

# CHAPTER 157: NATURAL RESOURCE PROTECTION

## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
<b>GENERAL PROVISIONS</b>	
157.01 Purpose and Intent.....	1
157.02 Relationship to Other Requirements .....	1
157.03 Compliance When Subdividing Land.....	1
<b>WETLAND PROTECTION</b>	
157.04 Findings.....	1
157.05 Purpose.....	2
157.06 Definitions .....	2
157.07 Site Plans; Contents.....	2
157.08 Determination of Wetlands .....	3
157.09 Buffer Zones.....	3
157.10 Permitted Uses and Activities.....	4
157.11 Protection Standards.....	4
157.12 Mitigation.....	5
157.13 Standards.....	5
157.14 – 157.20 Reserved	
<b>WILDLIFE PROTECTION</b>	
157.21 Findings.....	6
157.22 Purpose.....	6
157.23 Definitions .....	6
157.24 Survey Required .....	7
157.25 Exemptions .....	7
157.26 Management Plan .....	8
157.27 Management Plan Approval .....	9
157.28 Designation of Preservation Area.....	9
157.29 – 157.35 Reserved	

SECTION

PAGE

**HABITAT PROTECTION**

157.36 Findings.....9  
157.37 Purpose.....9  
157.38 Definitions .....10  
157.39 Required Preservation of Habitat .....10  
157.40 Other Preservation Areas.....12  
157.41 Management Plan .....12  
157.42 Designation of Preservation Areas.....12  
157.43 – 157.50 Reserved

**MANGROVE PROTECTION**

157.51 Findings.....13  
157.52 Purpose and Intent.....13  
157.53 Definitions .....13  
157.54 Protection During Development .....14  
157.55 Permit Required .....14  
157.56 Exceptions.....14  
157.57 Submission of Application .....15  
157.58 Review of Application .....15  
157.59 Standards for Mangrove Alteration.....15  
157.60 Conditions on a Mangrove Alteration Permit .....16  
157.61 Terms.....17  
157.62 Penalties .....17  
157.63 – 157.70 Reserved

**PUBLIC INTEREST TEST**

157.71 Findings.....17  
157.72 Purpose.....18  
157.73 Applicability .....18  
157.74 Standards.....18  
157.75 Determinations .....19  
157.76 – 157.80 Reserved

SECTION

PAGE

**SOIL, EROSION AND SEDEMENT CONTROL**

157.81 Findings.....20  
157.82 Purpose.....20  
157.83 Erosion Control Plan .....21  
157.84 Standards.....21  
157.85 Exemptions .....22  
157.86 Violations.....22  
157.87 – 157.95 Reserved

**HISTORIC AND PREHISTORIC RESOURCE PROTECTION**

157.96 Findings.....22  
157.97 Purpose.....22  
157.98 Definitions .....23  
157.99 Permit Required .....23  
157.100 Site Review Procedure.....23  
157.101 Criteria for the Identification of Prehistoric and Historic Sites.....24  
157.102 Criteria for Designation of Prehistoric and Historic Sites as Significant.....24  
157.103 Historic Significance .....24  
157.104 Site Assessment Survey for Historic Resources .....25  
157.105 Archeological Significance .....25  
157.106 Site Assessment Survey for Prehistoric Resources .....26  
157.107 Mitigation of Impacts .....26  
157.108 Human Burial Sites.....27  
157.109 Sensitive Re-Use of Designated Historic Structures .....27  
157.110 Appeal to City Council.....27  
157.111 – 157.120 Reserved

**SHORELINE USE**

157.121 Priorities for Shoreline Land Use.....28  
157.122 Estuarine Beaches .....28  
157.123 Shore Protection Structures .....30  
157.124 – 157.130 Reserved

SECTION

PAGE

**MARINA SITING CRITERIA**

157.131 Findings.....32  
157.132 Purpose.....32  
157.133 Marina Siting Criteria.....32  
157.134 – 157.145 Reserved

**STORMWATER MANAGEMENT**

157.146 Purpose and Intent.....36  
157.147 Definitions .....36  
157.148 General Provisions.....37  
157.149 Exemptions .....37  
157.150 Standards.....37  
157.151 Stormwater Management Plan.....38  
157.152 Stormwater Management System Requirements.....39  
157.153 – 157.160 Reserved

**MISCELLANEOUS**

157.161 Mining.....40  
157.162 Floodplain Protection.....41

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## **CHAPTER 157: NATURAL RESOURCE PROTECTION**

### **GENERAL PROVISIONS**

#### **§ 157.01 PURPOSE AND INTENT**

(A) The purpose of this chapter is to establish those resources or areas of a development site that must be protected from the harmful effects of development.

(B) It is the intent of this chapter to ensure that proposed development is consistent with the city's Comprehensive Plan.

#### **§ 157.02 RELATIONSHIP TO OTHER REQUIREMENTS**

In addition to meeting the requirements of this chapter and other applicable city regulations, development plans shall comply with all applicable federal, state, county, and water management district regulations.

#### **§ 157.03 COMPLIANCE WHEN SUBDIVIDING LAND**

Each lot of a proposed subdivision must include a site suitable for constructing a structure in conformity with the standards of these requirements.

### **WETLAND PROTECTION**

#### **§ 157.04 FINDINGS**

(A) Native wetland vegetation.

(1) Helps protect shorelines against erosion;

(2) Provides habitat for a diverse community of plants and animals including species listed by the state as endangered, threatened, and species of special concern;

(3) Plays a fundamental role in estuarine nutrition by providing concentrations of organic matter which are utilized by marine organisms within the estuarine food web;

(4) Provides a nesting and resting ground for species of migratory birds;

(5) Is aesthetically appealing and can be reasonably incorporated as an asset into the landscaping of waterfront residences;

(6) Maintains and improves the quality of surface water.

(B) Upland areas directly adjacent to wetlands have an important effect on the water quality, wildlife habitat, and vegetative maintenance of adjacent wetlands.

**§ 157.05 PURPOSE**

It is the purpose of this subchapter to provide protection of wetlands and adjacent upland areas by establishing special buffer zones.

**§ 157.06 DEFINITIONS**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**NATIVE UPLAND VEGETATION.** Indigenous vegetation typically adapted for life in non-wetland areas.

**NATIVE WETLAND VEGETATION.** Indigenous vegetation typically adapted for life in saturated soil conditions and characterized by wetland species listed in Chapter 17-3, Florida Administrative Code.

**WETLANDS.** Hydrologically sensitive areas which are identified as being inundated or saturated by surface or ground water with a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands shall also be defined as those areas within the regulatory jurisdiction of the Florida Department of Environmental Regulation (DER), pursuant to Florida Statutes 403 and Florida Administrative Code, Chapter 17-3, 17-4, 17-12. Wetlands generally include swamps, bogs, and similar areas.

**§ 157.07 SITE PLANS; CONTENTS**

Development adjacent to wetland areas shall be required to submit as part of the site plan approval process:

(A) Maps which identify the location and extent of wetlands located on the property;

(B) Explanation of how the development plan will ensure that pre-development water flow, circulation, and water quality will be maintained after development is completed;

(C) Provision for wetland mitigation when applicant has shown that the wetlands must be altered in order to allow reasonable use of the property.

**§ 157.08 DETERMINATION OF WETLANDS**

(A) Wetland boundaries shall be the most landward extent of the following areas:

- (1) Areas within the dredge and fill jurisdiction of the DER as authorized by § 403 of the Florida Statutes.
- (2) Areas within the jurisdiction of the U.S. Corps of engineers as authorized by § 404, Clearwater Act, or § 10, River and Harbor Act.
- (3) Areas within the jurisdiction of the South Florida Water Management District.
- (4) All lands generally defined as Wetland Communities in the City's Comprehensive Plan.
- (5) All wet areas, regardless of size, which are utilized by species listed by the state as endangered, threatened, or species of special concern.

(B) The owner of the property shall submit a determination of wetland boundaries to the Site Plan Review Committee for approval. The determination shall include:

- (1) An adequate description of the land the developer wishes to develop;
- (2) The nature of the owner's right to ownership or control of the land; and,
- (3) Methods used to determine boundaries per regulations in this section.

**§ 157.09 BUFFER ZONES**

(A) A buffer zone of native upland vegetation shall be provided and maintained around wetland and deepwater habitats which are constructed or preserved on new development sites.

- (1) For all wetlands except man-made canals, the buffer zone shall:
  - (a) Extend at least 15 feet landward from the wetland perimeter in all places;
  - (b) Average 50 feet from the landward edge of all wetland perimeters.

(B) For all man-made canals, the buffer zone shall extend ten feet from the landward edge of all wetland perimeters.

**§ 157.10 PERMITTED USES AND ACTIVITIES**

The following uses may be permitted in wetland and buffer zones:

(A) Minor maintenance and repair of existing structures or improved areas provided such structures or improved areas are not expanded.

(B) Docks, piers, walkways, and open boat shelters pursuant to other provisions of this Code and the requirement of applicable state permitting agencies.

(C) Recreation.

(D) Fish and wildlife management.

(E) Open space.

**§ 157.11 PROTECTION STANDARDS**

(A) Removal or alteration of native wetland vegetation is prohibited, except as otherwise permitted in this subchapter, §§ 157.51 through 157.62, or by appropriate federal, state, and regional permitted agencies.

(B) No construction of impervious surfaces shall be permitted in the buffer zone except as specifically provided for in this code.

(C) Fertilization and the use of pesticides is prohibited in the buffer.

(D) Rural, Estate, and Single-family residential zoning categories of development shall provide a grassy swale landward of, parallel and adjacent to, the required buffer zone.

(E) Development of other than low density uses shall meet the requirements of all applicable state, federal, or water management district regulations governing the volume and quality of discharge.

(F) Pursuant to §§ 157.81 through 157.86, siltation and erosion control measures shall be used during and after constructions.

**§ 157.12 MITIGATION**

General.

(A) Compensatory mitigation by which environmentally sensitive lands are purchased, created, enhanced, and/or restored to compensate for the loss of such lands, is required whenever wetlands are destroyed or degraded.

(B) The purchased, created, enhanced, or restored environmentally sensitive lands must be of the same type as that destroyed or degraded.

(C) A developer of a compensatory mitigation plan shall grant a conservation easement on the newly purchased, created, enhanced, or restored environmentally sensitive lands to protect them from future development.

**§ 157.13 STANDARDS**

(A) Mitigation shall be subject to the approval of the Site Plan Review Committee.

(B) Compensatory wetland mitigation shall require that the amount of wetlands purchased, created, enhanced, or restored, be large enough to assure that the amount of wetlands destroyed or degraded will be completely and successfully replaced. The following ratios of replacement to destroyed wetlands shall be presumed to provide minimal reasonable assurances for type-for-type mitigation, however, more mitigation may be required by the Site Plan Review Committee upon recommendation of the Urban Forester:

<u>Type of Destroyed Wetlands</u>	<u>Mitigation Ratio</u>
(1) Swamp hammock	2.5:1
(2) Hardwood Swamp	2.5:1
(3) Bayheads and Bogs	2.5:1
(4) Mangroves	2.5:1
(5) Riverine Cypress	2.0:1
(6) Cypress Pond	2.0:1
(7) Wet Prairie	1.5:1
(8) Freshwater Marsh	1.5:1
(9) Salt Marsh	1.5:1

**§§ 157.14-157.10 RESERVED**

**WILDLIFE PROTECTION**

**§ 157.21 FINDINGS**

It is hereby found and determined that:

(A) Various animal species found in the city of Port St. Lucie have been classified by the Florida Game and Freshwater Fish Commission (FGFWFC) as endangered and threatened, reflecting a depletion in population so critical that extinction is possible.

(B) various plant species found in the city have been classified by the Preservation of Native Flora of Florida Act as endangered or threatened, reflecting a depletion in population so critical that extinction is possible.

(C) These listed species may be of aesthetic, ecological, educational, historical, recreational, economic, or scientific value.

(D) The city seeks to preserve a stable ecosystem, which is dependent upon the number and diversity of constituent species.

(E) The protection of these species requires identification of species on development sites, preservation of occupied habitat or approved relocation, protective buffers, and adequate management measures.

**§ 157.22 PURPOSE**

It is the purpose of this subchapter to protect listed animal species within the city from destruction due to development activities.

**§ 157.23 DEFINITIONS**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

(A) **DEGRADATION OF SPECIES.** Degradation of listed species shall be considered to occur when habitat loss would result in elimination of listed species individuals from the area in question. Habitat includes the place or type of site where a species naturally or normally nests, feeds, resides, or migrates.

(B) FLUCCS. Florida Land Use, Cover, and Forms Classified system, published by the Florida Department of Transportation, as amended from time to time.

(C) LISTED SPECIES, ANIMALS. Any animal species indicated as endangered or threatened as found in the "Official Lists of Endangered and Potentially Endangered Fauna and Flora of Florida," Florida Game and Fresh Water Fish Commission, as amended from time to time.

(D) LISTED SPECIES, PLANT. Any plant species indicated as "endangered" or "threatened" in the Preservation of Native Flora of Florida Act, as amended from time to time.

(E) LISTED SPECIES, LIKELY TO OCCUR. Species listed in "appendix B," Conservation Element, Port St. Lucie Comprehensive Plan.

(F) UPLAND. All land areas not defined as wetlands per § 157.08.

#### **§ 157.24 SURVEY REQUIRED**

(A) A general site survey for listed plant and animal species likely to occur on a site shall be required of all properties which meet the following criteria:

- (1) Sites over ten acres;
- (2) Sites over five acres adjacent to wetlands;
- (3) Sites including three acres or more of scrub habitat;
- (4) Sites with known listed plant or animal species.

(B) A site survey for gopher tortoises shall be conducted on all upland properties. If gopher tortoises are identified on the property,, then the property must also b e surveyed for listed species associated with gopher tortoise burrows.

(C) Site surveys must be conducted by qualified ecologist, biologist, or equally qualified individual.

#### **§ 157.25 EXEMPTIONS**

Surveys and Management Plans, as per this subchapter, are not required for properties designated as Developments of Regional Impact (DRI).

**§ 157.26 MANAGEMENT PLAN**

(A) When listed species are identified on development parcels, a management plan will be required to ensure protection of the species.

(B) The management plan shall include:

(1) A map at the scale of the development application including habitat classifications depicted by using FLUCCS; location of individual species, nest sites, dens, burrows, feeding locations, roosting and perching areas, and trails, as appropriate; and areas to be preserved;

(2) Recommended management activities; and,

(3) Specific implementation activities, costs, schedules, and assignment of responsibilities.

(C) In cases where guidelines have been prepared by the FGFWFC for a listed species, those guidelines shall be considered in the preparation of the plan.

(D) The plan must provide for on-site protection of listed species on site unless off-site mitigation is proposed. The following criteria for on-site protection shall apply:

(1) Occupied habitat shall remain free of all development, except development which will not cause degradation of species existing on the site;

(2) Protection areas may be included in required open space and buffer zones as provided for in §§ 157.04 through 157.13 and §§ 157.36 through 157.42.

(3) When protection areas exceed required open space and buffer zones, as described above, by more than 10% of the total remaining developable property, the city shall allow transfer of density/intensity from the protection area to an area not occupied by listed species.

(E) The plan may provide for off-site mitigation of impacts to the species. Off-site mitigation may include relocation of the listed individuals to areas designated as conservation or open space, either on the same property or elsewhere, provided that:

(1) The land is physically suited for the species;

(2) No conflicts exist with other management objectives for the land;

(3) Approval of the location is documented by the agency processing title to the land;

(4) All commensal listed species, as appropriate, are also relocated; and,

(5) All appropriate permits are obtained.

**§ 157.27 MANAGEMENT PLAN APPROVAL**

The management plan shall be approved by the Site Plan Review Committee, following recommendations from the FGFWFC.

**§ 157.28 DESIGNATION OF PRESERVATION AREA**

All preservation areas shall be designated as Open Space-Conservation Areas, as per the provisions of § 158.101.

**§§ 157.29-157.35 RESERVED**

**HABITAT PROTECTION**

**§ 157.36 FINDINGS**

(A) Most wildlife species use more than one vegetative community to obtain their life-sustaining requirements.

(B) Wildlife movement between natural communities is essential for recolonization and maintaining genetic variations in viable populations.

(C) Large, connecting natural systems, which include different vegetative community types, are needed to preserve viable populations of plant and animal species.

(D) Conservation of small areas will not necessarily ensure maintenance of vegetative or wildlife species unless the parcels are connected with part of a larger conservation system.

**§ 157.37 PURPOSE**

It is the purpose of this subchapter to provide for preservation of viable habitats for plants and animals within the city.

## **§ 157.38 DEFINITIONS**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**OPEN SPACE.** Land devoid of any structures or buildings except for minor pavilions, landscape structures, or terraces, and designed and maintained for recreation or leisure-time enjoyment, buffer areas, drainage, or conservation.

**WILDLIFE CORRIDORS.** Areas of open space, preferably well vegetated, which connect conservation areas and allow wildlife traffic between different vegetative communities. Wildlife corridors shall have an average width of at least 150 feet and a minimum width of 50 feet.

## **§ 157.39 REQUIRED PRESERVATION OF HABITAT**

(A) Residential. All residential development subject to site plan approval shall meet the following requirements for provision of open space.

(1) Fifty percent of the total area of each site must remain as open space.

(2) When native vegetative communities exist on the property, at least one-half of designated open space area must remain in native state as a preservation area.

(3) Wildlife corridors shall be provided between preserved areas within development area.

(4) When possible, wildlife corridors shall be provided between preserved areas adjacent to the site, when they exist.

(5) In situations where preserved areas would be ten acres or less, and cannot be connected with other preserved areas which would result in an area ten acres or more, the City Council, upon recommendation of the Site Plan Review Committee, shall consider accepting a monetary donation to a Conservation Trust Fund to be used towards purchase of habitats of ten acres or more. In determining whether to accept a donation in lieu or preservation, the city shall consider the following factors;

(a) Evidence presented by the applicant demonstrating that the preserved habitat would be prohibitively difficult to adequately manage due to the management requirements of the habitat in relation to any of the following factors:

1. Habitat size;
2. Condition of habitat;
3. Influence of urban conditions.

(B) Nonresidential. All nonresidential development subject to site plan approval shall meet the following requirements for provision of open space.

(1) When native vegetative communities exist on the property, at least 25% of the total area of each site must remain as open space kept in its native state as a preservation area;

(2) Wildlife corridors shall be provided between preserved areas within development area;

(3) When possible, wildlife corridors shall be provided between preserved areas on site and preserved areas adjacent to the site, when they exist;

(4) In situations where preserved areas would be ten acres or less, and cannot be connected with other preserved areas which would result in an area ten acres or more, the City Council, upon advice of the Site Plan Review Committee, shall consider accepting a monetary donation to a Conservation Trust Fund or the donations of land to be used towards purchase of habitats of ten acres or more. In determining whether to accept a monetary payment or land donation in lieu of preservation, the city shall consider the following factors:

(a) Evidence presented by the applicant demonstrating that the preserved habitat would be prohibitively difficult to adequately manage due to the management requirements of the habitat in relation to any of the following factors:

1. Habitat size;
2. Condition of habitat;
3. Influence of urban conditions.

(b) Mitigation standards of monetary and land donation. The amount of money donated or uplands purchased, created, enhanced or restored shall be based upon a mitigation ratio of 1.5 times to 1; that is, donation shall be equal to one and one-half (1-1/2) times the amount of uplands destroyed or degraded.

(c) The mitigation fee shall be \$140,000.00 per acre, said fee shall be adjusted upward annually at the rate of five percent (5%) each fiscal year. The upland mitigation fee shall be re-evaluated by the City Council every ten years. The mitigation fee shall be calculated and paid at the time the applicant applies for a clearing permit.

(d) Conservation Trust funds may be used in conjunction with purchase and development of park sites provided that 50% of any property or portion of property purchased with Conservation Trust Funds for a public park shall have upland vegetation and be limited to passive recreation uses only. Conservation Trust Funds may be used for payment of any debts issued for the acquisition of uplands or conservation property. Conservation Trust Funds may also be used for management of upland preserves, development of passive recreation facilities, restoration of uplands, and removal of exotic vegetation from City properties, easements, and rights-of-way.

#### **§ 157.40 OTHER PRESERVATION AREAS**

Other preservation areas required under different provisions of this code may be used toward preserved open space requirements.

#### **§ 157.41 MANAGEMENT PLAN**

A management plan describing how the preserved habitat will be managed shall be presented to the Site Plan Review Committee for approval.

#### **§ 157.42 DESIGNATION OF PRESERVATION AREAS**

All preservation areas shall be designated as Open Space Conservation Areas, as per the provisions of § 158.101.

#### **§§ 157.43-157.50 RESERVED**

## **MANGROVE PROTECTION**

### **§ 157.51 FINDINGS**

Mangroves:

- (A) Help to protect the shoreline against erosion;
- (B) Provide habitat for a diverse community plants and animals, including species listed by the state as endangered, threatened, or species of special concern;
- (C) Play a fundamental role in estuarine nutrition and maintenance of water quality; and,
- (D) Are aesthetically pleasing and can be reasonably incorporated as a landscaping asset for waterfront residence.

### **§ 157.52 PURPOSE AND INTENT**

It is the purpose of this subchapter to protect mangroves in the city from degradation caused by uncontrolled alteration or removal.

### **§ 157.53 DEFINITIONS**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

(A) **ALTER OR ALTERATION OF VEGETATION.** To cut, remove, defoliate, or otherwise destroy mangrove leaves, limbs, stems, roots, or other plan parts, dead or alive.

(B) **MANGROVES.** Any individual, or any portion of any individual, living or dead, of the species *Avicenna germinans* (black mangrove), *Laguncularia racemosa* (white mangrove), *Rhizophora mangle* (red mangrove), AND *Conocarpus erectus* (buttonwood mangrove).

(C) **NATIVE HABITAT.** Habitat which predominantly consists of or is used by those communities of plans, animals, and other flora and fauna which occur indigenously on the land, in the soil, or in the water.

(D) **PROP ROOTS.** The non-leaf producing structures which decent from the trunk and limbs of red mangroves, and which are also known as stilt roots.

(E) REMOVAL. to relocate, cut down, remove, or in any other manner destroy or cause to be destroyed, vegetation.

(F) UNTRIMMED MANGROVES. Mangroves that have not been trimmed over two successive growing seasons.

**§ 157.54 PROTECTION DURING DEVELOPMENT**

During any land development activity, appropriate protective measures as determined by the Urban Forester, shall be taken to prevent the destruction or damaging of mangroves to be retained on the site pursuant to this subchapter.

**§ 157.55 PERMIT REQUIRED**

It shall be unlawful for any person to remove, destroy, or alter any mangrove, or cause to be removed, destroyed, or altered any mangrove without first obtaining a mangrove alteration permit as provided for in this subchapter.

**§ 157.56 EXCEPTIONS**

The requirement of a permit in § 157.55 shall not apply to the following activities:

(A) Mangroves altered by duly constituted communication, water, sewerage, electrical, or other utility companies; and federal, state, municipal or county agencies, or engineers or surveyors working under a contract with these agencies whether the alteration of mangroves is done as a governmental function of the agency, or where the mangrove alteration is:

(1) On or adjacent to rights-of-way owned or controlled by a duly constituted communication, water, sewerage, electrical, or other utility company; or,

(2) Limited to those areas necessary for maintenance of existing lines or facilities, or for construction of new lines or facilities in or adjacent to a public or private easement or right of way, in furtherance of providing utility service; or located on the grounds of previously authorized electric power plant and substations, water treatment plants, or sewage treatment plants in furtherance of providing utility service. all alteration pursuant to this division (A)(2) shall be conducted so as to avoid any unnecessary alteration of mangroves. Unnecessary mangrove alteration shall include any alteration of limbs, branches, or trunks of mangroves which are growing at a height of 15 feet or less above the substrate, except that limbs, branches, and trunks may be trimmed below a height of 15 feet above the substrate within access routes not exceeding three feet in width and spaced not less than 15 feet apart which are necessary to provide access into mangroves.

(B) Alteration of mangroves by Florida licensed land surveyors in the performance of determining survey lines, provided such alteration is limited to a swath of three feet or less in width.

#### **§ 157.57 SUBMISSION OF APPLICATION**

A person desiring a mangrove alteration permit shall submit a written application to the Site Plan Review Committee, such application shall include the following information:

(A) An overall site plan, including the approximate shape and dimensions of the lot or parcel of land, together with existing and proposed driveways, structures and improvements.

(B) Location of all mangroves to be altered.

(C) A statement s to why the trees are to be altered.

(D) A statement as necessary, explaining how mangroves are to be protected during the construction of the development.

#### **§ 157.58 REVIEW OF APPLICATION**

Upon receipt of a complete permit application, the Urban Forester shall visit and examine the site. Within a reasonable period of time, the Site Plan Review Committee shall approve or deny the application, furnishing the applicant with a written statement of the reason for denial.

#### **§ 157.59 STANDARDS FOR MANGROVE ALTERATION**

(A) No approval shall be granted for the removal, alteration, or destruction of mangroves by other than hand-held, non-mechanized means, except as otherwise provided for in this subchapter.

(B) No approval shall be granted for the alteration or removal of any mangrove which serves as a nesting site for native or migratory birds.

(C) Prior to the commencement of any alteration, permits and approvals required by other federal, state, and local agencies must be obtained. Copies thereof must be submitted to the Site Plan Review Committee.

(D) The following rules, as set out in Part I and Part II of 17-321, F.A.C., as amended from time to time, are hereby adopted and incorporated into this subchapter:

(1) Definitions 17-321.010

(2) Prohibitions 17-321.020

(3) Standards for  
Issuance or  
Denial of Permit` 17-321.050

(4) Any other portions of 17-321 F.A.C. which may be applicable to mangrove trimming in the city.

(E) Alterations by other than hand held, non-mechanized equipment are prohibited.

**§ 157.60 CONDITIONS ON A MANGROVE ALTERATION PERMIT**

Mangrove reforestation must meet the following requirements:

(A) When a total removal is requested, the applicant must provide a mitigation strategy. This strategy must include, at a minimum:

(1) Replanting of not less than three times the total land area proposed for alteration, and a replacement of mangroves at a four-to-one (4:1) ratio;

(2) Description of species and spacing;

(3) The location of the reforestation, its elevation and all surrounding vegetation;

(4) A performance bond guaranteeing the success of the reforestation.

(B) Mangroves used for reforestation purposes shall be grown in pots no smaller than three gallons, have no fewer than two lateral branches, and be a minimum of four feet in height at the time of planting.

(C) Maintenance of all mangroves planted for reforestation purposes shall be the responsibility of the property owner. Failure to maintain live growth in plantings shall be considered a violation of this code.

(D) For mangroves that have been altered in violation of this subchapter, or planted to abate a violation of this subchapter, no alterations shall be permitted for a minimum period of five years, and only then if the mangroves have reached a height of eight feet or higher.

**§ 157.61 TERMS**

Mangrove alteration permits shall continue in force for the same period of time, and be subject to the same extension privileges, as provided for building permits.

**§ 157.62 PENALTIES**

(A) No development approval, development permit or certificate of occupancy shall be issued on lands where violations of this section are determined to exist, until such time as appropriate remedial action is agreed to by the city and completed by the owner of the land.

(B) Failure to obtain a permit prior to commencement of work shall result in a \$150 fine for each mangrove removed, and a \$500 fine for each mangrove altered, in addition to any other federal, state, or local fines that may be applied.

(C) Reforestation, as provided for in § 157.60, shall be required for violation of any mangrove protection provisions of this section.

(D) Each individual mangrove unlawfully altered or removed, in violation of the provisions of this section, shall constitute a separate offense.

**§§ 157.63-157.70 RESERVED**

**PUBLIC INTEREST TEST**

**§ 157.71 FINDINGS**

(A) Degradation of natural resources can be caused by development activities and result in loss of valuable natural habitat.

(B) Development of natural resources can also result in beneficial recreational or other resources for the community.

(C) The city of Port St. Lucie hereby finds that a balancing test shall be used to determine whether social, economic, and/or environmental benefits clearly exceed the cost of the natural environment.

**§ 157.72 PURPOSE**

The purpose of the public interest test is to protect the natural environment from degradation except in cases where the benefits to the public outweigh the loss of the resource.

**§ 157.73 APPLICABILITY**

(A) The public interest test shall be applied to the following development activities in the city:

(1) Alterations and construction which degrades existing estuarine productivity, including loss of coastal area wetlands, living marine resources, and wildlife habitat.

(2) For the purposes of this subchapter, potential degradation of natural resources, as described in division (A) above shall be determined to occur under the following circumstances:

- (a) When more than one acre of wetland habitat is removed.
- (b) When more than one acre of listed species habitat is degraded;
- (c) When any mangrove is removed; or
- (d) When shoreline protection structures are constructed.

(B) Projects which fall under the application of the public interest test shall represent a letter to the Site Plan Review Committee responding to each of the standards, outlined below, as applicable.

**§ 157.74 STANDARDS**

The Site Plan Review Committee shall be responsible for applying the following standards in determining if development projects which may negatively affect natural resources are in the public interest.

(A) The following categories represent benefits to the city:

- (1) Provision of public access to natural resource (boat ramps, boat slips, and the like).
- (2) Provision of boating and marina services (repair, pumpout, and the like).

- (3) Improvement and enhancement of public health, safety, and welfare.
- (4) Improvement of public land management.
- (5) Improvement and enhancement of public navigation.
- (6) Improvement and enhancement of water quality.
- (7) Enhancement and/or restoration of natural habitat and functions.
- (8) Protection of endangered, threatened, or unique species.

(B) The following categories represent costs to the city:

- (1) Reduced and/or degraded water quality.
- (2) Reduced and/or degraded natural habitat and function.
- (3) Destruction, harm, or harassment of endangered or threatened species habitat.
- (4) Preemption of public use.
- (5) Increasing navigational hazards and congestion.
- (6) Reduced and/or degraded aesthetics.
- (7) Adverse cumulative impacts.

#### **§ 157.75 DETERMINATIONS**

(A) If a project is determined to be in the public interest, the Site Plan Review Committee shall recommend that a permit, as required by other provisions in this code, be issued.

(B) If a project is determined not to be in the public interest, the Site Plan Review Committee shall recommend general changes to the project, including mitigation, which would increase the benefits of the project. If recommended changes are not considered in a new application, the Site Plan Review Committee shall recommend that a permit, as required by other provisions in this code, not be issued.

#### **§§ 157.76-157.80 RESERVED**

## **SOIL, EROSION AND SEDIMENT CONTROL**

### **§ 157.81 FINDINGS**

(A) Land disturbing activities can cause excessive runoff and accelerate the process of soil erosion, resulting in the damage and loss of natural resources, including the degradation of water quality.

(B) In addition, emissions of particulate matter during construction and demolition, including but not limited incidents caused by vehicular movement, transportation of materials, construction, alteration, demolition, or wrecking of buildings or structures, or the stockpiling of particulate substances, may trespass on neighboring properties, and degrade air quality.

(C) The city hereby finds that:

(1) Excessive quantities of soil may erode from areas undergoing development due to land-disturbing activity.

(2) Soil erosion can result in the degradation of valuable shoreline resources.

(3) Sediment from soil erosion can clog storm sewers and swales, and silt navigational channels.

(4) Sediment and sediment-related pollutants degrade wetland systems, including estuarine wetland systems in the North Fork of the St. Lucie River and the Indian River Lagoon, resulting in the destruction of aquatic life and degradation of water quality.

(5) Airborne sediments can constitute a nuisance for adjacent property owners, and degrade the quality of the air.

### **§ 157.82 PURPOSE**

The purpose of this subchapter is to safeguard persons, protect property, prevent damage to the environment, and promote the public welfare by guiding, regulating, and controlling the design, construction, use and maintenance of any development or other activity which disturbs or otherwise results in the movement of earth on land situated in the city.

### **§ 157.83      EROSION CONTROL PLAN**

No person may engage in land-disturbing activity until a plan has been submitted for erosion and sediment control and such plan has been approved by the city. The following erosion control standards should be incorporated, as appropriate, into the erosion and sediment control plan.

### **§ 157.84      STANDARDS**

(A) No land-disturbing activity during periods of construction or improvement to land shall be permitted to proximity to wetlands or the shoreline of the North Fork of the St. Lucie River unless a buffer zone, as described in §§ 157.04 through 157.13, is provided along the margin of the watercourse.

(B) The angle for graded slopes and fills shall not be greater than the angle which can be retained by vegetative cover, or other adequate erosion-control, devices or structures (generally 4:1 or less). Slopes left exposed will, within ten working days of completion of any phase of grading, be planted or otherwise provided with ground cover, devices, or structures sufficient to restrain erosion.

(C) Groundcover sufficient to restrain erosion must be planted or otherwise provided within ten working days on portions of cleared land upon which further construction activity is not being undertaken within 30 days of clearing.

(D) Vegetative cover or other erosion control devices or structures used to meet these requirements shall be properly maintained during and after constructions.

(E) Temporary seeding or sodding, adequate covering, or chemical application, on exposed soils, including stockpiles of topsoil, sand, or other construction fill, shall be used where delays in construction of more than one day are anticipated.

(F) The "operator" or any construction project that disturbs one acre or more, or is part of the larger common plan of development or sale which disturbs one acre or more, is required to obtain the proper stormwater permit from the Florida Department of Environmental Protection and to comply with all the terms and conditions of the permit, in addition to any city requirements. The city engineer or his or her designee is hereby authorized to issue stop work orders on any site that is not in compliance with the applicable stormwater permit or that has failed to obtain said permit and upon issue of such stop work order all site work effected thereby shall immediately cease until authorized by the city engineer.

**§ 157.85 EXEMPTIONS**

Minor land-disturbing activities, such as home gardens and individual home landscaping, repairs maintenance work, and other related activities, provided such activities do not contribute to any on-site generated erosion, or degradation of lands or water beyond the boundaries of the property of the residence involved.

**§ 157.86 VIOLATIONS**

Violations of this subchapter shall constitute grounds for the issuance of a stop-work order by the Building Official in accordance with the provisions of the Building Code.

**§§ 157.87-157.95 RESERVED**

**HISTORIC AND PREHISTORIC RESOURCE PROTECTION**

**§ 157.96 FINDINGS**

(A) Historic and prehistoric resources are non-renewable.

(B) Archaeologic sites can contain artifacts and other associated remains and features, such as human burials, structural remains, pits, postmolds, and wells, which can contribute to an understanding of an area's prehistory and/or history.

(C) The protection, enhancement, and perpetuation of properties of historical, cultural, archeological, aesthetic, and architectural merit are in the interest of the health, prosperity, and welfare of the people in the city.

**§ 157.97 PURPOSE**

The purpose of this subchapter is to provide for:

(A) Criteria for identification of historic and prehistoric sites on development properties;

(B) Protection, enhancement, and perpetuation of buildings, structures, improvements, landscape features, and archeological resources of sites and districts which represent distinctive elements of the city's cultural, social, economic, political, scientific, religious, prehistory and architectural history.

(C) Standards for permitting to allow excavation, sensitive reuse, and development of historic and prehistoric sites, as appropriate.

**§ 157.98      DEFINITIONS**

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

**ARCHAEOLOGICAL SITE.** A property or location which has yielded or may yield information on the city’s history or prehistory. Archaeological sites are evidenced by the presence of artifacts and features below the ground surface indicating the past use of a location by people.

**DEMOLITION.** The complete constructive removal of a building on any site.

**QUALIFIED PROFESSIONAL.** Archaeologists, historians, architectural historians, or historical architects meeting the training and experience criteria set forth in the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation, as amended.

**§ 157.99      PERMIT REQUIRED**

No archaeological or historic sites in the city shall be destroyed or altered within a permit from the city. Permits shall be issued after the site review procedure has been completed, according to the instruction of the City Council.

**§ 157.100     SITE REVIEW PROCEDURE**

The following procedures shall be followed when historic or archaeological sites identified by the city, or other sources, exist on a property for which a building permit is sought from the city:

(A) All sites shall be subject to a determination of significance. Significance shall be determined by the Site Plan Review Committee.

(B) Significant sites shall be protected from adverse effects of development through mitigation, as determined by the Site Plan Review Committee and approved by the City Council.

**§ 157.101 CRITERIA FOR THE IDENTIFICATION OF PREHISTORIC AND HISTORIC SITES**

(A) Sites shall be identified in one of three ways:

- (1) On the Florida State Master Site File;
- (2) By the city as part of a historic and prehistoric site survey;
- (3) By property owners, qualified professionals, or site developers.

(B) Historic sites shall meet the following criteria for identification:

- (1) Structures and sites shall be at least 50 years old;
- (2) Structures and sites have not lost their historic integrity through redevelopment or demolition.

(C) Prehistoric sites shall meet the following criteria for identification:

- (1) Sites have yielded, or are likely to yield, artifacts regarding prehistory or history.

**§ 157.102 CRITERIA FOR DESIGNATION OF PREHISTORIC AND HISTORIC SITES AS SIGNIFICANT**

(A) The city shall have the authority to designate areas, places, buildings, structures, and archaeological sites as significant historic or prehistoric sites, and thereby ensure their protections.

(B) Designation of sites as significant shall be the responsibility of the Site Plan Review Committee. Significant sites shall be subject to mitigation requirements during development.

(C) The Site Plan Review Committee shall base their determination on the criteria in §§ 157.103 through 157.106.

**§ 157.103 HISTORIC SIGNIFICANCE**

(A) Historic significance shall be determined by a qualified professional through a site assessment survey.

(B) The city hereby incorporates the Criteria for Listing in the National Register of Historic Places as the set of standards to be used in the determination of significance of historic sites within the city.

**§ 157.104 SITE ASSESSMENT SURVEY FOR HISTORIC RESOURCES**

The site assessment survey shall contain:

- (A) Mapping of the site;
- (B) Standard site data compiled and submitted to the Florida Master Site File;
- (C) Archival research of site;
- (D) An assessment of site integrity, including potential effects of vegetation removal;
- (E) An assessment of significance in terms of National Register eligibility, to include information on architectural style, condition, date of construction and significance;
- (F) Recommendations of appropriate site treatments and determination of significance.

**§ 157.105 ARCHEOLOGICAL SIGNIFICANCE**

(A) Archaeological significance shall be determined through an archaeological site assessment survey. The archeological site assessment survey shall be conducted by a qualified professional and shall analyze the significance of the site in terms of site condition and the importance of cultural remains.

(B) The following criteria shall be used in the site assessment to determine the significance of the site:

- (1) Important historical event or person associated with the site;
- (2) The quality of the site or the data recoverable from the site, is of such significance that it would provide unique information on prehistoric or historic events;
- (3) The site was the locus of discreet types of activities such as habitation, religious, burial, fortification, and the like;
- (4) The site was the location of historic or prehistoric activities during a particular period of time;

(5) The site maintains a sufficient degree of environmental integrity to reflect some aspect of the relationship of the site's original occupants to the environment.

(C) The following criteria shall be applied to the site to describe and evaluate its condition:

(1) Minimal disturbance. The site is intact and has little or not subsurface disturbance.

(2) Moderate disturbance. The site is slightly to moderately disturbed, but has considerable potential for providing useful information, or, the site is severely disturbed, but the quality and volume of the existing data may still permit useful and representative data to be recovered.

(3) Severe disturbance. The site has been severely altered and the quality of data is poor, or the site has been completely destroyed.

#### **§ 157.106 SITE ASSESSMENT SURVEY FOR PREHISTORIC RESOURCES**

The site assessment survey shall contain:

- (A) Mapping of the site, including horizontal and vertical boundaries;
- (B) Standard site data compiled and submitted to the Florida Master Site File;
- (C) Apparent site function based on type and distribution of artifacts and associated features;
- (D) An assessment of site integrity, including potential effects of vegetation removal;
- (E) An assessment of significance in terms of National Register eligibility;
- (F) Recommendations of appropriate site treatments.

#### **§ 157.107 MITIGATION OF IMPACTS**

(A) Mitigation of project impacts will be required when a historic or prehistoric site, which has been determined to be significant by the city, is located on a development site.

(B) Mitigation shall include either:

(1) Preservation of the site, or a portion of the site through modification of the development through redesign, reorientation of the project site, sensitive reuse, or other similar actions; or,

(2) Data recovery in accordance with the guidelines as set forth in The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Revised 1983), as amended.

(C) Adequacy of proposed mitigation shall be determined by the Site Plan Review Committee.

**§ 157.108 HUMAN BURIAL SITES**

(A) When human bones are identified on a site, the Local Sheriff, Medical Examiner, and the State Archeologist should be notified, as set forth in Chapter 872 (FA).

(B) Burial sites should be preserved in situs. When prevention is not possible, human remains should be removed in a manner approved by the State Archeologists in the Division of the Bureau of Archives.

**§ 157.109 SENSITIVE RE-USE OF DESIGNATED HISTORIC STRUCTURES**

Sensitive development uses for historic structures and associated features, such as restoration, rehabilitation, or maintenance activities, is allowable as long as reuse meets the provisions of The Secretary of the Interior's Standards for Rehabilitation, and Guidelines for Rehabilitating Historic Buildings, as amended.

**§ 157.110 APPEAL TO CITY COUNCIL**

Any determination of site significance or mitigation requirements shall be subject to appeal by the applicant to the City Council.

**§§ 157.111-157.120RESERVED**

## **SHORELINE USE**

### **§ 157.121 PRIORITIES FOR SHORELINE LAND USE**

(A) When reviewing applications for rezoning or amendments to the city's Comprehensive Plan, shoreline land use shall have the following priorities:

- (1) Water-dependent uses such as production or protection of fish, shellfish and wildlife; protection or conservation of coastal and natural resources; recreation, public access, and navigation, provided they have no significant adverse impact upon the land, water or adjacent land uses.
- (2) Water-related or water-enhanced uses such as recreation.
- (3) Scenic waterfront communities.
- (4) Uses which are not water-dependent or water-related which do not results in a diminution of coastal resources, and which are compatible with existing or committed uses in the city.

### **§ 157.122 ESTUARINE BEACHES**

(A) Findings.

- (1) Natural sandy beaches occur in the city on some high energy estuarine shorelines.
- (2) Sandy, unhardened beaches play an important role in natural shoreline dynamics because they are able to respond to various wave energies through readjustment of slope and sediment deposition.
- (3) Sandy beaches protect upland properties and adjacent submerged wetlands by providing a gradually sloping surface for dispersal of wave and water energy.
- (4) Pestilent exotic species can invade beaches, displacing native vegetation and endangering the natural qualities of the shore.

(B) Purpose. It is the purpose of this subchapter to protect estuarine beaches by prohibiting alteration and requiring restoration of degraded beaches during development and redevelopment of property.

(C) Definitions. For the purpose of this section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

(1) DEGRADED ESTUARINE BEACH. An estuarine beach is degraded when its natural flexible functions are inhibited by pestilent exotic species or shoreline hardening structures.

(2) ESTUARINE BEACH. The zone of unconsolidated material that extends landward from the mean low water line of an estuary to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves. Estuarine beaches are sometimes partially vegetated by native saltmarsh vegetation.

(3) ESTUARY. A semi-enclosed, naturally existing coastal body of water in which saltwater is naturally diluted by freshwater and which has an open connection with oceanic waters. Estuaries include bays, embayments, lagoons, sounds, and tidal streams.

(4) MEAN HIGH WATER LINE. Water line which is the average height of the high waters over a 10-year period. For shorter periods of observation, mean high water means the average height of the high waters after corrections are applied to eliminate known variations and to reduce the result to the equivalent of mean 19-year value.

(5) PESTILENT EXOTIC SPECIES. Any specimen of *Casuarina sp.* (Australian Pine), *Schinus terebinhdtolus* (Brazilian Pepper), *Meleleuca quincusnervia* (Meleleuca), and *Meleleuca leueadendra* (Meleleuca).

(D) Prohibitions. No alteration of estuarine beaches shall be allowed unless permitted under § 157.123, or §§ 157.131 through 157.133.

(E) Buffer area. A ten-foot wide buffer area shall be established landward to the mean high tide line of all estuarine beaches. No retention or discharge of stormwater shall be permitted within this buffer area. All pestilent exotic vegetation, as per § 153.03, Prohibited Species, shall be removed from the beach and buffer area.

(F) Restoration. Restoration of estuarine beaches degraded by pestilent exotic species and failed shoreline protection structures shall be required as part of development and redevelopment. Restoration shall include removal of pestilent exotic vegetation, pursuant to Chapter 153, landscaping; and, removal of shore protection structure, if technically feasible, pursuant to the requirements of § 157.123, Shore Protection Structures.

## § 157.123 SHORE PROTECTION STRUCTURES

(A) Purpose. The purpose of this provision is to prevent degradation or loss of native shoreline habitat, and encourage improvement of habitat degraded by shoreline protection structures or other means by prioritizing methods of allowable shoreline stabilization.

(B) Findings.

(1) Native shoreline vegetation.

(a) Helps t protect the shoreline against erosion;

(b) Provides habitat for a diverse community of plants and animals, including species listed by the state as endangered, threatened, or species of special concern;

(c) Plays a fundamental role in estuarine ecology and water quality; and,

(d) Is aesthetically pleasing and can be reasonably incorporated as a landing asset for waterfront residence.

(2) Rip rap, geotextiles, and geogrids can provide a substrate for marine organisms and native wetland shoreline vegetation, and can aid in the dispersal of coastal energies on shorelines, thereby increasing resistance to erosion and damage by storm driven waves.

(3) Seawalls and bulkheads fronted by berms of vegetated rip rap provide better protection for estuarine habitat and shoreline areas than seawalls or bulkheads alone.

(C) Definitions. For the purpose of this section, the following definitions shall apply unless the context clearly indicated or requires a different meaning.

(1) GEOGRIDS or GEOTEXTILES. Flat, interlocking shore protection structures which follow the natural slope of the shore.

(2) NATIVE SHORELINE WETLAND VEGETATION. Indigenous shoreline vegetation typically adapted for life in saturated soil conditions and characterized by wetland species listed in Chapter 17-3, Florida Administrative Code, as amended from time to time.

(3) RIP RAP. A loose assemblage of unconsolidated boulders, rocks, or clean concrete rubble arranged along the natural slope of the shoreline, often over a porous filter cloth, intended to stabilize the shoreline and reduce erosion. Concrete rubble shall be free to exposed reinforcing rods or similar protrusions, tar, asphalt, and paint.

(4) SHORELINE. The immediate interface of land and water; the mean high tide line in non-vegetated areas, and the landward extent of wetland species of vegetation as listed in Chapter 17-4, FAC. where such "Marine Species" constitute the dominant plant community.

(5) SHORE PROTECTION STRUCTURES. Shore hardening structures, such as seawalls, bulkheads, revetments, groins, and aggregates of materials other than natural sediments, used to prevent erosion and protect other structures from waves and other hydrodynamic forces.

(D) Permit required. No shoreline protection structures shall be constructed in the city without first receiving a permit pursuant to the provisions of this code. Other permits, as may be required by federal, state, and regional authorities, must be submitted to the city prior to issuance of the permit.

(E) Standards for shoreline stabilization. The following prioritization of shoreline stabilization techniques shall apply:

(1) Developments located along shorelines which are not already hardened, or which have failed or damaged seawalls, shall use native wetland shoreline vegetation for shoreline stabilization.

(2) When stabilization of shorelines with native wetland shoreline vegetation is not technically feasible, then shoreline shall be stabilized with a combination of geotextiles or geogrids and native wetland shoreline vegetation.

(3) When stabilization of shorelines with geotextiles and geogrids and native wetland shoreline vegetation is not technically feasible, then shorelines shall be stabilized with a combination of rock rip rap and native wetland shoreline vegetation.

(4) When replacement of failed seawalls with native wetland shoreline vegetation or vegetated rock rip rap is not technically feasible, then seawalls or bulkheads shall be permitted.

(F) Prohibitions. Protection structures will not be permitted if any interfere with normal littoral processes or impact coastal natural resources, as determined by §§ 157.71 through 157.75.

**§§ 157.124-157.130RESERVED**

**MARINA SITING CRITERIA**

**§ 157.131 FINDINGS**

(A) Improperly situated docking facilities can impede navigation by cluttering waterways.

(B) Pilings can contribute to poor water quality conditions by disrupting flow of tidal flushing.

(C) Seagrasses provide essential habitat and nutrition for marine organisms. docking facilities can prevent necessary sunlight from reaching seagrasses, thereby reducing or eliminating seagrass productivity and habitat value.

(D) Manatees (*Trichechus manatus*) are listed by the state as “endangered.” Boat/barge related manatee mortalities are a leading cause of manatee deaths in Florida.

**§ 157.132 PURPOSE**

It is the purpose of this subchapter to provide guidelines and standards for the siting and the construction of certain docking facilities within the city in order to protect the navigational and natural resource qualities of waterways in the city.

**§ 157.133 MARINA SITING CRITERIA**

(A) Marina siting criteria shall be applied to all commercial, industrial, and residential multi-slip marinas. Criteria shall be reviewed by the Site Plan Review Committee as part of development approval.

(1) Preference shall be given to sites which have been legally distributed or identified as suitable in local marina siting plan elements as opposed to sensitive areas.

(2) Non-water dependent uses (such as bait and tackle, restaurants, and the like) shall be situated on uplands.

(3) Marinas shall demonstrate that they have sufficient upland area to accommodate all needed utilities and marina support facilities.

(4) Docking facilities shall only be approved which require minimal or no dredging and/or filling to provide access by canal, channel, or road.

(5) Marina basins shall only be approved when the locations have adequate depths to accommodate the proposed boat use.

(6) Dock and decking design and construction shall ensure penetration of light sufficient to support existing shallow water habitats.

(7) Landscape buffers and setbacks shall be required to mitigate impacts upon adjacent land uses.

(8) Marinas shall identify which docking facilities are to be rented and which are to be sold. Areas available to the public shall be identified and maintained as such.

(9) Sewer pump-out service shall be made available at all marinas capable of servicing or accepting boats inhabited overnight or boats which require pump-out service.

(10) In the event marina fueling facilities are developed, adequate and effective measures shall be taken to prevent contamination of area waters from spillage or storage tank leakage.

(11) Prior to operation of marina fueling facilities, the developer shall concurrently submit to the city a copy of the application for a terminal facility and the applicable portion to the DNR "Florida Coastal Pollutant Spill Contingency Plan." The plan shall describe the methods of fuel storage, personnel training, methods to be used to dispense fuel, and all the procedures, methods, materials, and emergency response contractors to be used in the event of a spill.

(12) Marina and appurtenant upland areas shall be compatible with the Future Land Use Map and applicable land development regulations in terms of the types and intensities of uses that are permitted.

(13) Marinas shall not be sited in designated critical manatee habitat.

(B) In addition to the criteria listed in (A), the following additional criteria shall be required of commercial, industrial, and residential multi-slip marinas over 25 slips:

(1) Marinas shall include a hurricane contingency plan which shall include those methods to be taken to secure property and facilities at the marina, the time period necessary to complete the preparation and the safe evacuation of all marina personnel and those who rent or own space at the marina.

(2) All applications for marinas shall include a market study indicating the need, market area, and user profile of the marina and which shall include protected costs and revenues proving the economic feasibility of the marina.

(3) All approved uses shall comply with Florida Department of Natural Resources Manatee Protection Plan when developed, otherwise, uses utilizing waterfront access for boats shall:

(a) Construction:

1. If the Department of Natural Resources has identified the waters surrounding the development as an area frequented by the manatee, the West Indian Manatee shall be protected during the construction period. The contractor shall instruct all personnel associated with the project of the presence of manatee and the need to avoid collisions with manatees.

2. All personnel will be advised that there are civil and criminal penalties for harming, harassing or killing manatees which are protected under the endangered Species Act of 1973, the Marine Mammal Protection Act of 1972, and the Florida Manatee Sanctuary Act of 1978. The developer will e held responsible for any manatee harmed, harassed or killed as a result of construction of the project.

3. All construction activities in open water will cease upon the sighting of manatees within 100 yards of the project area. Construction activities will not resume until the manatee have departed the project area.

4. A log shall be kept detailing sightings, collisions, or injury to manatees which have occurred during the construction period.

(b) Post Completion.

1. Following project completion, a report summarizing the above incidents and sightings shall be submitted to the Florida Department of Natural Resources, Manatee Recovery Program (100 Eighth Ave., S. E., St. Petersburg, FL 33701-5095), and to the U.S. Fish and Wildlife Service (2747 Art Museum Drive, Jacksonville, FL 32207).

(c) No Wake Zone. If the Department of Natural Resources has identified the waters surrounding the marina as an area frequented by the manatee, an idle/no wake speed zone shall be clearly marked in the channel from the marina facility to a point beyond the manatee area, or to a marked channel.

(d) Signs.

1. Manatee awareness signs shall be installed and maintained at prominent locations within the construction area/facility. A marina site plan shall be sent to the Florida Department of Natural Resources (FDNR) (100 Eight Ave., S. E., St. Petersburg, FL 33701-5095). FDNR personnel will specify sign locations.

2. The specifications and installation of the signs shall be made in accordance with the specifications of the Department of Natural Resources for such signs. Sign installation specifications will be furnished to the permittee when sign locations are designated.

3. Placement and installation of signs will be certified as on designated stations to FDNR by the project Professional Engineer before the marina facility is in use.

4. Signs and pilings are to remain the responsibility of the owner(s) and are to be maintained for the life of the marina in a manner acceptable to the Department of Natural Resources.

(e) Collision. Any collision with a manatee shall be reported immediately on the manatee "hotline" (1-800-342-1821) and to the U. S. Fish and Wildlife Service, Jacksonville Endangered Species Field Station (904-791-2580).

(f) Education display. A permanent educational display shall be established and maintained at a prominent location to increase the awareness of boaters using the facility of the presence of manatees and need to minimize the threat of boats to these animals. The display should include information on the location of the facility with respect to boat speed zones in the area, the threat which boats pose to manatees, and the manatee "hotline" number (1-800-342-1821). Other information which may aid in the conservation of the species may be obtained from the Florida Department of Natural Resources.

**§§ 157.134-156.145RESERVED**

## STORMWATER MANAGEMENT

*Note: This section has been cross-referenced with § 150.021.*

### § 157.146 PURPOSE AND INTENT

This subchapter is intended to protect, maintain, and enhance both the immediate and the long-term health, safety and general welfare of the citizens of the city by protecting and maintaining the chemical, physical, and biological integrity of ground and surface waters through:

- (A) Preventing activities which adversely affect ground and surface waters;
- (B) Minimizing runoff pollution to ground and surface waters; and,
- (C) Minimizing erosion and sedimentation of receiving waters.

### § 157.147 DEFINITIONS

For the purpose of this subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

(A) ALTER, OR ALTERATION OF STORMWATER SYSTEMS. Work done on a stormwater management system other than that necessary to maintain the system's original design and function.

(B) DETENTION. the collection and storage of surface water for subsequent gradual discharge.

(C) IMPERVIOUS SURFACE. A surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. It includes, but is not limited to, semi-impervious surfaces such as compacted clay, as well as most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar structures.

(D) RATE. Volume per unit of time

(E) RETENTION. The collection and storage of runoff without subsequent discharge to surface waters.

(F) RUNOFF COEFFICIENT. Ratio of the amount of rain which runs off a surface to that which falls on it; a factor from which runoff can be calculated.

(G) STORMWATER. the flow of water which results from, and that occurs immediately following, a rainfall.

(H) **STORMWATER MANAGEMENT SYSTEM.** The system, or combination of systems, designed to treat stormwater, or collect, convey, channel, hold, inhibit, or divert the movement of stormwater on, through, and/or from a site.

(I) **SURFACE WATER.** Water above the surface of the ground whether or not flowing through definite channels.

## **§ 157.148 GENERAL PROVISIONS**

In addition to meeting the requirements of this subchapter, the design and performance of all stormwater management systems shall comply with applicable federal and state regulations and requirements of the South Florida Water Management District. In all cases, the strictest of the applicable standards shall apply.

## **§ 157.149 EXEMPTIONS**

The following development activities are exempt from the requirements of this subchapter.

(A) Any development within a subdivision if each of the following conditions have been met:

(1) Stormwater management provisions for the subdivision were previously approved and remain valid as part of final plat or development plans; and,

(2) The development is conducted in accordance with the stormwater management provisions submitted with the final plat or development plan.

(B) Maintenance activity that does not change or affect the quality, rate, volume, or location of stormwater flows on the site or of stormwater runoff.

(C) Action taken under emergency conditions to prevent imminent harm or danger to persons, or to protect property from imminent hazards, with approval from the City Engineer.

## **§ 157.150 STANDARDS**

(A) The proposed development and development activity shall not violate the water quality standards as set forth in Chapter 17-3, Florida Administrative Code.

(B) No surface water shall be channeled or directed into any sanitary sewer system.

(C) The proposed stormwater management system shall be compatible with the drainage systems or drainage ways on surrounding properties or streets.

(D) Stormwater systems shall be designed to meet the city's adopted level of service for drainage as follows:

(1) For existing platted development and surface water management systems in Planning Areas #1-7: ten-year frequency, five-day duration storm event;

(2) For storm water management facilities in Planning Areas #1-7 not included in (D)(1), and Planning Area #8: 25-year frequency, 72-hour storm event.

(3) All new development must comply with applicable state regulations for water quality and direct stormwater discharge to Outstanding Florida Waters and Aquatic Preserves.

(E) All stormwater must run over permeable surfaces prior to discharge into the city drainage systems.

(F) All stormwater management systems shall use soil erosion control techniques during construction, as described in Chapter 157, Article VI, Soil Erosion and Sediment Control.

(G) In phased developments, the stormwater management system for each integrated stage of completion shall be capable of functioning independently.

(H) The characteristics of stormwater conveyed from the site should approximate the rate, volume, quality, and timing that occurred on the site under conditions preceding the proposed development.

## **§ 157.151    STORMWATER MANAGEMENT PLAN**

(A) A stormwater management plan shall be submitted with all applications for building permits or site plan approval, as applicable. The stormwater management plan shall contain sufficient information to allow the City Engineer to determine whether the proposed development meets the requirements of this section.

(B) The following specific information shall be submitted:

(1) Topographic map of the site clearly showing the location, identification, and elevation of bench marks. The contour interval of the topographic map shall not be greater than one foot.

- (2) An overall project area map showing existing hydrography and runoff patterns, and the size, location, topography, and land use of any off-site areas that drain onto, through, or from the project area.
- (3) A map of vegetative cover of wetlands or other specially protected vegetation, per the provisions of Chapter 157, is present.
- (4) A map showing the locations of any soil borings or percolation tests. Percolation tests representative of design conditions shall be performed if the stormwater management system will use wales, percolation (retention), or exfiltration (detention with filtration) designs.
- (5) Grading plans specifically describing the interface of the proposed development with abutting properties.
- (6) Paving, road, and building plan showing the location, dimensions, and specifications of roads and buildings (including ground or finished floor elevations.
- (7) An erosion and sedimentation control plan that describes the type and location of control measures, the stage of development at which they will be put into place or used, and maintenance provisions. (Chapter 157, Article VI, Soil Erosion and Sediment Control.)
- (8) Any other requirements deemed by the City engineer to be necessary due to unique site or design conditions.

## **§ 157.152 STORMWATER MANAGEMENT SYSTEM REQUIREMENTS**

A description of the proposed stormwater management system shall be provided to include the following information.

- (A) Channel, direction, flow rate, and volume of stormwater that will be conveyed from the site, with a comparison to natural or existing conditions.
- (B) Detention and retention areas, including plans for the discharge of contained waters, maintenance plans, predictions of surface water quality changes.
- (C) Areas of the site to be used or reserved for percolation.
- (D) Location of all natural and artificial water bodies to be included in the surface water management system with details of hydrography, side slopes, depths, and water surface elevations or hydrographs.

(E) any off-site rights-of-way required for the proper functioning of the system.

(F) Drainage basin or watershed boundaries identifying locations of routes of off-site water onto, through, or around the project.

(G) Rights-of-way and easements for the system, including locations and a statement of the nature of the reservation of all areas to be reserved as part of the Stormwater Management System.

(H) The entity or agency responsible for the operation of the stormwater management system.

## **§§ 157.153-157.160 RESERVED**

### **MISCELLANEOUS**

#### **§ 157.161 MINING**

(A) Purpose. It is the purpose of these provisions to regulate mining activities which might degrade natural resources in the city.

(B) Definitions. For the purpose of this section/subchapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning

.RECLAMATION PLAN. A plan which describes how reclamation, including the restructuring, reshaping, and vegetation of disturbed lands to a form in which the lands may be beneficially used and includes the process of restoration, will take place.

WATER REFUSE PLAN. A plan which describes how water used in the mining process will be conserved through a reuse program.

(C) Permit required. No mining activities shall take place in the city without a Mining Permit.

(D) Permit criteria.

(1) The city shall not issue a mining permit until all other necessary federal, state, and regional permits have been issued by appropriate agencies and presented to the city.

(2) The city shall not issue a mining permit until the following standards are met:

(a) Water use and reclamation plans.

1. All mining operations within the city shall be required to submit a water use plan and reclamation plan, if applicable, for city approval prior to permit of mining activities.

2. The Site Plan Review Committee shall review and approve all plans prior to permit issuance.

### **§ 157.162 FLOODPLAIN PROTECTION**

The city shall limit development in the floodplain of the NFSLR to preservation, conservation, public recreation uses and public interest projects of overriding public benefit unless development meets the provisions of Chapter 152.

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