR INTERGOVERNMENTAL COORDINATION WITHIN THE COASTAL AREA. The City shall coordinate with Indian River County and appropriate regional, State, and federal agencies in managing coastal resources. Management activities shall include, but not be limited to, the following:~~

- ~~a. The City shall coordinate the following coastal resource management issues with Indian River County:~~

- ~~i. Participate in County forums and technical review concerning emergency preparedness and hurricane evacuation issues and update of the Peacetime Emergency Plan, including hurricane evacuation plans.~~
  - ~~ii. Participate in technical review and in formulation of policies concerning the U.S. 1, C.R. 512, and Roseland Road (C.R. 505) corridors, including stormwater management policies within these corridors. This activity shall also be coordinated with the State DOT.~~
  - ~~iii. Public access issues shall be coordinated with Indian River County, including issues surrounding maintenance and improvements.~~
  - ~~iv. Issues surrounding conservation of the shorelines of the Indian River and St. Sebastian River shall be coordinated with Indian River County, and the State DEP as appropriate.~~
  - ~~v. The City shall coordinate resource management within the Indian River Lagoon with Indian River County.~~
- ~~b. Major issues to be coordinated with Indian River County in order to assure that all future development shall be timed and staged to assure that requisite infrastructure and services are available to respective developments concurrent with the impacts of the development.~~
- ~~e. Major issues to be coordinated with the Florida Department of Environmental Protection (DEP) and the St. Johns River Water Management District (SJRWMD) as may be appropriate in managing the following activities, which are occurring within the area that fronts on Indian River Drive, excluding improved open space:~~
- ~~i. The City shall coordinate all development and resource conservation measures impacting the Aquatic Preserve with the DEP as well as other applicable public agencies. These activities shall include, but not be limited to, review of proposed development potentially impacting natural resources, including development petitions for docks, shoreline stabilization, dredging, or other alteration of natural resources under the State's jurisdiction.~~
  - ~~ii. All applications for development activity impacting waters of the State as well as tidally influenced coastal marsh, or other lands under the jurisdiction of the State shall be coordinated with agencies having appropriate jurisdiction.~~
  - ~~iii. The City shall coordinate with technical staff within DEP and SJRWMD in order to assure implementation of sound principles and practices of coastal resource management during the development review process as well as in the formulation of policies impacting coastal resource management.~~
  - ~~iv. The City shall coordinate with the SJRWMD as well as other appropriate State agencies in matters surrounding stormwater management, drainage, water quality and quantity, and consumptive use permitting.~~
- ~~d. The City Growth Management Department shall coordinate with the Treasure Coast Regional Planning Council (TCRPC) in preparing the Comprehensive Plan and amendments thereto in order to assure consistency with the Treasure Coast Regional Planning Council Comprehensive Plan. In addition, the City shall coordinate other planning issues of regional significance with the TCRPC.~~

~~The City shall forward copies of development proposals within the area that fronts on Indian River Drive to public agencies having jurisdiction in the management of potentially impacted natural resources.~~

~~OBJECTIVE 5-1.11: CONTINUING EVALUATION OF COASTAL MANAGEMENT ELEMENT EFFECTIVE-~~

~~NESS. The City shall use the following policies as criteria in evaluating the effectiveness of the Coastal Management Element~~

~~Policy 5-1.11.1: Review the Impact of Changing Conditions on Coastal Management Policy. The~~

~~City shall monitor and evaluate significant changes in the characteristics of natural coastal resources. Policy implications of such changes shall be examined and corrective measures shall be pursued. Coastal management policies shall be refined as needed in order to remain responsive to evolving problems and issues.~~

~~Policy 5-1.11.2: Schedule, Budget and Implement Programmed Activities. The timely scheduling, programming, budgeting and implementation of programmed coastal management activities identified in this Element shall be evidence of the City's effectiveness in carrying out a systematic program for implementing coastal management goals, objectives, and policies.~~

~~Policy 5-1.11.3: Coordinate with Public and Private Sectors. While continually implementing and evaluating the Coastal Management Element, the City shall maintain a process of intergovernmental coordination as well as coordination with private sector groups interested in coastal management policy and programs. The effectiveness of this approach shall be evaluated by the success of coordination mechanisms in resolving coastal management problems and issues.~~

~~Policy 5-1.11.4: Achieve Effective Resolution of Coastal Management Goals, Objectives and Policies. The effectiveness of the Coastal Management Element shall be measured by the City's success in achieving coastal management goals, objectives and policies. The Coastal Management Element incorporates a systematic planning process for identifying coastal management problems and issues and implementing corrective actions.~~

## ~~CHAPTER 6: CONSERVATION ELEMENT~~ (reference §9J-5.013(2), F.A.C.)

~~§6-1 CONSERVATION GOALS, OBJECTIVES, AND IMPLEMENTATION POLICIES. This section stipulates goals, objectives, and implementing policies for the Conservation Element pursuant to 163.3177(6)(d), F.S., and §9J-5.013(2), F.A.C.~~

~~GOAL 6-1: CONSERVATION. THE COASTAL COMMUNITY OF SEBASTIAN SHALL CONSERVE, PROTECT, AND APPROPRIATELY MANAGE THE CITY'S NATURAL COASTAL RESOURCES IN ORDER TO ENHANCE THE QUALITY OF NATURAL SYSTEMS WITHIN THE COMMUNITY.~~

~~OBJECTIVE 6-1.1: PROTECT AIR QUALITY. Beginning in January 1998, the City shall maintain land development regulations including performance standards which ensure that development meets or exceeds the minimum air quality standards established by the Florida Department of Environmental Protection (DEP) and shall establish regulatory programs to prevent and/or minimize non-point sources of air pollution (note: the City has no point sources of air pollution).~~

~~Policy 6-1.1.1: Combat Erosion and Generation of Dust Particles. Land development regulations shall incorporate performance standards which combat erosion and generation of fugitive dust particles. The regulations shall require that measures be taken on building sites or cleared areas which assure that exposed, destabilized, or other altered soil is expeditiously covered with an acceptable erosion control material.~~

~~Policy 6-1.1.2: Air Pollution and Land Use Regulations. The City's adopted land development regulations, including adopted soil erosion and sedimentation controls as well as nuisance abatement standards shall continue to protect against loss of air quality by maintaining land use controls which promote only activities compatible with existing land uses and natural systems and prohibit activities which generate air pollutants and other adverse impacts on the environmentally fragile coastal ecosystem.~~

~~OBJECTIVE 6-1.2: WATER QUALITY AND QUANTITY. Beginning in January 1998, the City shall maintain land development regulations which address water quality and quantity through the implementation of the following policies.~~

~~Policy 6-1.2.1: Water Quality, Surface Water Management and Land Use. Land development regulations shall incorporate the following performance standards in order to protect the quality of the City's water resources and to conform with policies of the Indian River Lagoon SWIM, DEP, and SJRWMD:~~

~~a. Surface water management systems shall be designed and constructed to retain or detain with filtration, as a minimum the stormwater run-off generated from the first one-inch of rainfall over the entire site. The stormwater design standard shall be predicated on the following:~~

~~Off-site: 25-year, 24 hour design storm On-site: 10-year, 24 hour design storm.~~

~~b. A vegetated and functional littoral zone shall be established as part of the surface water management system of lakes occurring on all property. Prior to construction of the surface water management system for any phase of a project, the developer shall prepare a design and management plan for the wetland/littoral zone that will be developed as part of these systems. The plan should:~~

~~i. Include typical cross sections of the surface water management system showing the average water elevation and the -3 foot contour (i.e., below average elevation)~~

~~ii. Specify how vegetation is to be established within this zone, including the extent, method, type and timing of any planting to be provided; and~~

~~iii. Provide a description of any management procedures to be followed in order to assure the continued viability and health of the littoral zone. The littoral zone as established should consist entirely of native vegetation and should be maintained permanently as part of the water management system. As a minimum, 10 square feet of vegetated littoral zone per linear foot of lake shoreline should be established as part of the surface water management system.~~

~~c. Class II Waters (i.e., coastal waterbodies which currently do or have potential for supporting shellfish harvesting. That portion of the Indian River within the City's corporate limits has been classified by DEP as a Class II waterbody) shall be protected by incorporating the following provisions into the City's land development regulations:~~

~~i. Dredging activities shall be limited to approved maintenance dredging and shall minimize adverse impacts on shellfish propagation or harvesting,~~

~~ii. Ensure good water quality by coordinating with the DEP and the SJRWMD in monitoring the quality of stormwater run-off and discharge processes where these agencies have jurisdiction. The City shall notify the appropriate agency with jurisdiction as potential issues or problems are identified by the City. The City's amended land development regulations shall provide performance criteria designed to ensure that new development provides effective and adequate storm-water management improvements concurrent with the impacts of new development.~~

~~iii. Limit the use of Class II waters to water dependent activities that are not contrary to the public interest and satisfy a community need,~~

~~iv. Limit modification of grassbeds only to those cases involving overriding public interest.~~

~~v. Where modification of grassbeds is permitted the City shall assure that:~~

~~(a) A determination of overriding public interest has been demonstrated prior to modification of grassbeds.~~

~~(b) Project run-off and nutrient introduction shall be controlled to prevent an increase in water turbidity.~~

- ~~(c) Projects damaging grassbeds during construction shall incorporate mitigative techniques which re-establish benthic conditions favorable to natural regeneration.~~
- ~~(d) Special attention shall be given to stipulations cited in (a) through (c) above during the development review process. 111e City shall coordinate closely with State and federal agencies during the permitting processes to insure that the intent of these policies is carried out~~

~~Policy 6-1.2.2: Regulate Agricultural Activities to Preserve Water Quality. Land development regulations shall include stipulations requiring that agricultural activities shall:~~

- ~~a. Not be conducted adjacent to existing waterways and surface water management activities and shall comply with all applicable policies of DEP, SJRWMD, and other agencies having appropriate jurisdiction as well as State laws, including administrative rules governing the Indian River Lagoon Aquatic Preserve. Such activities shall not threaten the water quality of the Indian River Lagoon;~~
- ~~b. Maintain natural drainage patterns;~~
- ~~c. Promote the use of surface water supplies for irrigation purposes;~~
- ~~d. Prohibit the expansion of agricultural activities into wetland areas; and~~
- ~~e. Use best management principles and practices in order to reduce pesticide and fertilizer run-off, prevent soil erosion, and preserve water quality.~~

~~Policy 6-1.2.3: Regulate Wastewater Treatment Discharge to Preserve Water Quality. Land development regulations shall incorporate the following performance standards in order to protect water quality:~~

- ~~a. All new residential subdivisions, excluding individual single family houses in existing subdivisions, as well as multiple family and non-residential development within the established service area of the major public wastewater system shall be required to connect to the Indian River County wastewater system pursuant to §20A-17.2(P) of the Land Development Code of the City of Sebastian. In areas where developments cannot be connected to the public sewer, the development may be allowed to use septic tanks provided that the County Health Department approves and the developer agrees to install dry sewer lines in the development for connection at a later date. The City Council may waive the requirement to install dry lines.~~

~~Policy 6-1.2.4: Preserve and Enhance Lagoon and Canal Shoreline. In order to stabilize areas susceptible to shoreline erosion, such as shorelines along canals and the Indian River Lagoon which are susceptible to erosion, land development regulations shall require that all new development preserve shoreline native vegetation and revegetate areas along shorelines demonstrating historically erosive tendencies.~~

~~Policy 6-1.2.5: Protect Deep and Surficial Aquifer Recharge Areas. The City has no prime deep aquifer recharge areas which have been identified by the St Johns River Water Management District. However, stipulations for protecting surficial aquifer recharge areas shall be incorporated into the City's land development regulations which require retention of open space for all development in order to:~~

- ~~• Preserve the quality and quantity of water resources within the surficial aquifer,~~
- ~~• Promote improved surface water management; and~~
  - ~~Create natural or landscaped urban green space for enhanced community aesthetics and passive pedestrian activities.~~

~~Policy 6-1.2.6: Deep Aquifer Water Conservation. In order to protect the quality and quantity of deep aquifer water resources, the City shall coordinate with the St. Johns River Water~~

~~Management District and other applicable regulatory agencies in identifying the existence and location of free flowing deep aquifer wells and in requiring corrective measures, including capping, plugging, or installing regulatory devices which control the discharge of water from the deep aquifer pursuant to the St Johns River Water Management District policies.~~

~~Policy 6-1.2.7: Protection and Conservation of Potable Water Supply. By December 31, 1998, the City shall amend the land development regulations by incorporating performance criteria for public potable water wellfield protection. In addition, administrative procedures shall require applicants for development to coordinate with the St Johns River Water Management District in obtaining consumptive use permits. In order to comply with potable water conservation policies of the St Johns River Water Management District and achieve a reduction in the current rates of water consumption, the land development regulations shall incorporate the following performance standards:~~

- ~~a. Where reclaimed water is available, potable water supplies may not be used to meet irrigation needs.~~
- ~~b. Require the use of water saving plumbing fixtures on all new development~~
- ~~c. In order to reduce demand for irrigation water (which in turn often places greater demand upon potable water sources), at least thirty (30%) percent of all landscaping material obtained from off-site sources for use on any site should be native plants. Further, at least fifty (50%) percent of all trees used in landscaping shall be native species in order to lessen water demand.~~

~~Policy 6-1.2.8: Emergency Conservation of Water Sources. The City shall coordinate with the St Johns River Water Management District (SJRWMD) in implementing emergency water conservation measures based on the SJRWMD plans for management of the region's water resources.~~

~~Policy 6-1.2.9: Managing Land Use Surrounding Water Well Cones of Influence. By December 31, 1998 the City shall adopt amended land development regulations which contain performance criteria designed to protect potable water supply and quality by restricting land development within public water well cones of influence in order to avoid potential adverse impacts on potable water resources.~~

~~Policy 6-1.2.10: Protect And Conserve Lakes And Estuarine Areas. In order to protect lakes and estuarine areas, such as the Indian River Lagoon, and the St Sebastian River, the City's land development regulations shall include performance criteria designed to regulate against land development activities which adversely impact water quality, contribute to shoreline erosion and sedimentation, or otherwise threaten the long term existence of lakes and estuarine areas. The intent of the regulatory measures shall be to conserve the lakes and estuarine areas and protect these coastal resources from detrimental impacts of development.~~

~~Policy 6-1.2.11: SWIM Program Coordination. Beginning in January, 1998, the City shall continue to coordinate with the St. Johns River Water Management District for purposes of using resources available through the Surface Water Improvement Management (SWIM) program and Indian River Lagoon Comprehensive Conservation and Management Plan in order to enhance water quality especially surface waters which are directed to the Indian River Lagoon.~~

~~OBJECTIVE 6-1.3: MAINTENANCE OF FLOODPLAIN. Beginning in January 1998, the City shall maintain land development regulations which include performance criteria designed to protect the natural functions, including flood-carrying and flood storage capacity, of the 100-year floodplain.~~

~~Policy 6-1.3.1: Enforce Policies to Maintain Floodplain. The City shall continue to enforce its surface~~

~~water management and flood damage prevention regulations, §20A-10.2(H), Land Development Code of the City of Sebastian (as currently exists and as may hereinafter be amended). New development encroaching into the floodplain shall incorporate flood protection measures sufficient to protect against the 100-year flood. The City's Stormwater Management and Flood Protection Ordinance shall maintain consistency with program policies of the Federal Insurance Administration. The City shall monitor new cost effective programs for minimizing flood damage. Such programs may include modification to construction setback requirements or other site design techniques, as well as upgraded building and construction techniques.~~

~~Policy 6-1.3.2: Purchase of Floodplain. The City shall identify and recommend to the State and the St Johns River Water Management District purchase of floodplains that would comply with program guidelines established under the Conservation and Recreation Lands (CARL) Program or the Save Our Rivers (SOR) Program.~~

~~OBJECTIVE 6-1.4: PROTECT AND PRESERVE WETLANDS. Beginning in January 1998, the City shall maintain land development regulations which include performance criteria designed to protect and preserve wetlands from physical and hydrologic alterations as well as specifically direct incompatible land uses away from wetlands. This objective shall be measured through the implementation of the following policies.~~

~~Policy 6-1.4.1: Wetland Development Restrictions. Wetlands, as defined in Policy 5-1.1.1 of the Coastal Management Element shall be protected from physical or hydrologic alterations in order to maintain natural functions. Wetlands have the following functions:~~

~~Wetlands serve important natural biological functions, including food chain production; and general habitat; and nesting, spawning, rearing, and resting sites for aquatic or land species;~~

~~Wetlands are an integral part of natural drainage systems impacting sedimentation patterns, salinity distribution, flushing characteristics, current patterns, and other environmental characteristics;~~

~~Wetlands can be significant in shielding other areas from wave action, erosion, or storm damage. Wetlands serve as valuable storage areas for storm water and flood waters;~~

~~Wetlands can be prime natural recharge areas; and~~

~~Wetlands provide natural water filtration processes which serve to purify water.~~

~~No development shall be permitted in wetlands other than approved passive recreation, open space, restricted accessway, bird sanctuary, natural stormwater retention/detention, natural preserve, or other similar approved uses pursuant to the City's Flood Prone Land and Wetland Preservation Ordinance, §20A-10.2(G), Land Development Code.~~

~~Policy 6-1.4.2: Protection of Wetland Transition Areas. Transition areas shall be defined as the area separating wetland and upland areas and in which development activities may be regulated to protect wetlands. The transition zone is an area having a direct groundwater or surface water influence. The transition area provides a buffer between wetlands and upland development or other land alteration activities. This area shall meet the minimum size requirements established by SJRWMD for wetland buffers. The purpose of the transition zone is to ensure the continuing function of respective wetland~~

~~communities. The City shall retain the right to prohibit development within the wetland transition area. The boundary of a wetland transition area shall be established by field investigation. At a minimum the following uses shall be prohibited within the wetland transition areas:~~

~~All industrial uses;~~

~~Wastewater treatment facilities;~~

Animal feedlots;

Sanitary landfills; • Above-ground or below-ground pipes for pollutants or contaminants;

• Incinerators; • Petroleum or pesticide storage facilities;

• Any land use that stores, handles, or generates hazardous material or waste.

~~Policy 6-1.4.3: Required Dedication of Conservation Easements or Reservations. By December 31, 1998 the City shall amend the land development regulations to include performance criteria designed to protect and preserve wetlands and wetland transition areas. The City shall amend the Subdivision Ordinance and the Wetland Preservation Ordinance to provide for the dedication of conservation easements or reservations where the City finds that the dedication is reasonable in order to protect the value and function of a wetland~~

~~Policy 6-1.4.4: Wetland Delineation (Establishing the Wetland Line). Beginning in January 1998, the City shall include in the LDC a requirement that any development that meets the criteria in Policy 6-1.4.1 conduct a wetland delineation. A delineation of the upland wetland boundary shall be established based upon an on-site field survey by a professional biologist or registered engineer provided by the applicant and coordinated with the St Johns River Water Management District, the Department of Environmental Protection, and/or the US Corps of Engineers. Furthermore, the development shall through a comprehensive planning process identify the types, values, functions, size, conditions, and specific locations of the wetlands on the site.~~

~~Policy 6-1.4.5: Administration of Wetland Development Restrictions. By December 1999, the City shall have adopted land development regulations which implement the following:~~

- ~~1. Review Process. The City shall coordinate with the jurisdictional agencies for purposes of rendering legal, equitable, and environmentally sensitive determinations of the development rights to be permitted on such wetlands and/or lands under the jurisdiction of the State or Federal government. The developer of a parcel of environmentally sensitive land shall be responsible for obtaining permits or exemptions from the Florida Department of Environmental Protection (DEP) and from the Army Corps of Engineers, as may be appropriate, prior to obtaining a development order or development plan review approval from the City. Regardless of permitting by Federal or State permitting agencies, the City shall reserve the right to determine the appropriate land use, density/intensity, and special mitigation measures including, but not limited to, the construction of culverts or other means.~~
- ~~2. Burden on the Applicant. The applicant shall bear the burden of proof in determining that development shall not adversely impact wetlands, transitional wetlands, and other environmentally fragile natural systems. The applicant shall prove that the type, value, function, size, and condition of the wetland will not be adversely impacted. Such determinations shall be based on physical and biological data obtained from specific site investigations by a biologist, an engineer or by an other professional competent in producing data and analysis necessary to support impact assessments.~~
- ~~3. Coordination with Other Agencies. The urban forester, the Indian River County Soil Conservationist as well as representatives of the State Department of Environmental Protection, U.S. Army Corps of Engineers the St Johns River Water Management District, or the U.S. Fish and Wildlife Service may be included during the development review process to assist in identifying and delineating wetlands. Applicants shall have an opportunity to so demonstrate that any wetland designations within the confines of their property no longer function as wetlands as defined above.~~
- ~~4. Waiver for Marginal Wetlands If Mitigated. For small isolated marginal wetlands that the developer is providing viable compensatory preserve areas which mitigate against a loss of~~

~~viable wetland systems, the City may waive the preservation requirements, in and only in, the case of an overriding public interest.~~

~~OBJECTIVE 6-1.5: COMBAT SOIL EROSION. Beginning in January 1998, the City shall maintain land development regulations which include performance criteria designed to reduce the incidence of soil erosion caused by land clearing, breaches in stabilized shorelines, and lands having exposed soil without vegetative cover.~~

~~Policy 6-1.5.1: Implementing Erosion Control. Land development regulations shall require that appropriate measures be taken during land clearing and building operations to assure that exposed, destabilized or otherwise altered soil is equiditionally covered with an acceptable erosion control material. These provisions shall be incorporated in the Subdivision and Tree and Landscape Ordinances.~~

~~OBJECTIVE 6-1.6: PREVENTING POTENTIAL ADVERSE IMPACTS OF FUTURE MINING OF MINERALS~~

~~AND MINERAL EXCAVATION ACTIVITIES. No mining activities, including sand mining, shall be permitted within the City since the City is characterized by natural systems which would potentially receive irretrievable losses from the impacts of such operations.~~

~~Policy 6-1.6.1: Prohibition Against Mining Activities. Land development regulations shall prohibit mining of minerals, except for existing sand mining operations, based on the irretrievable losses which such intense activities may potentially impose on the City's fragile coastal ecosystem as documented in the Comprehensive Plan Data Inventory and Analysis.~~

~~OBJECTIVE 6-1.7: PROTECT NATIVE VEGETATION AND MARINE HABITATS. Beginning in January 1998, the~~

~~City shall maintain land development regulations which include performance criteria designed to protect and retain major vegetative communities and marine habitats.~~

~~Policy 6-1.7.1: Implementing Protection of Vegetative Communities and Marine Habitats. Land development regulations, including the adopted Tree Protection and Landscape Regulations of the City's Land Development Code, shall be used in managing and protecting the impacts of development on major vegetative communities and marine habitats. These regulations shall mandate restoration in order to compensate for unauthorized removal of vegetation and to enhance stabilization of fragile slopes and/or shorelines impacted by development.~~

~~By December 31, 1998 the City shall amend its adopted land development regulations by mandating any wetlands mitigation shall include minimum performance standards in order to enhance regeneration of viable wetlands and wetland vegetative communities.~~

~~Policy 6-1.7.2: Preservation of Native Plant Communities. The City shall amend the adopted land development regulations to ensure compliance with Treasure Coast Regional Planning Council Regional Comprehensive Policy Plan (Policy 10.1.2.2) mandating that new development set aside, as a minimum 25 percent of each native plant community (as identified in the Comprehensive Plan Data Inventory and Analysis. Conservation Element Chapter 6).~~

~~The ordinance shall provide incentives for increased conservation of native plant communities determined by the Treasure Coast Regional Planning Council to be "regionally rare or endangered." Such an incentive program may include, for instance, an exchange which sets aside one (1) unit of "regionally rare or endangered upland" in exchange for two units of common habitat. Such "set asides" of habitat shall be preserved in a viable condition with intact canopy, understory, and ground cover.~~

~~Pursuant to the Treasure Coast Regional Planning Council policy cited above, the City may require payment of a fee in lieu of the above described mandatory "set aside" of habitat. Such cash payment~~

~~may be in the form of an impact fee in lieu of habitat preservation to be accumulated from development for the purchase of upland habitat preservation off-site rather than on-site. Other adjustments may only be granted where compensatory mitigation is provided through revegetation with native plant species compatible with existing plant communities.~~

~~Where payment of an impact fee in lieu of preservation is an allowable option, the impact fee paid should be at least equivalent to: (the average assessed value of one acre of the particular habitat type under consideration within the County the development occurs in) (the number of acres of that habitat type the development was required to set aside but elected to contribute toward preservation off-site). Such impact fees shall be payable to the City prior to commencement of development on-site.~~

~~POLICY 6-1.7.3: REMOVAL OF UNDESIRABLE EXOTIC VEGETATION. The City shall amend the adopted Tree Protection Ordinance to require that, prior to the issuance of a certificate of occupancy for a new development, the owner/applicant shall remove all nuisance and invasive exotic vegetation on the subject property.~~

~~Policy 6-1.7.4: Removal of Trees Causing Safety Hazard. The City shall amend its land development regulations to require that trees, such as Australian Pines, which are prone to wind damage and blockage of evacuation routes be removed from areas deemed by the City to be critical corridors for evacuation purposes. This policy shall be implemented concurrent with the above stated policy 6-1.7.2. In addition, the City shall consider the feasibility of imitating a similar program to remove any trees on public property which impose a critical impediment to evacuation routes.~~

~~Policy 6-1.7.5: Protection of Manatee Habitats. The City shall promote protection of manatee habitats in a manner consistent with guidelines of the Marine Research Institute of the State Department of Environmental Protection. For instance, the City shall comply with the following State Guidelines:~~

- ~~• The City of Sebastian shall assist Indian River County, the Department of Environmental Protection, the U.S. Fish and Wildlife Service, and other State and federal agencies, in developing an area-specific manatee protection plan and marina siting plan in order to ensure long-range manatee and habitat protection.~~
- ~~• Permit applications for all boating facilities, including single family docks and dry storage, shall be evaluated in the context of cumulative impacts on manatees and marine resources.  
Construction and expansion of multi-slip docking facilities and boat ramps shall be directed to locations where there is quick access to deep, open water, where the associated increase in boat traffic will be outside the areas of high manatee concentration, and where wetlands supporting manatee habitat will not be disturbed.  
The City shall assist DEP in distributing State publications and educational materials on coastal and marine resource conservation, and manatees in particular, to boaters, and assist the display of such materials.~~
- ~~• Slow or idle speed zones shall be adopted, with or without channel exemptions as appropriate, in areas frequented by manatees. Enforcement of speed zones should be improved.  
The City shall assist DEP in protecting manatees from injury and disturbance resulting from aquatic commercial and recreational activities. Manatee food requirements shall be taken into account in all aquatic plant management activities where manatees may occur.  
The City shall assist DEP in ensuring the protection of habitat of special significance to manatees.~~

~~OBJECTIVE 6-1.8: PROTECTING FISHERIES, WILDLIFE AND WILDLIFE HABITATS. By December 31, 1998~~

~~the City shall have adopted land development regulations which include performance criteria which limits disturbance of seagrass beds, wetlands, habitats of endangered or threatened species. The performance criteria shall protect fisheries, wildlife, and wildlife habitats from the adverse impacts of development by regulating the location, density, and intensity of those activities which cause the~~

adverse impact. The City shall enforce these land development regulations and shall coordinate with Indian River County, the SJRWMD, and the State in promoting protection of fisheries, wildlife, and wildlife habitats. In order to prevent "taking" of private property rights, the City's land development regulations shall provide for flexible development alternatives, including planned unit developments which shall mandate conservation of said resources while allowing more flexible development options on developable portions of the site. This Objective shall be measured through the implementation of the following policies.

~~Policy 6-1.8.1: Manage the Impacts of Development on Fisheries. The City shall incorporate procedures for coordinating with the Florida Game and Freshwater Fish Commission, and DEP, as appropriate, in reviewing the implications of development proposals, including proposed subdivisions and site plan review petitions. Such coordination shall be designed to assist in identifying potential adverse impacts of proposed development on marine habitats and fisheries. The City shall incorporate performance standards into land development regulations which are designed to preserve the water quality within the Indian River Lagoon and which protect marine grassbeds, coastal marshes, and mangroves in order to preserve marine habitats and fisheries.~~

~~Policy 6-1.8.2: Protect Wildlife and Wildlife Habitats. By September 1990 the City shall amend the land development regulations to incorporate provisions which restrict development activities known to adversely impact endangered, threatened, or rare wildlife and wildlife habitats as well as wildlife and wildlife habitats of special concern as defined in Table VI-I of the Conservation Element data inventory and analysis. The City shall further protect wildlife and wildlife habitats by promoting the dedication of conservation easements or reservations as specified herein in Policy 6-1.4.3.~~

~~Policy 6-1.8.3: Protection of Living Marine Resources. The City shall have adopted by December 31, 1997 land development regulations which require estuarine shoreline developments to avoid adverse impacts of development on seagrass beds and coastal marsh. Since these areas are sensitive to increased turbidity and other forms of pollution, water runoff and introduction of nutrients shall be regulated through effective water quality management criteria. Plans for development impacting marine resources shall be coordinated with state agencies having jurisdiction prior to the City granting plan approval and/or prior to release of any permit for construction. Compensatory mitigation may be permitted in cases of overriding public benefit where State agencies having appropriate jurisdiction approve the mitigation measures proposed by the developer. Any such development shall ensure continuance and maintenance of essentially natural conditions in order to further propagation of fish and wildlife as well as public recreation opportunities.~~

~~Policy 6-1.8.4: Site Plans Required For Developments in Estuarine Shoreline Areas. The City shall have adopted by December 31, 1997 land development regulations which require all applicants proposing development activities along the estuarine shoreline or within submerged areas to submit a site plan pursuant to site plan review regulations. Such site plan shall provide sufficient information describing marine life potentially impacted by proposed land uses as well as related construction activity. The plan shall stipulate assurances that the proposed project shall not adversely impact marine life or water quality. For instance, water quality control techniques such as the use of weirs for purposes of managing turbidity may be required by the City. In addition, the City shall require surveys of existing conditions, specifications of planned site improvements, and techniques to be used during construction as well as in operating and maintaining the land use in order to prevent damage to living marine organisms.~~

~~Policy 6-1.8.5: Uses Within the Estuarine Shorelines. The City shall have adopted by December 31, 1997 land~~

~~development regulations which prohibit any development within the wetland estuarine shoreline, other than water dependent native shoreline vegetation programs, approved pervious or elevated accessways, or other uses approved by the City pursuant to other City regulations shall be permitted. No structures which constrict water circulation in the lagoon shall be permitted.~~

~~OBJECTIVE 6-1.9: PROTECT CONSERVATION LAND RESOURCES. By December 31, 1998~~

the City shall have

~~adopted land development regulations which include performance criteria designed to ensure that designated conservation land resources, are protected based on locally determined criteria which further the goals, objectives and policies of the Conservation Element. This Objective shall be measured through the implementation of the following policies.~~

~~Map I-9 specifically includes areas reserved for conservation uses or restricted development Table I-1 in the land use element provides a tabular summary of existing and projected future use of natural and historical resources. This table includes areas reserved for conservation uses or restricted development Table I-1, footnote #1, incorporates a list of existing land development regulations that presently regulate and shall in the future continue to regulate use of natural resources. All natural and historic resources identified in Map I-9 and Table I-1 shall either remain undeveloped or shall undergo "restricted development." "Restricted development" shall be regulated through performance criteria within the amended Land Development Regulations and through objectives and policies contained in the adopted Comprehensive Plan.~~

~~Policy 6-1.9.1: Designation of Environmentally Sensitive Areas. In Policies 6-1.8 and 6-1.9 estuarine shoreline resources, wetlands, and upland habitats are addressed including the regulatory framework through which the City intends to manage, protect and preserve the resources. The Future Land Use Map series identifies these environmentally sensitive systems. Other lands shall be subject to restricted development as defined in Objective 6-1.9.~~

~~OBJECTIVE 6-1.10: HAZARDOUS WASTE MANAGEMENT. The City shall coordinate with Indian River County as well as appropriate State and regional agencies in developing effective plans for managing hazardous waste (Note: No hazardous waste pollutants or sites currently exist within the City). Beginning in January 1998, the City shall maintain land development regulations which prohibit the following land uses and activities within wellfields and aquifer recharge areas as well as any area where it would adversely impact natural resources:~~

- ~~n. Sanitary landfills;~~
- ~~b. Animal feedlots;~~
- ~~c. Incinerators~~
- ~~d. Wastewater treatment facilities;~~
- ~~e. Petroleum or pesticide storage facilities;~~
- ~~f. Aboveground or belowground pipes for pollutants or contaminants.~~
- ~~g. All other land uses that store, handle, or generate hazardous materials or wastes. Hazardous materials or wastes, as regulated by this section shall consist of the following:~~
  - ~~• Chapter 38F-41 of the Florida Administrative Code (the Florida Substance List).~~
  - ~~• Title 40 of the Code of Federal Regulations Part 261 (Identification and Listing of Hazardous Wastes).~~
  - ~~• Title 40 of the Code of Federal Regulations Part 302.4 (Table 302.4) (List of Hazardous Substances and Reportable Quantities).~~
  - ~~• Title 40 of the Code of Federal Regulations part 355, Appendix A and B (List of Extremely Hazardous Substances).~~

~~Policy 6-1.10.1: Managing Hazardous Waste. The City shall continue to enforce land development regulations which incorporate development restrictions directed toward preserving natural systems and accommodating only low intensity land use activities identified in the Land Use Element. Therefore, the City does not anticipate that hazardous waste shall threaten the City's natural resources. Nevertheless, the City shall continue to work with the County and appropriate State and regional agencies in developing an improved areawide solid waste management program which includes more innovative solid waste management technologies that save energy and/or produce renewable energy and effectively manage hazardous waste.~~

~~OBJECTIVE 6-1.11: INTERGOVERNMENTAL COORDINATION FOR MANAGING CONSERVATION~~

~~ACTIVITIES. Establish an intergovernmental coordination mechanism in order to manage natural resources and assist in implementing appropriate laws, ordinances, and plans of existing State, regional and local agencies sharing responsibilities for managing natural resources within the City.~~

~~Policy 6-1.11.1: Implementing Policies for Intergovernmental Coordination in Managing Conservation Activities. The Coastal Management Element identifies policies for coordinating planning issues surrounding natural resources within the City. These policies shall be applied in managing intergovernmental activities associated with protecting, conserving, and preserving natural resources within the City.~~

~~OBJECTIVE 6-1.12: CONTINUING EVALUATION OF THE CONSERVATION ELEMENT EFFECTIVENESS.~~

~~The City shall use the following policies as criteria in evaluating the effectiveness of the Conservation Element.~~

~~Policy 6-1.12.1: Review the Impact of Changing Conditions on Conservation Policy. The City shall monitor and evaluate significant changes in the characteristics of natural resources within the City. Policy implications of such changes shall be examined and corrective measures shall be pursued. Conservation policies shall be refined as needed in order to remain responsive to evolving problems and issues.~~

~~Policy 6-1.12.2: Schedule, Budget and Implement Programmed Activities. The timely scheduling, programming, budgeting and implementation of programmed conservation activities identified in this Element shall be evidence of the City's effectiveness in carrying out a systematic program for implementing conservation goals, objectives, and policies.~~

~~Policy 6-1.12.3: Coordinate with Public and Private Sectors. While continually implementing and evaluating the Conservation Element the City shall maintain a process of intergovernmental coordination as well as coordination with private sector groups interested in conservation policy and programs. The effectiveness of this approach shall be evaluated by the success of coordination mechanisms in resolving conservation problems and issues.~~

~~Policy 6-1.12.4: Achieve Effect Resolution of Conservation Goals, Objectives and Policies. The effectiveness of the Conservation Element shall be measured by the City's success in achieving conservation goals, objectives and policies. The Conservation Element incorporates a systematic planning process for identifying conservation problems and issues and implementing corrective measures.~~

~~OBJECTIVE 6-1.13: ESTUARINE SHORELINE PROTECTION. The City shall have adopted land development regulations which protect the water quality of the estuary by protecting the shoreline. This objective shall be implemented through the following policies.~~

~~Policy 6-1.13.1: Protection Against Potential Adverse Impact on Estuarine Shoreline. By December 31, 1997, the City shall adopt land development regulations which require applicants for development along lakes, natural waterways, or the estuarine shoreline to submit as part of the development review process plans which demonstrate how the development shall incorporate feature designed to protect against potential adverse impacts to: *Shoreline vegetation and stabilization; Water quality; Native habitat; Living marine resources; and Shoreline access.* No shoreline development shall be approved until the applicant has demonstrated that potentially adverse impacts shall be prevented or that compensatory mitigation shall occur.~~

~~Policy 6-1.13.2: Shoreline Vegetation and Stability. By December 31, 1997, the City shall adopt land development regulations which require a duly authorized permit to remove vegetation from a~~

~~shoreline. Where the City approves shoreline alterations, the applicant shall be required to re-vegetate, stabilize, and enhance damaged estuarine shorelines by planting native vegetation, including mangrove and/or appropriate native estuarine plant species which:~~

- ~~i. Contribute to marine productivity and water quality;~~
- ~~ii. Offer protection from erosion and flooding; and~~
- ~~iii. Contribute to the natural soil building process.~~

~~Policy 6-1.13.3: Hardening of Shoreline. By December 31, 1997, the City shall adopt land development regulations which prohibit the hardening of the Indian River Lagoon shoreline or the shoreline of the St. Sebastian River with rip-rap, bulkheads or other similar devices, except where erosion constitutes a critical peril to upland property and the use of vegetation has failed to stabilize the shoreline. Such shoreline hardening structures shall generally not be vertical seawalls or bulkheads. The specific location and design of such structures shall:~~

- ~~i. Comply with the best management principles and practices and be accomplished by use of the least environmentally damaging methods and designs possible;~~
- ~~ii. Avoid a vertical slope which generates erosive tendencies, especially to adjacent unprotected shoreline properties. Pervious interlocking tile systems, filter mats, and similar stabilization methods shall be used in lieu of vertical walls whenever feasible;~~
- ~~iii. Not be located waterward of the mean high water line except when it is shown to be in the public interest;~~
- ~~iv. Approval conditioned upon receiving approval from other public agencies having jurisdiction; and~~
- ~~v. Incorporate a program of shoreline vegetation or revegetation in order to build, enhance, and stabilize 11 natural shoreline.~~