

## **CONSERVATION AND COASTAL ELEMENT GOALS, OBJECTIVES, AND POLICIES**

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### **PURPOSE**

Pursuant to Chapter 163.3177(6)(d)&(g) F.S., the purpose of the Conservation and Coastal Element is to promote the conservation, use and protection of natural resources as well as to plan for, and where appropriate, restrict development activities where such activities would damage or destroy coastal resources, and protect human life and limit public expenditures in areas that are subject to destruction by natural disaster.

### **GOAL 4-1 CONSERVE, MANAGE, USE AND PROTECT NATURAL AND ENVIRONMENTAL RESOURCES**

**It is the goal of the City to conserve, manage, use and protect the natural and environmental resources within the City to ensure continued resource availability and environmental quality and to manage development activities to protect coastal resources, protect human life and limit public expenditures in areas subject to destruction by natural disasters. §163.3177(6)d.2 & §163.3177(6)(g) F.S.**

#### **Objective 4-1.1 Maintain Air Quality**

*The City shall maintain the best possible air quality by meeting or exceeding State and Federal air quality standards. §163.3177(6)d.2.a. F.S.*

##### Policy 4-1.1.1 Support State and Federal Air Quality Standards

The City shall support the enforcement of applicable State and Federal air quality standards by requiring, through adoption of Land Development Regulations, that all applicable State and Federal permits be obtained prior to the commencement of development.

##### Policy 4-1.1.2 Prevent Erosion and the Generation of Dust Particles

The City shall continue to maintain Land Development Regulations that incorporate standards to prevent erosion and the degradation of ambient air quality through the generation of dust particles. These regulations shall require measures to contain and stabilize exposed or destabilized soil surfaces.

#### **Objective 4-1.2 Conserve, Protect, and Enhance Natural Systems**

*The City shall conserve, protect, and enhance the remaining natural systems of the City through the development of an information system. This information system shall be used as the basis for establishing appropriate land use designations and regulations which recognize the inherent values of these areas when left in their natural state. The information system shall also be used*

*as the basis for regulating land development activities in wetland areas, to identify potential wetland restoration sites and to identify high quality wetland sites for possible future acquisition by the City, State or private non-profit conservation organization. §163.3177(6)d.1 & 2. & §163.3177(6)(g) F.S.*

**Policy 4-1.2.1 Establish Regulations to Protect and Manage Conservation Lands and Natural Resource Systems**

The City shall continue to maintain Land Development Regulations protecting and managing environmentally sensitive natural systems, including but not limited to water resources, wetlands, native habitats and other natural resources. These regulations shall require consistency with the policies in the Plan that govern:

- a. Management of surface water;
- b. Preservation of open space; and
- c. Preservation of native vegetation and environmentally sensitive habitats.

**Policy 4-1.2.2 Protect Plant and Animal Species**

The City shall continue to maintain Land Development Regulations that restrict development activities, which may adversely impact plant and animal species designated, by a State or Federal agency, as endangered, threatened or of special concern. These regulations shall also apply to the City's list of regionally important plant species and mature native species of substantial size. These regulations shall steer development away from environmental sensitive habitats through the following methods: identify and rank habitats, define open space, transplantation and mitigation criteria, and encourage the dedication of conservation easements or deed restrictions.

**Policy 4-1.2.3 Promote Recovery of Federally Listed Species**

The City shall work cooperatively with the US Fish and Wildlife Service (FWS) to protect and promote the recovery of plant and animal species designated by the Federal government as threatened and endangered. Related activities shall include:

- a. Require notification to the FWS when development proposals are received for sites documented as having historic and/or current occurrences of federally designated species;
- b. Continued technical assistance coordination consultation with the FWS; and
- c. Cooperation with the FWS in locating potential introduction sites for federally designated plant and animal species.

**Policy 4-1.2.4 I Identify Wetlands**

The City shall continue to maintain Land Development Regulations to define wetlands pursuant to Subsection 373.019(22), F.S., further described by the delineation methodology in Section 373.421, F.S.

**Policy 4-1.2.5 Identify Wetland Vegetation**

The City shall adopt and utilize the "Vegetative and Hydric Soil Field Indicators Lists for Chapter 62-340" as compiled by the Department of Environmental Protection (DEP) as a tool to identify and categorize wetland plant species commonly found within the City.

**Policy 4-1.2.6 Participate in the ADID Program**

The City shall participate in the Florida Keys Advance Identification of Wetlands (ADID) Program. This program is designed to facilitate the regulatory process under Section 404 of the Clean Water Act of 1973 by providing comprehensive wetlands mapping and assessment information. The geographic scope of the ADID program on the islands connected by US 1 includes:

- a. Privately owned lands with development potential on islands connected by US 1;
- b. Publicly owned lands on islands connected by US 1; and
- c. Offshore islands.

As part of the ADID Program, the City shall:

- a. Inform and educate the public regarding wetlands protection and the applications of information from the ADID Program;
- b. Adopt preliminary Army Corps of Engineers (ACOE) and DEP jurisdictional lines;
- c. Update wetlands spatial data on the City's geographic information system (GIS);
- d. Have assigned City Planning Department staff attend DEP wetlands identification and delineation training sessions;
- e. Assist with the development of a Florida Keys wetlands functional quality analysis;
- f. Adopt the Keys Wetlands Evaluation Procedure (KEYWEP) contained in the ADID to classify wetlands;
- g. Continue to jointly carry out the functional analysis of wetlands on all wetland areas within the City; and
- h. Assist with ground-truthing GIS data.

**Policy 4-1.2.7 Wetlands Maps**

The City shall use data made available from the ADID program and the FWC to generate wetlands maps. The wetlands maps shall replace those currently in use by the City. In order to prepare new wetlands maps, the City shall compile information obtained from the ADID Program, National Wetlands Inventory (NWI), and the Florida Fish and Wildlife Conservation Commission (FFWCC) in the GIS. This map or overlays shall identify:

- a. All undisturbed and disturbed wetlands by vegetative cover type;
- b. Advisory ACOE and DEP jurisdictional lines mapped as part of the ADID Program; and
- c. Wetland 'suitable/unsuitable' designations with respect to ACOE Section 404 permitted activities mapped as part of the ADID Program.

**Policy 4-1.2.8 Keys Wetlands Evaluation Procedure (KEYWEP)**

As part of the ADID Program, the City shall adopt the Keys Wetlands Evaluation Procedure (KEYWEP) as the methodology for determining wetlands functionality. This methodology is

tailored for use in the Florida Keys and is based upon habitat suitability, water quality and flood flow alteration functions of marine and freshwater wetlands.

Policy 4-1.2.9 Coordinated Analysis of Wetlands

As part of the ADID Program, the City, EPA, FWS and FFWCC will continue to jointly carry out the functional analysis of wetlands. This shall be completed on all wetland vegetative cover areas within improved subdivisions and on selected sites outside improved subdivisions, according to statistically valid selected sample locations for each wetland vegetative cover type. In addition to the functional analysis, the field team shall ground-truth the wetland vegetative cover maps using a differential global positioning system. The wetland vegetative cover boundaries in the GIS shall be revised to reflect results of the ground-truthing.

Policy 4-1.2.10 Regulate Development in Wetlands through KEYWEP

The development potential of wetlands will be determined through the KEYWEP quality ranking system as follows:

- a. **‘Red-flag’ wetlands:** This classification is given to wetlands that lack disturbance and are of obvious and exceptionally high quality meeting criteria specified in the KEYWEP.
- b. **High functional capacity wetlands:** Wetlands which score 5.5 or higher regardless of previous disturbance. These wetlands exhibit the greatest number of beneficial functions.
- c. **Moderate functional capacity wetlands:** Wetlands with previous disturbance, which score below 5.5, but greater than or equal to 4.6. These wetlands exhibit moderate functionality.
- d. **Low functional capacity wetlands:** Wetlands with previous disturbance, which score less than 4.6 and exhibit low functionality.

Disturbed wetlands are those wetlands where the topography, hydrology, soil or natural vegetation has been permanently impacted to such a degree that succession to the original wetland community is not likely. Undisturbed wetlands are those wetlands where the topography, hydrology, soil or natural vegetation has not been permanently impacted.

Policy 4-1.2.11 Limit Development Impacts on Wetlands

Wetlands shall be protected from physical or hydrologic alterations in order to maintain their natural functions. No structures shall be permitted in submerged lands, mangroves, salt ponds, freshwater wetlands, undisturbed wetlands or high quality salt marsh or high quality buttonwood association wetlands, except for elevated, pile supported walkways, docks, piers, water observation platforms and utility pilings. No fill shall be permitted in submerged lands, mangroves, salt ponds, freshwater wetlands, undisturbed wetlands or high quality salt marsh or high quality buttonwood association wetlands except:

- a. As specifically defined in the environmental design criteria within the Land Development Regulations for mooring facilities, water observation or access

- facilities, navigational markers, rip-rap, seawalls, bulkheads, boat ramps or retaining walls;
- b. To fill a manmade, excavated waterbody such as a canal, boat slip, boat basin or swimming pool with approval by ACOE and DEP; or
  - c. As needed for the siting of necessary public facilities when it can be demonstrated that the siting will serve a legitimate public purpose and an analysis has been undertaken prior to finalizing plans for the siting of any new or any significant expansion (greater than 25 percent) of existing public facilities. The analysis shall include an evaluation of need; evaluation of alternative sites and design alternatives for the selected sites and an assessment of impacts on surrounding land uses and natural resources or as needed for shoreline stabilization or beach re-nourishment projects with a valid public purpose that furthers the goals of the City's Plan, as determined by the City Manager or designee. All such projects shall require approval by the Florida DEP and the US ACOE prior to issuance of a City building permit.

Policy 4-1.2.12 Mitigate Development in Disturbed Wetlands

The City shall continue to maintain Land Development Regulations which provide a methodology for calculating the mitigation value of disturbed wetlands identified as developable through the KEYWEP. The debit value will be calculated based on the quality and the size of the wetland area to be developed.

Policy 4-1.2.13 List and Prioritize Sensitive Sites for Acquisition

The City shall update on an annual basis the prioritized list of environmentally sensitive sites for potential acquisition which includes, but is not limited to the following:

- a. Nesting sites of the southern bald eagle (*Haliaeetus leucocephala*), the osprey (*Pandion haliaetus*), the brown pelican (*Pelecanus occidentalis*) and the roseate tern (*Sterna dougallii*); and
- b. Wintering grounds for the peregrine falcon (*Falco peregrinus*) and the piping plover (*Charadrius melodus*); and
- c. Native upland habitats used by species listed by a State or Federal agency as threatened or endangered, such as the white-crowned pigeon (*Columba leucocephala*); and
- d. Transitional habitat with potential for wildlife corridors, tropical flyways or buffers for environmentally sensitive lands.

Policy 4-1.2.14 Establish and Coordinate Acquisition Programs

The City shall maintain a land acquisition program and prepare a Capital Investment Plan for the acquisition of environmentally sensitive land, land for affordable housing, open space, parks and recreation, and the purchase of development rights in coordination with regional, State, Federal and private programs, including but not limited to the DEP, the Monroe County Land Authority, the Department of Economic Opportunity (DEO) and other agencies with an interest in conservation lands. This Capital Investment Plan shall be incorporated into the City's Capital Improvement Program.

**Objective 4-1.3      Protect, Conserve, and Enhance Coastal Resources**

*The City shall protect, conserve and enhance coastal resources, wetlands, water resources, living marine resources, wildlife habitats and other natural resources and the environmental health of Florida Bay, the Atlantic Ocean and all surface and ground waters within its jurisdiction, in order to maintain the economic and social well being of its citizens. The City shall help ensure that the ambient water quality of near shore waters meets or exceeds State standards for Class II Outstanding Florida Waters. §163.3177(6)(d)2.; §163.3177(6)(g)1. And §163.3178(2)(e). F.S.*

**Policy 4-1.3.1      Protect, Conserve and Enhance Coastal Resources, Wetlands, Water Resources, Living Marine Resources, Wildlife Habitats and Other Natural Resources and the Environmental Health of Florida Bay, the Atlantic Ocean and All Surface and Ground Waters**

The City shall adopt Land Development Regulations to protect, by:

- a. Preventing adverse impacts of development and redevelopment on wetlands, estuaries, water resources, living marine resources and other natural resources;
- b. Maintaining or improving coastal environmental quality by commencing the Stormwater Management Plan identified in this Plan;
- c. Regulating land development activities that could have negative impacts on coastal shorelines, including impacts on water quality, living marine organisms, seagrass beds and wetlands;
- d. Directing growth away from VE Flood Zones through Local Mitigation Strategies and the Building Permit Allocation System identified in this Plan;
- e. Creating a Transfer of Development Rights (TDR) Program that directs growth away from VE zones as described in this Plan;
- f. Managing nearshore waters and flats through the enforcement of speed limits, no wake zones and no motor zones;
- g. Regulating activities with potentially adverse impacts on coastal resources, including but not limited to ultra-light planes, seaplanes, live-aboard vessels and personal watercraft;
- h. Preventing adverse impacts of lighting on coastal resources;
- i. Prohibiting the mooring of live aboard vessels outside of approved marinas;
- j. Prohibiting boat launching from various rights-of-way that are not designated as public boat ramps and restricting random water access points; and
- k. Regulating the impacts of development on native vegetative communities and wildlife habitats; and
- l. Providing for the distinction between riparian mangrove fringes and those mangroves growing in isolated communities on infill, landlocked lots where surface water run-off from surrounding development has created the wet condition which facilitated the establishment of the isolated community of mangroves which do not perform the functions of riparian mangrove fringes, i.e. resisting and preventing shoreline erosion, providing food and habitat for the marine food chain, maintaining and improving the quality of coastal waters. This provision is

not applicable to parcels which are historically, naturally, vegetated with mangroves such as are found on Grassy Key.

These objectives shall be accomplished as described below, and through coordination with the South Florida Water Management District (SFWMD).

Policy 4-1.3.2          Protect and Conserve Outstanding Florida Waters

The Land Development Regulations shall prohibit development activities that adversely impact water quality, contribute to shoreline erosion and sedimentation or negatively impact wetlands.

Policy 4-1.3.3          Surface Water Management and Flood Damage Prevention

The City shall continue to maintain surface water management and flood damage prevention regulations. New development encroaching into the 100 year floodplain shall incorporate elevation and flood protection measures sufficient to protect against the 100 year flood. The City shall maintain consistency with program policies of the National Flood Insurance Program. The City shall monitor new cost effective programs for minimizing flood damage. Such programs may include modifications to construction setback requirements or other site design techniques, as well as upgraded building and construction techniques.

Policy 4-1.3.4          Restrict Development in Wetlands

The City shall continue to maintain Land Development Regulations that prohibit development within undisturbed wetlands and limit development of disturbed wetlands as described in Policy 4-1.2.12. The City shall encourage the dedication of conservation easements for all wetlands and upland buffer areas adjacent to wetlands. Wetlands shall be defined per Subsection 373.019(22), F.S., further described by the delineation methodology in Section 373.4211, F.S. All development in wetlands shall have approval or a letter of exemption by the DEP and the ACOE prior to review by the City.

The following plant species are wetland species commonly found within the City, although the applicable State list of jurisdictional wetland vegetation shall apply:

- Black Mangrove (*Avicennia germinas*)
- White Mangrove (*Laguncularia racemosa*)
- Red Mangrove (*Rhizophora mangle*)
- Sea Purslane (*Sesuvium portulacastrum*)
- Key Grass (*Monanthochloe*)
- Cordgrass (*Spartina spartinae*)
- Buttonwood (*Conocarpus erectus*)
- Saltwort (*Batis maritima*)
- Sea Blite (*Suaeda linearis*)
- Salt Grass (*Distichlis spicata*)
- Dropseed (*Sporobolus virginicus*)
- Fringe-Rushes (*Fimbristylis spp*)

Policy 4-1.3.5          Protect Coastal and Estuarine Environmental Quality and the Shoreline

The City shall continue to maintain Land Development Regulations mandating that the potential impacts of shoreline development be analyzed as part of the development review process. The

City shall not approve a development order until the potential impacts identified by the applicant and public entities having jurisdiction over the impacted resources have been considered by the City. The applicant shall bear the burden of demonstrating that adverse impacts on natural resources of the coastal zone will be prevented and that all applicable State and/or Federal regulatory measures have been satisfied. The development review process shall involve all local, regional, State and Federal entities with jurisdictional authority. All development shall:

- a. Protect fish and wildlife habitat;
- b. Prevent degradation of water quality and estuaries;
- c. Manage surface water run-off to prevent water quality degradation;
- d. Protect living marine resources;
- e. Reduce exposure to natural hazards; and
- f. Ensure adequate public access.

**Policy 4-1.3.6 Protect, Stabilize and Enhance Shorelines**

The City shall continue to maintain Land Development Regulations that stipulate that no native vegetation shall be removed from shorelines without a duly authorized permit. Similarly, criteria shall be included requiring applicants for development along the shoreline to re-vegetate, stabilize and enhance damaged vegetative shorelines by planting native plant species, which:

- a. Contribute to fish and wildlife habitat, marine productivity and water quality;
- b. Offer protection from erosion and flooding;
- c. Contribute to the natural soil building process;
- d. Provide habitat for a diverse community of plants and animals, including species listed by the State of Florida as endangered, threatened, or species of special concern; and
- e. Are aesthetically pleasing and can be reasonably incorporated as a landscaping asset for waterfront residences.

Native vegetation shall not be removed unless the applicant agrees to a mitigation plan to ensure that re-vegetation occurs.

**Policy 4-1.3.7 Prohibit Construction of New Bulkheads, Seawalls or Other Hardened Vertical Shoreline Structures on Open Water**

No hardening of shorelines shall be permitted unless for erosion control where the applicant can demonstrate that native vegetation will not suffice. Where erosion control is necessary then rip-rap shall be permitted to the minimum extent necessary in conjunction with native shoreline vegetation. Geotextiles and geogrids are flat, interlocking shore protection structures which follow the natural slope of the shore. Rip-rap are natural or concrete boulders that meet the following guidelines:

- a. It is constructed in a manner that would not prevent the establishment of native vegetation;
- b. It consists only of natural boulders or clean concrete rubble six (6) inches to three (3) feet in diameter or in average dimensions;



- c. The slope of the riprap is no steeper than 2H:1V and the horizontal distance is no more than eight (8) feet;
- d. There are no reinforcing rods or other similar protrusions in concrete rubble and all rubble or boulders are free of attached sediments;
- e. Neither the distance nor the use of the riprap interferes with navigation or infringes upon the riparian rights of the adjacent property owners; and
- f. There is no filling or dredging associated with the placement of riprap other than the riprap material itself.

**Policy 4-1.3.8 Enact Measures to Stabilize Canals and Shorelines**

In lieu of constructing bulkheads, seawalls or other hardened vertical shoreline structures, residential canals and altered shorelines shall be stabilized by maintaining native vegetation. When it can be demonstrated that native vegetation will not prevent erosion, then riprap or sloping rock revetments shall be permitted to the minimum extent necessary, in conjunction with native vegetation as approved by the Planning Director.

**Policy 4-1.3.9 Limit Hardened Shorelines**

Bulkheads, seawalls or other hardened vertical shoreline structures shall be permitted on residential canals and altered shorelines only in the following situations and then utilizing materials consistent with Policies 4-1.3.6 and 4-1.3.7 for the following purposes:

- a. To replace an existing deteriorated bulkhead or seawall; or
- b. To stabilize a severely eroding shoreline area where riprap in conjunction with native vegetation will not suffice.

**Policy 4-1.3.10 Prevent Adverse Impacts to Water Quality**

The City shall continue to maintain Land Development Regulations to prevent development activities that adversely impact water quality through shoreline erosion and sedimentation over-wash onto wetlands.

**Objective 4-1.4 Protect and Preserve Wetlands**

*The City shall protect and preserve wetlands from physical and hydrologic alteration through upland buffers, setbacks and the use of conservation easements. §163.3177(6)(d)2 F.S.*

**Policy 4-1.4.1 Protect Living Marine Resources, Wetlands and Seagrass Beds**

The City shall continue to maintain Land Development Regulations that prevent adverse impacts of development on seagrass beds, wetlands and other living marine resources. Since these areas are sensitive to increased turbidity, stormwater runoff and other forms of pollution, the introduction of nutrients shall be regulated through effective water quality management. Development impacting marine resources shall be coordinated with State and Federal agencies having jurisdiction prior to the City granting plan approval and/or prior to release of any permit for construction. §163.3177(6)(d)2.e F.S.

Policy 4-1.4.2 Maintain a 50 Foot Buffer Adjacent to Wetlands

The City shall require minimum vegetated setbacks of fifty (50) feet to be maintained as an open space buffer for development occurring adjacent to all types of wetlands except for tidally inundated mangrove fringes or permitted under Objective 4-1.11. If a fifty (50) foot setback results in less than 2,000 square feet of principal structure footprint of reasonable configuration then the setback may be reduced to allow for 2,000 square feet of principal structure footprint of reasonable configuration, provided the setback is not reduced to less than twenty-five (25) feet. On properties classified as scarified adjacent to wetlands, the wetland setback may be reduced to twenty-five (25) feet, without regard to buildable area if the entire setback area is planted and maintained in native vegetation with a site-suitable stormwater management plan, and thereafter placed under conservation easement. The wetland setback required by this subsection shall not apply to mangrove or wetland fringes occurring along man-made canals, channels or basins. 'Development' shall include all activities as currently defined in the F.S. 380.05, hereby incorporated by reference. §163.3177(6)(d)2. j. F.S.

Policy 4-1.4.3 Manage Impacts of Coastal Development on Tidal Flushing and Circulation Patterns

No development shall produce changes in the tidal flushing and circulation patterns unless all agencies having jurisdiction grant clearance. Any project that may produce changes in circulation patterns or tidal flushing shall be approved only after sufficient hydrographic information is available to allow an accurate evaluation of the possible impacts of the project. Previously existing manmade alterations shall be evaluated so as to determine whether more hydrological benefits will accrue through their removal as part of the project. §163.3177(6)(d)2.e & j F.S.

Policy 4-1.4.4 Promote Propagation of Fish and Wildlife

The City shall incorporate criteria in the Land Development Regulations that prevent adverse impacts from development on submerged lands, water quality, reef systems and other habitats for fish and wildlife. §163.3177(6)(d)2.e & j F.S.

Policy 4-1.4.5 Require Necessary External Agency Permits

Within one year of the effective date of this Plan, the City shall adopt Land Development Regulations to require that all applicants for a permit to develop in submerged lands or wetlands obtain necessary permits from all applicable State and Federal regulatory agencies.

Policy 4-1.4.6 Shoreline Vegetation Trimming or Removal

The City shall continue to maintain Land Development Regulations to regulate the trimming or removal of shoreline vegetation, excluding mangroves. The trimming and removal of mangroves is regulated by the Florida Department of Environmental Protection. §163.3177(6)(d)2.e & j F.S.

Policy 4-1.4.7 Coordination with State and Federal Management

The City shall coordinate and support all State and Federal management measures designed to protect, preserve and enhance the coastal resources, wetlands, marine resources, wildlife habitats and other natural resources including fisheries and coral reefs. §163.3177(6)(d)2.g F.S.

Policy 4-1.4.8 Shoreline Setback Development Criteria

Minimum coastal construction setbacks in the City shall be established in the Land Development Regulations to protect:

- a. Natural shoreline vegetation;
- b. Marine turtle nesting habitat;
- c. Water quality through assimilative and filtrative uptake of pollutants by upland setback buffer areas;
- d. Structures from the effects of long-term sea level rise;
- e. Beaches and shorelines from erosion; and
- f. The character and overwater views of the community.

§163.3177(6)(d)2 F.S.

Policy 4-1.4.9 Principal Structure Shoreline Setbacks

The City shall establish that, at a minimum, all principal structures shall be setback from shorelines as follows. For the purposes of this policy cut-in boat slips shall be excluded from the shoreline setback requirements for lots 5,000 square feet or less in area. Such lots must meet all applicable regulations including, but not limited to, ten (10) foot setback from the cut-in boat slip, stormwater management, other required setbacks, and open space ratio.

- a. On parcels greater than or equal to 4,500 square feet, all principal structures shall be setback twenty (20) feet, as measured from mean high water line (“MHWL”) or landward edge of the mangrove fringe, whichever is further landward, for manmade canals, channels, basins and lawfully altered shorelines, except as allowed in (b) below.
- b. On parcels less than 4,500 square feet on manmade canals, channels, basins, and lawfully altered shorelines, the required setback for a principal structure may be reduced to a minimum of ten (10) feet provided that the structure is sited so as to protect community character and minimize environmental impacts by maintaining open space and protecting shoreline vegetation.
- c. On open water, all principal structures shall be setback fifty (50) feet, as measured from the MHWL or the landward extent of the mangroves, whichever is further landward, for all unaltered and unlawfully altered shorelines.
- d. On open water, all principal structures shall be setback thirty (30) feet, as measured from the landward extent of the mangroves, where the original slope landward of the water has been significantly altered by filling but a mangrove fringe exists that is contiguous from side lot line to side lot line and is at least ten (10) feet wide at the root zone.
- e. On open water where the original slope landward of the water has been significantly altered by filling where no bulkhead, significant armoring or mangrove fringe exists that is contiguous from side lot line to side lot line, all principal structures shall be setback thirty (30) feet, as measured from the MHWL, provided that native vegetation exists or is planted and maintained in at least a ten (10) foot width across the entire shoreline; otherwise the setback shall be fifty (50) feet, as measured from the MHWL.

- f. On in-fill lots along open water shorelines which have been altered by the legal placement of fill, have a bulkhead, or significant armoring with no contiguous mangrove fringe and which are surrounded by significant development where principal structures are set back less than fifty (50) feet from the MHWL or the landward extent of the mangroves, the City Manager or designee may evaluate the community character, the presence or absence of environmental features, and the setbacks on adjacent developed properties within two parcels on either side of the proposed development, and may allow principal structures to be setback as far as is practicable or in line with adjacent principal structures. In no event shall the setback be less than twenty (20) feet. On shorelines where the existing pattern of setback is greater than thirty (30) feet, the greater setback shall apply. This setback relaxation shall not be available for recognized Marine Turtle nesting habitats.

Policy 4-1.4.10      Accessory Structure Shoreline Setbacks

An exception to the shoreline setback requirement shall be allowed only for utility pilings, fences, docks, boat ramps, boat slips, boat shelters, seawalls, retaining walls, riprap, bulkheads, walkways, and outdoor sport and recreational accessory structures such as, but not limited to, non-enclosed decks, gazebos, pools, spas, permanent barbecues, fish cleaning tables, picnic tables and seating structures, which are allowed within the shoreline setback. All accessory structures shall be setback from shorelines as follows:

- a. All permissible accessory structures within the shoreline setback other than docks, docking facilities, utility pilings, fences, boat ramps, boat slips, boat shelters, seawalls, retaining walls, riprap, bulkheads, walkways, water observation platforms and water observation walkways must maintain a twenty-five (25) foot setback from the MHWL or the landward extent of the mangroves, whichever is further landward, on all unaltered shorelines.
- b. All permissible accessory structures within the shoreline setback other than docks, docking facilities, utility pilings, fences, seawalls, retaining walls, riprap, walkways, water observation platforms and water observation walkways must maintain a fifteen (15) foot setback from the landward extent of the mangroves on all significantly filled shorelines on open water with a contiguous mangrove fringe.
- c. Provided that native vegetation exists or is planted and maintained in at least a ten (10) foot width across the entire shoreline, on all significantly filled shorelines on open water where there is no bulkhead, significant armoring or mangrove fringe that is contiguous from side lot line to side lot line, all permissible accessory structures within the shoreline setback other than docks, docking facilities, utility pilings, fences, seawalls, retaining walls, riprap, walkways, water observation platforms and water observation walkways must maintain a fifteen (15) foot setback from the landward edge of the ten (10) foot wide shoreline bufferyard; otherwise, for scarified parcels all permissible accessory structures must maintain the setbacks established for unaltered shorelines on open water.
- d. All permissible accessory structures within the shoreline setback other than docks, docking facilities, utility pilings, fences, seawalls, retaining walls, riprap, walkways,

water observation platforms and water observation walkways must maintain a ten (10) foot setback from mean high water along lawfully altered shorelines.

**Policy 4-1.4.11 Shoreline Walkways**

Walkways landward of mean high water serving nonresidential uses or residential uses of more than three (3) dwelling units shall not exceed eight (8) feet in width. Walkways serving all other uses shall not exceed five (5) feet in width. All walkways and access ways extending over mangrove, wetlands, or submerged lands shall be pile supported and not exceed four (4) feet in width.

**Policy 4-1.4.12 Shoreline Setback Development Limits**

In no event shall the total combined area of all upland accessory structures within the shoreline setback occupy more than sixty percent (60%) of the required shoreline setback area along manmade canals, channels, basins and lawfully altered shorelines. In no event shall the total, combined area of all upland structures within the shoreline setback occupy more than thirty percent (30%) of the required shoreline setback area for all other shorelines.

**Objective 4-1.5 Protect and Retain Environmentally Sensitive Habitat**

*Through the implementation of the following policies the City shall protect and retain environmentally sensitive upland and marine habitats. §163.3177(6)(d)2 & §163.3177(6)(g)1. F.S.*

**Policy 4-1.5.1 Establish Incentives to Conserve Sensitive Habitat**

The City shall continue to maintain Land Development Regulations providing for protection of native vegetative communities and land clearing which mandate that new development preserve, at a minimum, all undisturbed wetlands and ninety percent (90%) of high quality tropical hammocks on the parcel being developed. These regulations shall further provide for the preservation and transplantation of plant species that have been designated as endangered, threatened or of special concern by a State or Federal agency. These regulations shall also apply to the City's list of regionally important plant species. An incentive program shall be provided for the conservation of upland areas containing recognized sensitive plant communities and species.

**Policy 4-1.5.2 Require Removal of Invasive Exotic Vegetation**

The City shall continue to maintain Land Development Regulations that require the owner/applicant to remove all invasive exotic vegetation from the subject site as a condition of development. Prior to the removal of vegetation, a vegetation survey or habitat analysis shall be required if deemed necessary by the City. These regulations shall require the site be maintained free of invasive exotic vegetation for a period of at least two (2) years. The list of invasive exotic vegetation will be developed pursuant to the Florida Exotic Pest Plant Council annual recommendations.

**Policy 4-1.5.3 Provide for Open Space**

Upon the effective date of the Plan, the City shall provide for open space as a part of the requirements for all development and redevelopment. Open space areas shall be designated and

treated in such a manner as to maintain the integrity whether the primary purpose is to serve as natural vegetative or wildlife habitat, or as cultivated landscaped space. No land shall be developed, used or occupied such that the amount of open space on the parcel proposed for development is less than the open space ratios (OSR) listed below in Table 4-1, for each ecological community.

<b>TABLE 4-1 OPEN SPACE RATIOS</b>	
<b>Ecological Community</b>	<b>OSR</b>
Submerged Lands (Open Water)	1.00
Mangrove and Freshwater Wetlands	
Undisturbed	1.00
Disturbed	.90
Salt Marsh and Buttonwood Wetlands	
Undisturbed	1.00
Disturbed	.60
Beach Berm Complex	
Undisturbed	.95
Disturbed	.40
Off Shore Island	.95
Hammocks	
Palm Hammock	.90
Cacti Hammock	.90
High Quality Hammock	.90
Moderate Quality Hammock	.70
Low Quality Hammock	.50
Disturbed	
Disturbed with Hammock	.40
Disturbed Saltmarsh Buttonwood Association	.30
Disturbed with exotics	.20
Scarified	.20

**Policy 4-1.5.4      Limits to Hammock BPAS Allocation**

In no case shall more than one (1) BPAS allocation per year be issued for properties which are in part or whole designated as Hardwood Hammock, Palm Hammock, Cactus Hammock, or Beach/Berm on the City of Marathon Existing Conditions Maps or as determined by the City Biologist or private habitat survey.

**Policy 4-1.5.5      Limit Clearing of Native Vegetation (Hardwood Hammock)**

The clearing of high quality hammock is hereby limited to a 7,500 square foot footprint for the principle structure. Additionally, one driveway no wider than 18 feet per parcel is allowed in high quality hammock that is exempt from clearing requirements; however, in no case shall clearing exceed 10 percent of the entire site. The clearing of moderate quality hammock is

hereby limited to 7,500 square feet or 30 percent, whichever is less. For all categories of hammock, a minimum clearing area of 3,000 square feet shall be allowed to provide reasonable use of property. The clearing of native vegetation is hereby limited to the immediate development area. The immediate development area shall include the area of approved clearing shown on the approved site plan. The immediate development area shall be fenced throughout the duration of construction. During construction, there shall be no disturbances of the ground surface and vegetation within required open space areas.

**Policy 4-1.5.6 Prohibit Development Impacts on Certain Native Vegetation**

Development shall not disturb the following vegetation:

- a. champion trees;
- b. specimen trees (diameter at breast height that is greater than seventy-five (75) percent of the record tree of the same species for the State of Florida); and
- c. plant species listed by the FWS as threatened and endangered.

**Policy 4-1.5.7 Limit Impacts on Native, Threatened, Endangered or Commercially Exploited Species**

Development shall be sited so as to minimize impacts on the following plants:

- a. species listed by the Florida Department of Agriculture and Consumer Services as threatened, endangered or commercially exploited (excluding those specifically protected by Policy 4-1.5.6);
- b. other locally rare native species; and
- c. native trees with diameter at breast height (dbh) of four (4) inches or greater.

In those instances, where an applicant can demonstrate that avoidance of such species or trees is not possible by clustering or by an alternate design approach, then successful transplantation of such species shall be considered on-site. "Successful" transplantation shall be defined as one-hundred (100) percent survival after a period of one (1) year. Where the probability of survivability of transplanted plants is low (as determined in writing by the City Biologist), then the applicant shall be required to pay into the City Restoration Fund, or to donate nursery stock to city or state restoration projects. Donated nursery stock shall be identical in species composition to that which will be lost to construction. Stock shall be donated according to the following replacement schedule:

- a. for native trees over four (4) inches dbh, three (3) replacements for each taken;
- b. for listed species of any size, three (3) replacements for each taken; and
- c. for locally rare native species, three (3) replacements for each taken.

In situations where replacement stock is not available, then a replacement schedule utilizing alternative species shall be approved in writing by the City Biologist. This alternative shall be utilized only after all possible sources of replacement species have been exhausted. In situations where payments are made in lieu of donations of stock, such payments shall be sufficient to purchase stock in numbers corresponding to the above replacement schedule.

**Policy 4-1.5.8      Require Clustering**

Upon the effective date of the Plan, the City shall require development to minimize impacts on sensitive natural areas to the maximum extent feasible through the following clustering provisions. In the event development must be permitted, adverse impacts shall be mitigated by clustering.

Clustering requirements shall be as follows:

- a. Development which may impact sensitive natural resources may be required to utilize reduced construction ‘footprints’, modified construction techniques, innovative construction techniques, land use and development techniques which minimize negative environmental impacts or results, and the like;
- b. When a parcel proposed for development contains more than one (1) habitat type, development shall be:
  1. clustered on the least sensitive portion of the parcel, until the maximum allowable density is reached;
  2. if further development occurs, it shall be clustered on the next least sensitive portion of the parcel, until maximum allowable density is reached, etc.; and
  3. development permitted on the least sensitive portion(s) of a parcel shall be clustered within that portion(s) of the parcel.
  4. Modification of the development footprint to minimize the impact on existing native understory and canopy trees.

When a parcel proposed for development contains more than one (1) habitat type, all development shall be clustered on the least environmentally sensitive portions of the parcel. For the purpose of this policy, the relative sensitivity of separate habitat types shall be classified as shown below with Class I being the most sensitive and Class III being the least sensitive.

**Class I**

Saltmarsh and/or buttonwood association wetlands;  
Beach or berm;  
High quality hammock;  
Moderate quality hammock;  
Low quality hammock;

**Class II**

Disturbed beach or berm;  
Disturbed with salt marsh and/or buttonwood association wetlands (lawfully converted to disturbed uplands);  
Disturbed with hammock;

**Class III**

Disturbed; and  
Disturbed with exotics.



Development within the least sensitive habitat shall achieve the maximum density or intensity allowable and shall fully utilize the net buildable area of the habitat prior to expanding to the next least sensitive habitat type on the site. The OSR for Class I habitat types shall be implemented by the developer/property owners execution of a Grant of Conservation Easement Agreement (GOCEA), stating the required amount of open space.

Policy 4-1.5.9 Participate in the Florida Champion Tree Program

The City shall actively participate in the Florida Champion Tree Program of the Florida Department of Agriculture. Excluding invasive exotic species, development shall not disturb the following vegetation:

- a. Champion trees;
- b. Specimen trees (diameter at breast height that is greater than seventy-five (75) percent of the record tree of the same species for the State of Florida); or
- c. Plant species listed by the FWS as threatened and endangered.

Policy 4-1.5.10 Update the Existing Conditions and Threatened and Endangered Species Habitat Maps

The City shall maintain and update the Threatened and Endangered Species map with the best available data. The updated map shall be prepared through cooperation and coordination with DEP, FWS and FFWCC to prepare the updated map from the Current Existing Conditions and Threatened and Endangered Species Map adopted from Monroe County and shall include identification of adjacent off shore island bird rookeries. Thereafter, this map shall be updated every three years.

Policy 4-1.5.11 Adopt a Habitat Analysis Methodology

The City shall continue to maintain and enforce Land Development Regulations that outline a methodology for and require a habitat analysis to be prepared and submitted as a part of a development application for all proposed development projects stated herein. Should this application or permit be denied, expired or abandoned, the habitat analysis shall be revised and resubmitted according to the applicable standards at the time of submittal of a new application for development. Any development that impacts the following environmentally sensitive lands shall require a habitat analysis:

- a. Tropical hardwood hammock as identified on the Existing Conditions Maps; or
- b. Wetlands as identified on the ADID maps; or
- c. As determined by the Planning Director.

The habitat analysis shall analyze the distribution and quality of undisturbed lands within the parcel proposed to be developed. The habitat analysis shall include, at a minimum, the following:

- a. A written methodology for completing the habitat analysis;
- b. Requirements for integrating data regarding the historic sightings of rare and endangered species and critical nesting/feeding areas for birds; and
- c. Evaluation criteria, which will differentiate high, medium, and low quality habitat.

**Policy 4-1.5.12 Enhance Coastal and Marine Resources**

The City shall continue to maintain Land Development Regulations to implement each of the policies defined within this objective to protect, conserve and enhance coastal and marine resources.

**Policy 4-1.5.13 Define Altered and Unaltered Shorelines**

The City shall continue to maintain Land Development Regulations that define ‘altered shoreline’ and ‘unaltered shoreline’, which shall be written to recognize the following general features of each:

- a. Altered shorelines. Altered shorelines generally are located directly along dredged canals, basins and channels and/or have been filled or vertically bulkheaded to such a degree that the original natural slope landward of the water is no longer present.
- b. Unaltered shorelines. Unaltered Shorelines generally are located along natural non-dredged waterways and open water and have a sloping profile typical of the original natural conditions of the shoreline even though fill or riprap may be present.

**Policy 4-1.5.14 Protect Natural Resources through Development Review**

The City shall require development review of all proposed development or redevelopment to prevent unnecessary destruction or inappropriate use of existing natural resources and natural sites. Through the development review process the City shall enforce qualitative and quantitative development criteria consistent with the Plan that governs:

- a. The management of surface water;
- b. The preservation of open space;
- c. The preservation of native vegetation and environmentally sensitive habitats; and
- d. Protection of tidal flushing and circulation patterns.

**Objective 4-1.6 Restoration**

*The City shall initiate a program to restore and maintain disrupted native marine, wetland, beach, berms and native upland vegetation systems. §163.3178(2)(e) & §163.3177(6)(g) F.S.*

**Policy 4-1.6.1 Prioritize Wetland Restoration Sites**

A list of priority wetland restoration sites shall be drafted and updated every other year. This list shall be developed by the City in consultation with representatives of the ACOE, EPA, FWS, DEP, and FWCC and as information is gained through the development review process. Priority wetland restoration sites shall be those disturbed wetlands having the greatest potential functional value after restoration (determined by the KEYWEP) as defined in the Florida Keys ADID Program.

Policy 4-1.6.2 Prioritize Beach and Upland Restoration Sites

A list of priority beach berms and upland, native vegetative restoration sites shall be drafted and updated every other year. This list shall be developed by the City in consultation with the Florida Department of Agriculture and Consumer Services (Division of Plant Industries), the Florida Natural Areas Inventory and the National Audubon Society Research Department and other agencies as appropriate. Priority upland restoration sites shall be identified based on findings of the general evaluation of upland vegetation. Priority sites shall be those disturbed areas where restoration will result in the greatest habitat benefit at the least cost. Candidate restoration sites shall include publicly-owned as well as privately-owned sites.

Policy 4-1.6.3 Restore Seagrass Beds

The City shall cooperate with National Oceanic and Atmospheric Administration (NOAA), EPA, DEP and Florida Keys National Marine Sanctuary (FKNMS) to restore seagrass beds within the City's jurisdiction.

Policy 4-1.6.4 Establish a Program for Invasive Vegetation Removal on City Lands

The City shall maintain a program for removing invasive exotic vegetation from City owned lands. This program shall include establishing and prioritizing a list of sites, monitoring and plans for re-vegetation.

Policy 4-1.6.5 Establish a Program for Restoration of City Owned Lands

The City shall maintain a program for restoring City owned beaches and beach berm areas. This program shall include monitoring and plans for re-vegetation.

Policy 4-1.6.6 Restoration Funding Sources

Restoration projects shall be completed as funding, as established through Policy 4-1.6.7 and other sources, becomes available. Local, State, Federal and private funding sources shall be pursued and used to support restoration projects.

Policy 4-1.6.7 Establish a Restoration Fund

The City shall continue to maintain a restoration fund. Local, State, Federal and private funding sources shall be pursued and used to support restoration projects.

**Objective 4-1.7 Protect and Enhance Fisheries, Wildlife and Wildlife Habitat**

*The City shall protect and enhance fisheries, wildlife and wildlife habitat from the adverse impacts of development by regulating the location, density and intensity of those activities that cause the adverse impact. The City shall coordinate with all Federal, State and local government agencies to promote protection of fisheries, wildlife and wildlife habitats. The Land Development Regulations shall provide for flexible development alternatives, including density transfers from wetlands to adjacent uplands, allowing more flexible development options on developable portions of the site. §163.3177(6)(d)2 F.S.*

Policy 4-1.7.1 Wetland Densities

In accordance with the Future Land Use Element, allocated density (dwelling units per acre) shall be assigned to high quality disturbed wetlands, undisturbed wetlands, salt ponds and mangrove

forests only for use as transferable development rights (TDR's) away from these habitats. High quality disturbed and undisturbed wetlands shall be assigned a density of 0.25 dwelling units per acre as a sender site. Submerged lands shall not be assigned density for the purposes of development right transfers.

**Policy 4-1.7.2          Protect Native Wildlife from Free-roaming Domestic Pets**

The City shall continue to maintain regulations to protect native wildlife species, especially State and Federally designated species, from disturbance and predation by free-roaming domestic pets, particularly cats and dogs. The City Biologist shall meet periodically with the Monroe County Animal Control Department to review priorities for animal control.

**Policy 4-1.7.3          Protect Native Wildlife from Invasive Exotic Wildlife Species**

By December 31, 2015, the City shall adopt regulations to protect native wildlife species, especially State and Federally designated species, from invasive exotic wildlife species, particularly iguanas and Gambian rats. Prior to this, the City Biologist shall coordinate with the FFWCC and the US FWS to develop a list of undesirable exotic wildlife species. In accordance with this list, the City shall adopt an exotic wildlife ordinance which shall restrict the sale and handling of listed undesirable exotic species by December 31, 2015.

**Policy 4-1.7.4          Endangered Species Focus Areas**

The City shall implement activities to protect the habitat of, and to prohibit the destruction of, the federally- designated eastern indigo snake (*Drymarchon corais couperi*) (*Drymachron corais couperi*), Stock Island tree snail (*Orthalicus reses*) and Key tree cactus (*Pilosocereus robinii*). The City, in conjunction with the FWS and FWC, shall identify wetland and upland habitats which are potentially suitable habitat for the above mentioned species. Identified sites shall be given priority for conservation acquisition purposes. Particular emphasis shall be placed upon those sites located within improved subdivisions. Acquisition shall be considered consistent with land acquisition policies in this Plan.

**Objective 4-1.8          Prohibit Mining of Minerals**

*No mining activities shall be permitted within the City. The City has no areas suitable for the extraction of minerals. §163.3177(6)(d)2.d F.S.*

**Policy 4-1.8.1          Prohibit Mining of Minerals**

The City shall continue to maintain Land Development Regulations to prohibit mining of minerals based on the irretrievable losses that such intense activities may potentially impose on the City's fragile ecosystem. Mining shall include the extraction of minerals solely for the purpose of commercial sale. These Land Development Regulations shall also prohibit the removal of coral from City waters.

**Policy 4-1.8.2          Inventory Abandoned Mining Pits**

The City shall maintain an inventory of all abandoned mining pits. The inventory shall include at a minimum, the location, ownership, size, general description of existing site conditions, and general description of potential environmental problems for each abandoned pit.

Policy 4-1.8.3            Adaptive Reuse

The City shall work cooperatively with the DEP and other appropriate agencies to identify strategies for adaptive reuse and reclamation of abandoned mining pits within the City.

**Objective 4-1.9            Hazardous Waste**

*The City shall ensure that the storage, transport and disposal of hazardous waste generated in the City are managed with the best available technology to protect environmental quality. §163.3177(6)(d)2.i F.S.*

Policy 4-1.9.1            Assure Proper Management of Solid and Hazardous Wastes

The City shall cooperate with the appropriate Federal, State and local agencies to assure that solid and hazardous wastes generated within the City are properly managed to protect the environment.

**Objective 4-1.10            Preservation of Historical, Cultural, or Archaeological Features**

*The City shall ensure the preservation of historical, cultural, or archaeological features of local, regional, State and National significance. §163.3177(6)(f)1.e. F.S.*

Policy 4-1.10.1            Implement Historic and Archaeological Site Policies

The City shall coordinate with the State and Federal government to develop programs for implementing City, State and Federal policies for identifying, preserving and enhancing sites of historical and archaeological significance. Programs for identification, evaluation of relative significance, protection, preservation and enhancement shall be promoted, utilizing all available local, State, Federal and private sector resources.

Policy 4-1.10.2            Establish Provisions to Address Adverse Impacts to Historic and Archaeological Sites

The City shall continue to maintain Land Development Regulations that include provisions to address adverse impacts to historic or archaeological sites of significance created by development or redevelopment of the site.

Policy 4-1.10.3            Identify Historic and Archaeological Sites

The City shall continue to maintain criteria within the Land Development Regulations to define structures or sites with locally historical and/or architectural significance. The City shall complete a survey identifying potential architectural and historical sites. The survey shall primarily focus on structures and properties that are at least 40 years old.

Policy 4-1.10.4            Preserve Historic and Archaeological Sites

Based upon the survey identified in Policy 4-1.10.3, the City shall adopt Land Development Regulations to preserve these sites and to establish a procedure to add sites to the City's list of locally significant historical resources.

Policy 4-1.10.5      Develop a Pedestrian and Bicycle Path Network

The City shall promote a systematic approach to the development of a pedestrian and bicycle path network. The City shall also investigate the increased use of golf carts and alternative transportation means by the public and private sectors in order to improve energy efficient transportation links between major activity areas such as residential neighborhoods, schools, employment centers, shopping areas, resorts and parks and recreational areas.

**Objective 4-1.11      Protect, Conserve, and Enhance Marine Resources**

*The City shall protect, conserve and enhance coastal and marine resources. §163.3178(2)(g); §163.3177(6)(d)2 and §163.3177(6)(g) F.S.*

Policy 4-1.11.1      Enhance Coastal and Marine Resources

The City shall continue to maintain Land Development Regulations to implement each of the policies defined within this objective to protect, conserve and enhance coastal and marine resources.

Policy 4-1.11.2      Minimum Water Depth for Docking Facilities

Except as provided herein, the siting of docking facilities shall require minus four (-4) feet mean low water (MLW) depth at the terminal end. These structures must have continuous access to open water at depths of minus four (-4) feet MLW or greater over a channel width of twenty (20) feet, or access to open water via a marked, Federal and State approved navigation channel.

- a. Docking facilities may be developed on any shoreline if there is a MLW depth of at least minus four (-4) feet at the terminal end of the docking facility, and continuous access to open water; or
- b. Docking facilities may be developed on the shoreline if there is a MLW depth of at least minus four (-4) feet at the terminal end of the docking facility and the docking facility is located in a channel, canal or basin that connects five or more contiguous lots, with continuous access to open water.

For the purposes of this policy ‘open water’ means the area beyond (-) 6 feet MLW or deeper of the Straits of Florida, Florida Bay, the Gulf of Mexico or the Atlantic Ocean, which consists of an uninterrupted expanse of water and ‘continuous access’ means a natural passage or an existing manmade channel no shallower than four (4) feet at MLW and no narrower than twenty (20) feet.

Policy 4-1.11.3      Minimum Water Depth for Mooring Sites

The minimum water depth requirement at a mooring site that is not in a designated mooring field shall be minus four (-4) feet MLW. Access to and from the mooring site will have minus four feet mean low water, per Policy 4.1.11.2.

Policy 4-1.11.4      Regulate Docks

The following restrictions shall apply to all structures built over or adjacent to water:

- a. The maximum permitted length of docks shall be commensurate with the shoreline width of the land parcel at which the dock is located, subject to a maximum length of 100 feet from the mean low water line;
- b. The length of docks shall not exceed ten percent (10%) of the width of the water body as measured laterally across the water body from the proposed location of placement and from the point of mean low water to the opposing point of mean low water. An exception to this shall be made in cases where adequate depth at the terminal end of the dock pursuant to Policy 4-1.11.2 is not available. In such cases the dock may be lengthened only enough to allow the centerline of an average width vessel to lie in four feet of water at mean low water;
- c. No dock or mooring structure together with a moored vessel shall preempt more than twenty-five percent (25%) of the navigable portion of a manmade water body;
- d. All fishing, swimming and other piers, and observation decks shall conform to design criteria to be adopted in the Land Development Regulations, which prohibit their use as a dock;
- e. Only designs perpendicular to the shoreline shall be allowed except where such structures would preclude lawful navigation of the waterway; or where perpendicular designs are not feasible; and
- f. A parallel structure may be permitted provided that the structure does not exceed eight (8) feet in width. Where a continuous mangrove fringe exists along the shoreline, a dock with a walkway perpendicular to the shoreline, such as a "T" or "L" dock, shall be the design permitted.

Policy 4-1.11.5 Special Approvals

The City shall establish and adopt a variance or special approval procedure to allow the minimum relaxation of the above restrictions when it is necessary to provide the upland owner reasonable access to adjacent waters. This procedure shall allow the minimum relaxation of the above restrictions and incorporate, among other criteria, requirements that such structures not be inconsistent with community character, not interfere with public recreational uses in or on adjacent waters, and poses no navigational or public safety hazard.

- a. For structures serving commercial uses, public uses, or more than three dwelling units, the City Manager or designee may approve deviations from these adopted standards through a special approval process. Such approval may include additional structures or uses provided that such approval is consistent with and furthers the purposes of the Plan, is consistent with the general standards applicable to all uses, and the proposed structures are located in a disturbed area of an altered shoreline. Additional conditions to mitigate for such development shall be established by the City Manager or designee, such as requiring a water quality-monitoring program, a reduction of impervious surfaces, or installation of additional landscaping material.
- b. The City Manager or designee may approve designs that address unique circumstances such as odd shaped lots, even if such designs are inconsistent with the above standards. Such approval may be granted only upon the City Manager

or designee's written concurrence with the applicant's written finding that the proposed design furthers the purpose of this section and the goals of this Plan. Site Plan approval shall strive for the least possible deviation from the above standards to address the unique circumstances.

- c. Nonconforming structures lawfully existing within the shoreline setback along manmade canals, channels, or basins, or serving three or fewer dwelling units on any shoreline, may be rebuilt in the same footprint provided that there will be no adverse impacts on surface water runoff or navigation.
- d. Existing docks or docking facilities lawfully established along the shoreline of manmade canals, channels, or basins, or serving three or fewer dwelling units on any shoreline, may be expanded or extended beyond the size limitations contained in this section in order reach the water depths specified for docking facilities in Policy 4-1.11.2. Any dock or docking facility so enlarged must comply with all other requirements of this Plan.
- e. The City shall establish and adopt a long dock variance procedure to allow the minimum relaxation of the above restrictions for new docks or docking facilities requiring lengths that exceed the established minimums in order to reach adequate water depths. Due to inaccessibility to sufficient water depth, prevalence of marine turtle nesting habitat and abundant seagrass communities, this variance procedure shall not be available for new docks located on the ocean side of Grassy Key.

**Policy 4-1.11.6          Protect Living Marine Resources**

Regardless of water depth, docking facilities and piers shall not terminate on submerged land which is vegetated with sea grasses or is characterized by coral reef or a hard-bottom community except as may be permitted by DEP and ACOE; this shall also apply to mooring fields. The Land Development Regulations shall adopt design criteria to permit sunlight to reach the bottom.

**Policy 4-1.11.7          Maximize Protection of Sea Turtles**

The City shall continue to maintain Land Development Regulations to maximize protection of sea turtles. Such regulations shall apply to existing and new development and shall generally accomplish the following:

- a. Prohibit activities disruptive to marine turtles;
- b. Establish standards for preventing interior or exterior lighting from illuminating nesting areas during the nesting season;
- c. Establish nesting habitat setbacks;
- d. Establish standards for mechanical beach cleaning; and
- e. Protect marine turtles from predation.

**Policy 4-1.11.8          Protect Sea Turtles From Land Development Activities**

The City shall protect marine turtles from land development activities. Notwithstanding the provisions above for shoreline development, no development other than pile supported docks and walkways designed to minimize adverse impacts on marine turtles shall be allowed within fifty (50)



feet of any portion of potential nesting area for marine turtles. All such development shall comply with the City Code and the following:

- a. On shorelines with no distinct berm, the nesting area is recognized as the first fifty (50) feet from the MHWL. The setback is measured from this fifty (50) foot line for a required setback of one hundred (100) feet from MHWL. If a berm is present, the fifty (50) foot setback shall be measured from the landward toe of the most landward beach berm. At no time shall the maximum total setback exceed one hundred (100) feet from MHWL.
- b. Known or potential nesting areas for marine turtles are those areas identified as such on the City's adopted Protected Animal Species Maps. Within mapped nesting areas, the City Planning and Development staff may, in cooperation with the DEP, determine that specific segments of shorelines have been previously, lawfully altered to such a degree that suitable nesting habitat for marine turtles is no longer present. In such cases, the City Planning and Development staff in cooperation with the Florida DEP may recommend reasonable measures to restore the nesting habitat. If such measures are not feasible, the specific requirements of this subsection do not apply. Restoration of suitable nesting habitat shall be required for unlawfully altered beaches.
- c. Any such dock or walkway shall be designed to the following criteria to minimize adverse impacts on marine turtles.
- d. The structure shall have a minimum horizontal distance of four (4) feet between pilings or other upright members.
- e. The structure shall have a minimum clearance of two (2) feet above grade.
- f. If stairs or a ramp with less than the minimum two (2) feet clearance above grade is required, such stairs or ramp shall be enclosed with vertical barriers no more than two (2) inches apart.

Policy 4-1.11.9 Turtle Nesting Habitat

Beaches recognized as nesting areas for marine turtles are those areas documented as such on the City's Threatened and Endangered Species Map.

Policy 4-1.11.10 Attend Sea Turtle Training

A representative from City staff shall attend routine FFWCC training sessions regarding marine turtle nesting, stranding and salvage reporting. The City shall support and assist the conservation efforts of the State marine turtle stranding and salvage response and reporting network.

Policy 4-1.11.11 Adopt Beach Re-nourishment Standards

The City shall continue to maintain within the Land Development Regulations specific criteria for beach re-nourishment projects. Any proposed beach re-nourishment project shall meet standards of best management practices and shall receive permits from all Federal and State agencies having jurisdiction. Re-nourishment projects for naturally occurring erosion events shall take into account the degree of erosion, the need to stabilize and protect existing upland principal structures and uses, the restoration of Marine Turtle nesting habitat and upland natural resources. Sand used in beach re-nourishment projects on recognized Marine Turtle nesting

beaches must meet all applicable criteria for the maintenance and enhancement of sea turtle nesting habitat, including grain size, composition and percent clay. When beach re-nourishment projects are needed, the vegetated berm system shall be restored, as necessary, utilizing site suitable native vegetation.

Policy 4-1.11.12 Public Beach Management Plan

The City shall prepare and annually review a Beach Management Plan for all City owned beaches that are marine turtle nesting habitat. These shall be consistent with the policies for protecting marine turtle nesting habitat.

Policy 4-1.11.13 Dead-End Canals

The City shall work cooperatively with the DEP, ACOE and other applicable agencies to identify the water quality and permitting issues relating to the opening of dead-end canals.

Policy 4-1.11.14 Sea Weed Restriction Devices

The City shall work cooperatively with the DEP, ACOE and other applicable agencies to identify and permit appropriate use of aerators or other weed restriction devices as a means of improving water quality.

Policy 4-1.11.15 Mooring Field Construction

The City shall adopt regulations to ensure that mooring field construction is accomplished using low-impact techniques which minimize alteration of bottom topography and sediments and to ensure that mooring fields are sited in areas with a minimum water depth of minus six (-6) feet MLW. Access to and from the mooring site will have minus four feet mean low water, per Policy 4.1.11.2.

**Objective 4-1.12 Protect Marathon's Marina Community**

*Protect and enhance the character, history, economic viability and environmental quality of Marathon's marina community through marina siting and operation criteria. §163.3177(6)(d)2; §163.3177(6)(g) and §163.3178(2)(g) F.S.*

Policy 4-1.12.1 Marina Definition

The City shall continue to maintain Land Development Regulations to define a marina. The definition of marina shall include commercial marinas, commercial fishing marinas, boat launching and ramp facilities, mooring fields, and multifamily marinas.

Policy 4-1.12.2 Marina Construction

The City shall continue to maintain Land Development Regulations to implement marina siting criteria through the development approval process. Marina uses are defined as conditional uses in all zoning districts. Marina siting criteria will consist of the policies under this objective as well as additional objectives and policies in this Plan, including, but not limited to:

- Live-aboard Vessels: Policies 1-3.4.5 and 1-3.4.6

- Natural Resource Protection: Policies 4-1.2.2, 4-1.2.3, 4-1.2.11, 4-1.2.12, 4-1.3.1, 4-1.3.2, 4-1.3.4, 4-1.4.1, 4-1.4.4, 4-1.4.6, 4-1.5.1, 4-1.5.2, 4-1.5.3, 4-1.5.5, 4-1.5.6, 4-1.5.7, 4-1.5.8, 4-1.5.11, 4-1.7.1, 4-1.11.1, 4-1.11.7 and 4-1.11.8
- Shoreline Alterations: Policies 4-1.3.5, 4-1.3.6, 4-1.3.7, 4-1.3.8, 4-1.3.9 and 4-1.5.13
- Water Quality: Policies 4-1.3.10, 4-1.4.3, 4-1.11.13, 4-1.11.14 and 4-1.18.6
- Waste Management: Policy 4-1.9.1
- Development Approval: Policies 4-1.4.5, 4-1.5.14, 4-1.11.5 and 4-1.18.1
- Setbacks: 4-1.4.2, 4-1.4.8, 4-1.4.9, 4-1.4.10 and 4-1.4.12
- Walkways: 4-1.4.11
- Dock and Mooring Restrictions: Policies 4-1.11.2, 4-1.11.3, 4-1.11.4, 4-1.11.6 and 4-1.11.15
- Prioritization of Uses: Policies 4-1.13.1 and 4-1.13.2,
- Public Access: Objective 4.1.14 and Policies 4-1.3.5, 4-1.14.2 through 4-1.14. 4
- Hazard Mitigation: Policies 4-1.3.3, 4-1.15.1 and 4-1.22.8
- Concurrency: Policy 4-1.17.2
- Dredging: Policies 4-1.18.2, 4-1.18.3 and 4-1.18.4

New and redeveloping marinas must demonstrate consistency with all the criteria listed above in order to receive development approval.

#### Policy 4-1.12.3 Marina Operating Permit

The City shall require all marinas to obtain and annually renew a Marina Operating Permit (MOP), which at a minimum shall provide for information for the City's marina inventory and compliance with best management practices. Best management practices shall include at a minimum:

- a. Provision for clear and concise safety and environmental signage;
- b. Appropriate handling and storage of hazardous materials;
- c. Spill prevention and control;
- d. Guidelines on discharges related to boat repair and maintenance;
- e. Hurricane evacuation and preparedness;
- f. Sewage pump-out requirements;
- g. Provision of adequate support facilities for the maximum number of vessels anticipated at each facility and the type of services offered at the facility. Support facilities shall include bathrooms, recreation and laundry facilities, parking facilities, waste disposal and, where appropriate, access and dinghy docking areas for mooring fields; and,
- h. Compliance with stormwater management requirements.

Within six months of the effective date of the land development regulations implementing the Marina Operating Permit all lawfully established marinas shall submit a complete Marina Operating Permit application to the City, and within one year of the effective date the applicant will be required to obtain a Marina Operating Permit or a valid extension. All marinas unable to obtain a permit or extension, because the marina is an unlawful use, or for other reasons cannot meet criteria, shall be subject to enforcement action under the City Code.

Policy 4-1.12.4            Inventory of Existing Marinas

The City shall continue to update and expand its current inventory of marinas through the Marina Operating Permit (MOP) process. The City's inventory will be updated annually using information gathered through permit applications and annual renewals. The inventory shall include per marina:

- a.     Number of wet and dry slips;
- b.     Type of berths (recreational, commercial and live-aboard);
- c.     List of on-site amenities;
- d.     Provision of boat ramps;
- e.     Availability of pump-out facilities; and
- f.     Presence of fueling facilities.

Policy 4-1.12.5            Pump-Out Criteria

To reduce pollutant discharges into surface waters, the City shall maintain the Marina Operating Permit procedures and other regulations in order to implement siting and discharge regulations, fee requirements, and enforcement provisions designed to ensure good management of marinas and reduce pollutant discharges into surface waters from docked and moored/anchored vessels in nearshore waters. At a minimum these regulations shall include the following:

- a.     Establish criteria that living on board vessels of any type shall only be allowed in designated mooring and anchorage areas and marinas;
- b.     Recognize that occupancy of a vessel for less than a 72 hour period does not constitute a live-aboard use;
- c.     Require all marinas, regardless of size or type, to provide signage conspicuously posted at dockage sites which educate the public about the importance of pumping out and which give clear directions to the nearest pump-out stations;
- d.     Prohibit the mooring or dockage of a live-aboard vessel unless such vessel has an operable, USCG-approved Type III MSD holding tank;
- e.     Require new marinas proposing ten (10) or more slips (wet or dry), or at which a live-aboard vessel is proposed to be docked, to provide an on-site pump-out station and appropriate sewage treatment to accommodate the number of slips present according to all applicable State and Federal standards. Marinas accessory to a multi-family principal use are exempt from this requirement if the total slip number is less than 20; and,
- f.     Require that all existing marinas having ten (10) or more slips (wet or dry), or at which a live-aboard vessel is docked, which have not been retrofitted pursuant to a site improvement project, to provide an on-site pump-out station and sewage treatment in order to obtain their annual Marina Operating Permit. Existing marinas accessory to a multi-family principal use are exempt from this requirement if the total slip number is less than 20.

Policy 4-1.12.6            Derelict Vessels

The City shall continue to maintain a program and where appropriate adopt Regulations relating to derelict vessels which shall include:

- a. Establishing a definition for a derelict vessel;
- b. Identification of procedures for locating and inventorying derelict vessels;
- c. Establishing a method to prioritize the removal of;
- d. Establishing a coordination program with external agencies having jurisdiction; and
- e. Identification of procedures and funding sources for removal of derelict vessels.

Policy 4.-1.12.7 Vessel Impacts

The City shall continue to maintain Regulations to protect submerged lands in shallow water areas from boating impacts. These regulations shall include strategies to reduce seagrass propeller scarring and to minimize vessel groundings. To accomplish this, the City shall:

- a. Identify problem areas and issues related to channel and shallows marking;
- b. Establish criteria and priorities for identifying channels and shallows to be marked;
- c. Make recommendations, in coordination with all appropriate local, State and Federal agencies for channel marking;
- d. Seek funding sources and, as funding is available, install markers; and
- e. Consider adopting speed controls in nearshore waters and/or the creation of a boating restricted or “no vessel” protection zone; and
- f. Require marinas to mark entrance channels as necessary and permitable.
- g. Adopt a Marina Operating Permit program requiring new, redeveloped, and expanded marinas totaling over 100 slips (combined wet and/or dry) to contribute to the vessel impacts program through an annual fee to be used to implement the activities outlined in this policy; and,
- h. Require new, redeveloped, and expanded marinas totaling over 100 slips (combined wet and/or dry) to demonstrate that the marina will not increase impacts to submerged resources and to provide appropriate educational signage and information that specifically illustrates the designated route to open water, surrounding areas of benthic resources to be avoided, and potential penalties for damage of benthic resources. The signage information shall be required as part of the Marina Operating Permit, shall be in a form approved by the City biologist, and will be reviewed annually for effectiveness and to determine if additional measures are necessary to protect the marine environment.

Policy 4-1.12.8 Coordination of Development Affecting Marine Resources

To ensure consistency, the City shall coordinate with all external agencies having jurisdiction over marine resources in the development of marina, mooring, derelict vessels, boating education and impact management policies. The City shall continue to maintain Regulations establishing coordination procedures with all external agencies having jurisdiction, relating to permitting, monitoring and enforcement, regarding mooring, vessels and marine resources.

Policy 4-1.12.9 Waterfront Community Character

The City shall encourage the maintenance of its waterfront community character, public values and traditional uses on the waterfront as identified in the visioning associated with the marina siting plan formulation process. To accomplish this, the City shall adopt land development regulations or other regulations to:

- a. Ensure dedicated public access from water and land and creation of public spaces (such as boardwalks and plazas) in new development and redevelopment of commercial marina facilities through the provision of pedestrian access along the shoreline, protection of view sheds from public areas, and creation of public open spaces, subject to reasonable limits;
- b. Support mixed use development adjacent to commercial marinas which provides a broad range of services and activities for boaters and their families, including restaurants, shops, and other activities for residents and visitors;
- c. Protect the viability of the working waterfront by: establishing that commercial fishing activities are an important community value and that impacts associated with these uses are normal and compatible with other uses of the waterfront;
- d. Coordinate with Monroe County in their efforts to study and protect traditional uses and consider adopting County recommendations as appropriate into the City's Comprehensive Plan or City Code ordinances;
- e. Ensure that changes in uses and services provided at existing commercial fishing, industrial and live-aboard marinas do not occur unless those uses are demonstrably replaced at another facility.
- f. Allow variances to lot, yard and bulk regulations when the variance can be demonstratively related to the support of water-dependent traditional uses, such as public access (as described in part "a" of this policy), commercial fishing, industrial marinas and live-a-board access and facilities, as stipulated in this policy. Develop criteria defining traditional uses and establishing possible variances for consideration The guidelines shall require strict adherence to all comprehensive plan policies and regulations regarding handling of stormwater runoff on site. This policy will not change the location from which setbacks are measured.

**Objective 4-1.13      Prioritize and Limit Shoreline Uses**

*The City shall prioritize shoreline uses to limit the specific and cumulative impacts of development and redevelopment, enhance coastal resources and ensure the continued economic viability of the City. §163.3177(6)(g) and §163.3178(2)(g) F.S.*

**Policy 4-1.13.1      Shoreline Uses**

The City shall continue to maintain Land Development Regulations to establish shoreline land use priorities. These regulations shall categorize water-dependent and water-related land uses, establish permitting criteria and use priorities. Priority shall be given to water dependent uses over water related. Water-dependent and water-related uses shall take priority over uses that are not water-dependent or -related. In conjunction with the development of these regulations, the City shall:

- a. Identify environmentally suitable waterfront areas and recommend strategies for reserving such areas for water-dependent and water-related development sites consistent with estimated need;
- b. Analyze conflicts among existing shoreline uses and recommend strategies for reducing or eliminating such conflicts;

- c. Identify strategies for encouraging appropriate mixed use development that includes water-dependent and water-related uses and is compatible with existing land uses;
- d. Develop strategies to protect the waterfront sites exhibiting Keys Unique Character;
- e. Complete a survey of all other water-dependent uses; and
- f. Complete an inventory of public access points to the beach or shoreline through public and through private lands.

**Policy 4-1.13.2 Establish Criteria for Prioritizing Shoreline Uses**

When reviewing applications for shoreline development, shoreline uses shall be prioritized as follows:

- a. Approved public and private shoreline protection, re-vegetation or restoration programs;
- b. Approved water-dependent shoreline uses available to the public;
- c. Recreational and water-related uses available to the public;
- d. Commercial water-related uses available to the public;
- e. Docks and commercial marina expansion. Priority shall be directed to water-dependent uses that are available for public use;
- f. Parking facilities for shoreline access;
- g. Protection of sites designated as having Keys Unique Character;
- h. Residential water-dependent shoreline uses; and
- i. Residential water-related shoreline uses.

**Objective 4-1.14 Public Access to Water Bodies and Salt-water Beaches**

*The City shall maintain land use policies that provide new or enhance public access to water bodies and salt-water beaches. Beaches shall remain unobstructed and, to the extent lawful, no barriers shall be erected which prevents pedestrian access along the shoreline, subject to reasonable regulations, such as closing times, access, protection of endangered species and use. As such, the City shall enforce standards contained within the following policies. §163.3178(2)(g) F.S.*

**Policy 4-1.14.1 Maintain Designated Beach Accesses**

The City shall continue to maintain and protect all designated public beach access points and signage indicating such points.

**Policy 4-1.14.2 Provide Beach Access at Publicly Funded Oceanfront Developments**

Publicly funded projects that improve, change or in some way support shorefront development shall provide for public access to the shoreline, as well as the necessary support facilities and services, such as boardwalks, beach / dune walkovers, parking lots and restrooms.

**Policy 4-1.14.3      Consider Scenic Views in All Site Plans**

The Land Development Regulations shall include stipulations requiring all site plans for waterfront sites to include design measures, which provide, enhance and preserve scenic views of the water from public rights-of-way (R-O-W).

**Policy 4-1.14.4      Retain Public R-O-W's that Terminate on Water**

The City shall adopt Regulations establishing criteria to be used in evaluating requests for the abandonment of Public rights-of-way that terminate on the water. Abandonment of these rights-of-way shall generally be discouraged but in cases where they are granted, the City may require that an access easement in favor of the City be retained for possible future public benefit.

**Objective 4-1.15      Ensure Infrastructure Availability**

*The City shall ensure that required infrastructure is available to serve the development and redevelopment in the coastal planning area consistent with coastal resource protection and safe evacuation. §163.3178(2)(i) F.S.*

**Policy 4-1.15.1      Ensure Available Infrastructure and Coordinate Timing and Staging of Public Facilities with Private Development**

The City shall continue to maintain Land Development Regulations which 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 or redevelopment. The City shall ensure that funds for future needed infrastructure improvements are phased to coincide with demands generated by development or redevelopment. The infrastructure shall be designed in a manner consistent with the existing and projected future demands generated by development and redevelopment, at the densities permitted through the Future Land Use Element of this Plan. In order to ensure appropriate timing and staging, no development order shall be granted until a plan is submitted by the developer/applicant to the City which demonstrates that all required infrastructure shall be in place and available for use by the development concurrent with the impacts of development. The infrastructure shall also be consistent with applicable local, regional and State coastal resource protection policies.

**Objective 4-1.16      Coordinate Coastal Resource Management**

*The City shall establish an intergovernmental coordination mechanism in order to manage coastal resources within the jurisdiction of more than one local government or public agency. The City shall assist other agencies in implementing appropriate portions of existing multi-jurisdictional resource planning and management plans addressing the coastal area, including management of surface water runoffs, impacts of development on coastal waters and living marine resources. §163.3177(6)(2)d & g F.S.*



**Policy 4-1.16.1          Implement Policies for Intergovernmental Coordination within the Coastal Area**

The City shall coordinate with Monroe County and appropriate regional, State and Federal agencies in managing coastal resources. Management activities shall include, but not be limited to the following:

- a. Participating in County forums and technical review concerning emergency preparedness and hurricane evacuation issues and update of the Comprehensive Emergency Management Plan, including emergency management strategies for hurricanes;
- b. Participating in technical review and in formulation of policies concerning the US 1 corridor, including surface water management policies. This activity shall also be coordinated with the State DOT;
- c. Public access issues shall be coordinated with Monroe County, including issues surrounding maintenance and improvements; and
- d. Issues surrounding conservation of the shoreline of the Atlantic Ocean and Florida Bay shall be coordinated with Monroe County, the US ACOE and DEP, as appropriate; and
- e. Coordinate with the EPA, DEP, SFWMD, and NOAA during completion of the Phase II of the FKNMS Water Quality Protection Program.

**Policy 4-1.16.2          South Florida Regional Planning Council**

The City shall coordinate on a continuing basis with the South Florida Regional Planning Council (SFRPC) in preparing the Plan and amendments that are consistent with the SFRPC Strategic Regional Policy Plan for South Florida. In addition, the City shall coordinate other planning issues of regional significance with the SFRPC. The City shall forward copies of development proposals within the coastal area to public agencies having jurisdiction in the management of potentially impacted natural resources.

**Policy 4-1.16.3          Improve Canal Water Quality**

The City shall seek coordination and partnership with Monroe County, the DEP and other applicable agencies regarding canal monitoring and the development and implementation of strategies to improve canal water quality.

**Objective 4-1.17          Minimum Coastal Hazards**

*The City shall continue to maintain Land Development Regulations which regulate development activities in a manner that minimizes the danger to life and property occasioned by hurricane events. §163.3178(2)(h) F.S.*

**Policy 4-1.17.1          Coastal High-Hazard Area Defined**

As defined in Chapter §163.3178 F.S., the coastal high-hazard area (CHHA) is that area below the elevation of the Category 1 storm surge line as established in the latest Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model developed for use originally by the National Hurricane Center South (Statewide Regional Evacuation Study Program, Volume 7-11, Book 3 of 3).

Policy 4-1.17.2      Manage Coastal Hazards and Coordinate Updates of the Hazard Mitigation Plan

The City shall continue to participate in the Monroe County Technical Coordinating Committee to prepare the hazard mitigation component of the Comprehensive Emergency Management Plan. The City shall enforce appropriate land use controls within the CHHA, including but not limited to:

- a. Mandating that all development and redevelopment within the CHHA comply with the following regulatory techniques for hazard mitigation:
  1. State and local regulations to establish shoreline setbacks, as well as applicable State and local construction codes regulating construction activity in coastal areas;
  2. Surface water management improvements, which mitigate loss of floodplain and comply with adopted surface water management level of service standards for drainage;
  3. Publicly funded infrastructure shall not be built within the coastal high hazard area unless the facility is for the protection of public health, safety and welfare; and
  4. Land use controls shall ensure that wetlands are preserved and protected from the adverse impacts of development.
- b. A multi-agency development review process shall be initiated to ensure that all proposed development or redevelopment having potential adverse impacts on water quality, wetlands, shoreline stabilization, natural habitats, fish or wildlife, hurricane evacuation or other coastal resources shall be coordinated with County, State, Federal or regional agencies having jurisdiction. A primary function of this review process shall be to effectively reconcile hazard mitigation issues prior to issuance of any development orders.

Policy 4-1.17.3      Implement a Local Hazard Mitigation Strategy and Post Disaster Redevelopment Plan

The City shall adopt, by Resolution, the County-wide Local Mitigation Strategy for hazard mitigation. Within two years of the effective date of this Plan, the City shall evaluate and adopt a Post Disaster Redevelopment Plan to increase public safety and reduce damages and public expenditures.

Policy 4-1.17.4      Ensure Consistency with Peace Time Emergency Plan and Local Mitigation Strategy

The City shall ensure consistency with the hazard mitigation annex of the Monroe County Peace Time Emergency Plan as well as the Local Mitigation Strategy, when adopted.

Policy 4-1.17.5      Identify Areas Particularly Susceptible to Damage within the CHHA

The Local Mitigation Strategy shall identify areas particularly susceptible to damage within the CHHA; including FEMA designated V-zones within the City and repetitive loss areas as defined

by FEMA's analytical model, and shall specify procedures for relocating or to replacing public infrastructure away from these locations, where feasible.

**Policy 4-1.17.6 Limit Redevelopment in CHHA**

The City shall limit redevelopment in areas within the CHHA shown by the Local Mitigation Strategy to be particularly susceptible to repeated damage. Criteria for assessing redevelopment potential for these properties shall be addressed within the Post Disaster Redevelopment Plan, to be prepared pursuant to Policy 4-1.22.3.

**Policy 4-1.17.7 Implement General Hazard Mitigation by Restricting the Density/Intensity of Development**

Maximum densities and intensities within the CHHA shall be restricted by the densities and intensities established pursuant to Policy 1-3.2.7, in conjunction with open space requirements also established by Policy 1-3.2.7, of the Future Land Use Element of this Plan. Based upon the findings of the adopted Local Mitigation Strategy, within the Land Development Regulations, densities and intensities permitted within locations indicated by the Local Mitigation Strategy may further be restricted.

**Objective 4-1.18 Control Discharges into Nearshore Waters**

*The City shall implement policies to control pollutant discharges into surface waters from dredge and fill activities. §163.3178(2)(c) and §163.3177(6)(d)2. F.S.*

**Policy 4-1.18.1 Support County, State and Federal Policies**

The City shall support County, State and Federal policies and regulations concerning the permitting of dredge and fill activity, except in those instances where more stringent regulations, as adopted by the City, shall supersede other agency standards.

**Policy 4-1.18.2 Limit New Dredging**

There shall be no new dredging within the City of Marathon except to maintain a consistent water depth within existing navigable channels maintained by the US Coast Guard or canals that were unevenly dredged as documented in a report from a qualified expert. Dredging shall be the minimum required to match surrounding depths, not to exceed minus 7 feet Mean Low Water. This policy does not authorize the opening of dead end canals. Dredging that would increase flushing from contained water bodies such as boat basins, canals, or tidal pools to open water that would result in water quality degradation to receiving waters shall not be permitted. Impacts to natural communities shall be minimized if such impacts occur appropriate mitigation shall be required.

**Policy 4-1.18.3 Regulate Maintenance Dredging**

The City shall continue to maintain Land Development Regulations to establish criteria for maintenance dredging. Such Regulations shall prevent dredging within areas vegetated with seagrass beds or characterized by hard bottom communities except for maintenance in public navigation channels. To facilitate the establishment of bottom vegetation, maintenance dredging in artificial waterways shall not exceed depths greater than minus seven (-7) feet mean low water

unless otherwise permitted by the ACOE and DEP in order to maintain safe, navigable waterways.

**Policy 4-1.18.4 Placement of Dredged Spoil**

All dredged spoil resulting from maintenance dredging shall be appropriately disposed of or placed on permitted upland sites where drainage can be contained on-site with appropriate turbidity controls, or as may be permitted by the ACOE and DEP.

**Policy 4-1.18.5 Violations**

The City shall maintain a schedule of monetary fee penalties for all dredge and fill violations.

**Policy 4-1.18.6 Control Use of Non-vegetative Landscape Material**

The City shall continue to maintain Land Development Regulations that establish criteria and regulations which encourages the placement of alternative materials for use in landscaping and parking areas and discourages the use of crushed gravel in order to protect the City's nearshore waters from surface water runoff through crushed gravel. Runoff from crushed gravel results in high turbidity in our near-shore waters, resulting in layers of silt, which can kill off sea grass, corals and marine life.

**Objective 4-1.19 Limit Public Subsidies in the Coastal High Hazard Area (CHHA)**

*The definition of Coastal High Hazard Area is hereby established as that area below the elevation of the Category 1 storm surge line as established in the latest Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model developed for use originally by the National Hurricane Center South (Statewide Regional Evacuation Study Program, Volume 7-11, Book 3 of 3). The City shall, whenever possible, limit public expenditures that subsidize private development in the CHHA including the high velocity storm surge areas. However, public funds for improved public facilities, such as improvements to roads, potable water, wastewater or drainage included in the Capital Improvements Element and water dependent structures, such as beach access ways, piers and beach re-nourishment activities, may be permitted when required by this Plan, the LDRs, and State or Federal law, rule, or regulations. §163.3178(2)(h) F.S.*

**Policy 4-1.19.1 Adoption of Coastal High Hazard Area Maps**

Adopted by reference is the Florida Statewide Regional Evacuation Study Program, Volume 7 11, Book 3 of 3 produced by the South Florida Regional Planning Council. Particular reference is given to the Storm Surge Atlas reproduced therein and the areas within the Atlas Maps shown as Category 1 storm surge line or Coastal High Hazard Area.

**Policy 4-1.19.2 Inventory Existing Infrastructure in the Coastal Barrier Resource System (COBRA) and the High Velocity Area**

The City shall continue to maintain a list of infrastructure facilities located in the Coastal Barrier Resource System (COBRA) and VE-Flood zone areas. The City shall examine which facilities could be relocated, mitigated, or replaced should State funding sources become available for such activities. Infrastructure is defined as roads, bridges, surface water and wastewater management

systems and potable water facilities. The City shall give priority for relocating, mitigating, or replacing infrastructure facilities located in the high velocity storm surge areas.

**Policy 4-1.19.3      Restrict Future Infrastructure in Coastal High Hazard Area**

The City shall continue to allow the construction of new infrastructure facilities within the Coastal High Hazard Areas provided that such infrastructure shall only be to provide facilities necessary to serve the existing and future population projected in the Comprehensive Plan, and implement and maintain adopted LOS and implement this Plan and State or Federal law, rule, or regulations. §163.3178(2)(i) F.S.

**Policy 4-1.19.4      Limit Public Expenditures in the Coastal High Hazard Area**

The City shall limit public expenditures which subsidize development in designated CHHA areas or which lead to an increase in the capacity of a facility and allow for an additional number of facility users. Infrastructure improvements are defined as those activities (construction of roads, bridges, sewer and water plants), which lead to an increase in the capacity of a facility and allow for an additional number of facility users. Improvements to a facility to addresses existing deficiencies is not governed by this policy.

**Objective 4-1.20      Direct Population away from High Velocity Areas**

*The City shall direct population concentrations away from high velocity areas to the greatest extent consistent with the State Plan's private property rights goal and related policies. §163.3178(2)(j) F.S.*

**Policy 4-1.20.1      Discourage Development in the High Velocity Area**

The City shall, through the Land Development Regulations, continue to encourage both residential and non-residential development away from the areas designated as high velocity storm surge areas through disincentives in the adopted BPAS.

**Objective 4-1.21      Hurricane Evacuation**

*The City shall maintain a hurricane evacuation time as required by the State and provide for a safe and efficient evacuation in the event of a hurricane and ensuring a safe and efficient Post Disaster Management Plan. §163.3178(2)(d) F.S.*

**Policy 4-1.21.1      Provide Hurricane Evacuation Logistical Support**

In order to prevent evacuees crowding roads and shelters, the City shall coordinate with Monroe County in disseminating information concerning the need of residents to evacuate at various hurricane threat levels. The City shall coordinate with the Monroe County Emergency Management Director in assisting implementation of the Monroe County campaign to educate the general citizenry regarding emergency preparedness plans, including specific citizen directives.

Policy 4-1.21.2      Coordinate with Monroe County in Emergency Preparedness

In order to provide for safe and efficient evacuation of the residents in the event of a hurricane, the City shall coordinate with Monroe County in annually updating the Comprehensive Emergency Management Plan and in updating hurricane evacuation shelter assignments as well as other policy formulation surrounding land use and emergency preparedness. This update shall enable Monroe County and the incorporated municipalities to plan for future population densities, which will neither adversely impact the efficiency of the evacuation plan nor increase evacuation times.

Policy 4-1.21.3      Implement Staged/Phased Hurricane Evacuation for Major Hurricanes (Category 3 – 5)

In order to provide for safe and efficient evacuation of the residents in the event of a major hurricane (category 3 – 5), the City shall implement, in coordination with Monroe County, the following staged/phased evacuation procedures to achieve and maintain an overall 24-hour hurricane evacuation clearance time for the resident population.

- a.      Approximately 48 hours in advance of tropical storm winds, a mandatory evacuation of non-residents, visitors, recreational vehicles (RVs), live-boards (transient and non-transient), and military personnel from the Keys shall be initiated. State parks and campgrounds should be closed at this time and entry into the Florida Keys by non-residents should be strictly limited.
- b.      Approximately 36 hours in advance of tropical storm winds, a mandatory evacuation of mobile home residents, special needs residents, and hospital and nursing home patients from the Keys shall be initiated.
- c.      Approximately 30 hours in advance of tropical storms winds, a mandatory phased evacuation of permanent residents, by evacuation zone shall be initiated.

The actual sequence of the evacuation by zones will vary depending on the individual storm. The concepts embodied in this staged evacuation procedures should be embodied in the appropriate county operational emergency management plans.

Policy 4-1.21.4      Ensure City Hurricane Preparedness

The City shall continue to maintain an operational policy for managing public facilities, including transportation, in the event of a major hurricane. The operational policy will identify a strategy for ensuring a safe and efficient Post Disaster Management Plan. In addition, the City will participate in the State's Carrying Capacity and Hurricane Evacuation studies, and shall evaluate the findings and recommendations and where appropriate and based on a finding that the recommendations of these studies are consistent with the goals and objectives of the Plan, shall amend the Plan.

Policy 4-1.21.5      Designate US 1 the Primary Evacuation Route

The City shall designate US 1 as the primary evacuation route out of Marathon as part of the Comprehensive Emergency Management Plan. The City shall cooperate with other Monroe

County jurisdictions to work towards achieving and maintaining evacuation of the Florida Keys at or below the level required by the State.

Policy 4-1.21.6      Examine the Feasibility of Providing Shelter(s) of Last Resort

Within five years of the effective date of the Plan, the City shall analyze the feasibility of providing shelter(s) of last resort on high ground within the City.

Policy 4.1.21.7      Ensure a Quick Re-Entry into the City Following an Evacuation

The City shall continue to work with the appropriate agencies to develop a program for ensuring quick re-entry by City residents into Marathon following an evacuation.

**Objective 4-1.22      Reduce Exposure to Natural Hazards**

*The City shall reduce or eliminate exposure of human life and public and private property to natural hazards through establishment and update of a Post Disaster Redevelopment Plan. In addition, the City shall develop local plan components including policies for managing recovery operations through a Recovery Task Force. §163.3178(2)(f) F.S.*

Policy 4-1.22.1      Recovery Operations

The City shall continue to coordinate with Monroe County to modify the Comprehensive Emergency Management Plan in order to establish compliance with this Plan. The update of the Comprehensive Emergency Management Plan shall include strategies for post-disaster recovery operations. As part of the post disaster recovery planning process the City Council shall appoint a Recovery Task Force which is to be comprised of the City Manager, the City Manager designee 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 reestablish 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.

Policy 4-1.22.2      Conduct Post Hurricane Assessments

The Recovery Task Force shall coordinate their management plan with the Monroe County Emergency Management Office for compliance with the Comprehensive Emergency Management Plan and shall present the management plan to the City Council for review and approval. The management plan should provide a basis for considering the following activities during times of natural disaster:

- a.      Ensure a means to restore economic activity;
- b.      Establish a framework for deciding whether to implement a temporary moratorium on building activity as may be required for public safety;
- c.      Develop procedures for reviewing and deciding upon emergency building permits;
- d.      Coordinate with State and Federal officials to prepare disaster assistance applications;

- e. Analyze and recommend to the City Council hazard mitigation options, including reconstruction or relocation of damaged public facilities;
- f. Develop a redevelopment plan; and
- g. Recommend amendments to the Comprehensive Emergency Management Plan and other appropriate policies and procedures.

**Policy 4-1.22.3      Coordinate 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;
- d. Minimal repairs to make structures habitable; and
- e. Emergency repairs related to environmental damage.

These considerations shall receive first priority when 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 4-1.22.4      Propose Hazard Mitigation and Plan Amendments**

The Recovery Task Force shall propose needed Plan amendments to reflect the recommendations contained in any inter-agency hazard mitigation reports or other reports.

**Policy 4-1.22.5      Manage Redevelopment Activities**

The City shall manage unanticipated future redevelopment activities necessitated by hurricane events or other natural disasters through this Plan, the adopted Land Development Regulations and the City Master Plan.

**Policy 4-1.22.6      Review Post Disaster Management Alternatives**

The Recovery Task Force shall be charged with the responsibility for reviewing available alternatives for managing damaged public facilities following a hurricane event. The Task Force shall evaluate future options for such facilities including, but not limited to abandonment, repair in place, relocation and reconstruction with structural modifications. The Task Force shall consider these options based on the following considerations:

- a. Construction and maintenance costs;
- b. Recurring damages;
- c. Impacts on land use, the environment, and the public sector;
- d. Repair to any public facilities that shall be deemed historic structures according to the inventory of the National Register of Historic Places shall be guided by the Secretary of the Interior's Guidelines for Rehabilitation; and
- e. Other relevant factors.



Policy 4-1.22.7      Maintain a Contingency Fund for Disaster Assistance

The City shall maintain a contingency fund in order to cover the City's required match for disaster assistance grants.

Policy 4-1.22.8      Regulate Redevelopment of Structures Non-Conforming to the Required Base Flood Elevation

If an existing structure which is non-conforming to the required base flood elevation is substantially damaged (based on the definition in Chapter 161, F.S.) or abandoned, it shall be rebuilt only to the extent that complies with the current Flood Plain Management standards for the affected property.