## APPLICATION 6. CONSERVATION ELEMENT AMENDMENTS

Amend the Conservation Element as follows. Additions are denoted by underline; deletions by ~~strikethrough~~.

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

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

Reason for Amendment: To reflect changes in Florida Statutes.

**GOAL 6-1: CONSERVATION. The coastal community of Key West shall conserve, protect, and appropriately manage the City's natural coastal resources in order to enhance the quality of natural systems within the community.**

**OBJECTIVE 6-1.1: PROTECT AIR QUALITY.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations including performance standards which ensure that development meets or exceeds the minimum air quality standards established by the Florida Department of Environmental ~~Regulations~~ Protection ~~(DER)~~ (DEP) and shall ~~establish~~ continue to enforce regulatory programs to prevent and/or minimize non-point sources of air pollution (note: the City has no point sources of air pollution).

**Monitoring Measure: Achievement of air quality standards.**

Reason for Amendment: Update.

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

Reason for Amendment: Update.

**Policy 6-1.1.~~2~~1: ~~Air Pollution and Land Use Regulations~~ Soil Erosion and Sedimentation.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations that include performance criteria for soil erosion and sedimentation controls as well as nuisance abatement. ~~The criteria shall be designed to protect against loss of air quality by maintaining land use controls which promote only activities compatible with existing land uses and natural systems and~~

~~prohibit activities which generate air pollutants and other adverse impacts on the environmentally fragile coastal ecosystem.~~

Reason for Amendment: Update.

**Policy 6-1.1.2: Reduction of Greenhouse Gasses:** By 2015, the City shall achieve Commission goals of 15% reduction of greenhouse gas emissions from 2005 base year per actions including but not limited to the City's Climate Action Plan. The City shall prepare Land Development Regulations that achieve these goals. By 2015, the City shall create a Level of Service (LOS) standard for greenhouse gas emissions. By 2017, the City shall set energy, water, transportation and solid waste efficiency standards to support the greenhouse gas LOS.

Reason for Amendment: Consistency with Climate Change Action Plan.

**Policy 6-1.1.3: Funding Mechanisms:** By 2016, the City shall create and seek funding for a Sustainability Fund to help underwrite greenhouse gas reduction actions. Implement best practices for use of carbon credits as a funding mechanism to reach and maintain greenhouse gas reduction goals.

Reason for Amendment: Consistency with Climate Change Action Plan.

**OBJECTIVE 6-1.2: WATER QUALITY AND QUANTITY.** Maintain the environmental health of the Florida Keys Reef Tract to ensure that the ambient water quality of both near shore and reef waters is maintained and improved to the adopted standards for Class III Outstanding Florida Waters, or better, in order to protect the economic and social well-being of the citizens of the City of Key West.

Detrimental water quality impacts, including adverse impacts to the coral reef system ~~(as identified in the Public Facilities Data Inventory and Analysis Sanitary Sewerage and Drainage sub-elements)~~ shall continue to be combated by public facility improvements identified in ~~Table IV-1 within~~ the Public Facilities Element Goals, Objectives and Policies. ~~These improvements shall be undertaken pursuant to the schedule and funding levels cited in Table IV-1. These actions shall be taken to ensure that adverse environmental impacts cited in the Public Facilities Data Inventory and Analysis are adequately managed as provided for in the specific improvement measures identified as implementing polices for Objective 4-2.1(a) through (d) in the Public Facilities Goals, Objectives and Policies. The City shall pursue design and permitting of deep well injection in order to reduce the adverse impacts of the ocean outfall on marine life.~~

~~Upon plan adoption the City shall adopt amended land development regulations which ensure that new development shall be serviced with an adequate supply of potable water which meets State standards. Land development regulations shall include administrative procedures and a site plan review process which mandate technical review of public facility plans during site plan review. The procedures shall also mandate coordination~~

~~among the developer, the City and the Florida Keys Aqueduct Authority which supplies potable water to the City in order to efficiently manage potable water service system issues. The City shall not approve a development order unless the Florida Key Aqueduct Authority has had an opportunity to participate in the review of the potable water service system.~~

Implementation of the City of Key West Water Supply Facilities Work Plan shall ensure that adequate water supplies and public facilities are available to serve the water supply demands of the expected City population. The City shall coordinate the planning of potable water and sanitary sewer facilities, water supply sources, demands, education, other services and level-of-service standards with the FKAA, South Florida Water Management District, and through the Lower East Coast Water Supply Plan Update, as necessary.

~~Upon plan adoption the~~ The City shall ~~amend~~ enforce performance criteria designed to conserve and protect the quality of current and projected future water sources and surface water run-off. ~~The land development regulations shall include administrative and site plan review provisions which require that water supply and quality issues be coordinated with State, regional, and County governments having jurisdiction.~~

~~Prior to 1991 the~~ The City shall continue to coordinate with the South Florida Water Management District for purposes of using resources available through the Surface Water Improvement Management (SWIM) program in order to enhance water quality, especially surface waters which are directed to the Atlantic Ocean or the Gulf of Mexico.

**Monitoring Measure: Achievement of water quality and quantity standards.**

Reason for Amendment: Update and Address Water Supply Plan/duplicative of other sections.

**Policy 6-1.2.1: Water Quality, Surface Water Management and Land Use.** The City shall continue to enforce ~~the following performance~~ standards in order to protect the quality of the City's water resources and to conform with policies of the ~~Florida Keys~~ City of Key West Critical Area of State Concern Program.

~~1. Surface water management systems shall be consistent with the City's adopted drainage level of service (Reference Policy 4-1.1.1) and applicable federal, state, and regional standards.~~

~~2. A vegetated pond with sloping wetland buffers shall be established and maintained as part of the surface water management requirements. Prior to construction of the surface water management system for any phase of a project, the developer shall prepare a design and management plan for the wetland/fringe zone that will be developed as part of these systems. The plan should:~~

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

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

c. Include the removal of all exotic vegetation; and

d. Provide a description of any management procedures to be followed in order to ensure the continued viability and health of the stormwater management system. The wetland zone as established should consist entirely of native aquatic vegetation and should be maintained permanently as part of the water management system. As a minimum, 10 square feet of vegetated wetland zone per linear foot of wetland shoreline should be established as part of the water management plan.

3. Outstanding Florida Waters and Class III Waters shall be protected by incorporating the following provisions into the City's land development regulations:

a. Dredging activities shall be limited to approved maintenance dredging.

b. Upon plan adoption ensure good water quality by coordinating with the U.S. Fish and Wildlife Services, DER, DNR, and the SFWMD in monitoring the quality of stormwater run-off and all discharge processes where these agencies have jurisdiction. The City shall notify the appropriate agency with jurisdiction as potential issues or problems are identified by the City. The City's amended land development regulations shall provide performance criteria designed to ensure that new development provides effective and adequate storm-water management improvements concurrent with the impacts of new development. All new development shall comply with drainage level of service criteria.

c. Upon plan adoption prohibit the use of these waters for water dependent activities that are contrary to the public interest and do not satisfy a community need. All marinas within the City shall be retrofitted with pump-out stations by the end of 1992. Use of pump-out facilities shall be mandatory for all vessels and live-aboard units. An implementing regulatory program shall require participation by the State and County since the vessels and live-aboards are located on waters of the State.

d. Prohibit modification of marine grassbeds unless required by an overriding public interest, and the activity is approved by federal, state, and/or regional agencies having jurisdiction.

~~e. Where modification of grassbeds is permitted by agencies having jurisdiction, the City shall ensure that:~~

~~i. A determination of overriding public interest has been demonstrated prior to modification of grassbeds.~~

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

~~iii. Projects damaging grassbeds during construction shall incorporate mitigative techniques which re-establish benthic conditions favorable to natural regeneration. Mitigation should only be allowed at a 3 or 4 to 1 ratio as recommended by the Marine Resources Division of F-DNR.~~

~~iv. Special attention shall be given to stipulations cited in (a) through (c) above during the development review process. The City shall coordinate closely with State and federal agencies during the permitting processes to ensure that the intent of these policies is carried out.~~

Reason for Amendment: Update and Address Water Supply Plan.

~~**Policy 6-1.2.2: Regulate Agricultural Activities to Preserve Water Quality.** The City of Key West contains no agricultural land use activities.~~

Reason for Amendment: Not applicable.

**Policy 6-1.2.~~3~~2: Regulate Wastewater Treatment Discharge to Preserve Water Quality.** The City shall continue to enforce land development regulations ~~shall incorporate the following performance standards~~ in order to protect water quality and regulate wastewater treatment discharge.

1. All new residential subdivisions as well as multiple family and multiresidential development shall be required to connect to the City's central wastewater system ~~or to an approved package treatment plant~~. ~~Where a package treatment plant is permitted by F-DER, the applicant shall design the plant to facilitate mandatory connection to the City's central system when the system becomes available.~~

~~2. Package treatment plants shall be designed to achieve effluent limitations of 20 milligram/liter B.O.D. and .5 total suspended solids on an annual average. In addition, $NO_3$ can not exceed 12 mg/l on an annual average. All owners of wastewater treatment plants shall provide sufficient on-site certified operator time as determined by the Florida Department of Environmental Regulation, in order to ensure that estuarine and potable water systems are protected from pollution. As a minimum, the following are required:~~

~~a. Surge tanks (flow equalization tanks) are required on all treatment plants with design flows less than 100,000 gallons per day.~~

~~b. The system for monitoring treatment efficiency shall include a schedule with a minimum frequency increased to a one grab sample per week.~~

~~c. A flow measuring device is required which will provide a record of diurnal flow changes as well as total daily flow.~~

~~d. Provide an emergency power source for treatment facilities for purposes of preventing interruptions in treatment services.~~

Reason for Amendment: Update.

**Policy 6-1.2.4~~2~~3: Preserve and Enhance the Atlantic Ocean, Gulf of Mexico and Canal Shorelines.** In order to stabilize areas susceptible to shoreline erosion, the City shall require that all new development preserve shoreline native vegetation and shall revegetate areas along shorelines demonstrating historically erosive tendencies. Where exotic vegetation is present, such vegetation shall be removed and shall be replaced with native plant species.

**Policy 6-1.2.~~5~~4: Protect ~~Deep and~~ Surficial Aquifer Recharge Areas.** ~~The City has no prime deep aquifer or shallow aquifer recharge areas which have been identified by the South Florida Water Management District. However, stipulations for protecting the freshwater lens shall be incorporated into the City's land development regulations.~~ The City's shall continue to enforce land development regulations ~~shall~~ which require retention of open space for all development in order to:

- Preserve the quality and quantity of water resources within the freshwater lens. ~~Major sources of pollutants entering the freshwater lens are generally attributed to saltwater intrusion, septic tanks, mosquito spraying, oils from lobster traps, and leakage from sewer lines. In order to prevent excessive drawdown of the freshwater lens and resulting saltwater intrusion, the City of Key West shall by 1992 investigate a regulatory approach designed to prevent or control the withdrawal of water from the freshwater lens for domestic purposes. The investigation shall include recommended management approaches for adoption by the City Commission. The investigation shall be coordinated with the South Florida Water Management District~~ In updating its Land Development Regulations, the City will evaluate the need to study the function and condition of the freshwater lens;

- Promote improved surface water management; and

- Create natural or landscaped urban green space for enhanced community aesthetics and passive pedestrian activities.

Reason for Amendment: Update.

~~**Policy 6-1.2.6: Deep Aquifer Water Conservation.** The City of Key West has no deep aquifer recharge area.~~

Reason for Amendment: Not applicable.

**Policy 6-1.2.~~7~~5: Protection and Conservation of Potable Water Supply.** The City of Key West has no wellfields and has no need for a wellfield protection ordinance. Upon plan adoption, in order to comply with policies of the South Florida Water Management District directed toward conservation of potable water supply and to achieve a reduction in the current rates of water consumption, land development regulations shall be amended to incorporate the following performance standards:

1. Where nonpotable alternative sources of irrigation water are available, potable water supplies may not be used to meet irrigation needs.

2. Require the use of high-efficiency water-saving plumbing fixtures on all new development.

3. In order to reduce demand for irrigation water (which in turn often places greater demand upon potable water sources), at least ~~seventy~~ fifty (~~7~~50%) percent of all landscaping material obtained from off-site sources for use on any site should be native plant material adapted to soil and climatic conditions existing on the subject site. Further, at least ~~fifty~~ thirty (~~5~~30%) percent of all trees used in landscaping shall be native species adapted to soil and climatic conditions existing on-site in order to lessen water demand.

4. The City will ~~monitor~~ explore and pilot innovative concepts in reuse of water, including use of cisterns for collecting rainwater for use in spray irrigation. In addition the City shall study the feasibility of reuse of treated effluent (gray water). ~~However, the high salt content of such water currently indicates that the high salt content of Key West "graywater" may render it useless in spray irrigation since much of Key West's vegetation may not be sufficiently salt tolerant to withstand the gray water.~~

~~5~~. In order to reduce demand for irrigation water, rainwater collection and gray water reuse (if feasible) will be incorporated.

Reason for Amendment: Update.

**Policy 6-1.2.8: Emergency Conservation of Water Sources.** The City shall coordinate with the South Florida Water Management District (SFWMD) in implementing emergency

water conservation measures based on the SFWMD plans for management of the region's water resources.

**Policy 6-1.2.9: Protect and Conserve Salt Ponds, Outstanding Florida Waters.** In order to protect the Atlantic Ocean, the Gulf of Mexico, and the Salt Ponds, the City~~'s~~ shall continue to enforce land development regulations ~~shall include performance criteria~~ designed to regulate against land development activities which adversely impact water quality, contribute to shoreline erosion and sedimentation, or otherwise threaten the long term existence of these water resources, tidal ponds, and freshwater wetlands. The intent of the regulatory measures shall be to conserve and protect these coastal resources from detrimental impacts of development.

Reason for Amendment: Update.

**OBJECTIVE 6-1.3: MAINTENANCE OF FLOODPLAIN.** ~~Upon plan adoption~~ ~~t~~The City shall ~~adopt amended~~ continue to enforce land development regulations which include performance criteria designed to protect the natural functions of the 100-year floodplain in order to protect and maintain its flood-carrying and flood storage capacity.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**Policy 6-1.3.1: Enforce Policies to Maintain Floodplain.** The City shall ~~update~~ continue to maintain its surface water management and flood damage prevention regulations. New development encroaching into the floodplain shall incorporate sufficient flood protection measures~~ sufficient to protect against the 100-year flood~~. The City's Stormwater Management and Flood Protection Ordinance shall maintain consistency with program policies of the Federal ~~Insurance Administration~~ Emergency Management Agency. The City shall continue to monitor new cost effective programs for minimizing flood damage. ~~Such programs may include modification to construction setback requirements or other site design techniques, as well as upgraded building and construction techniques.~~

Reason for Amendment: Update.

**Policy 6-1.3.2: Land Purchase through Save Our Rivers Program or Other Available State and Federal Programs.** The City shall identify and recommend to the State and the South Florida Water Management District purchase of floodplains, wetlands, littoral zones, upland buffer areas, lands and migratory pathways that support threatened or endangered fish or wildlife, or other lands needed to retain or store water that would comply with program guidelines established under the Conservation and Recreation Lands (CARL) Program, the Save Our Rivers (SOR) Program or other land acquisition programs administered by the federal or state government.

Reason for Amendment: Update.

**OBJECTIVE 6-1.4: PROTECT AND PRESERVE WETLANDS.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations which include performance criteria designed to protect and preserve wetlands from physical and hydrologic alterations.

**Monitoring Measure: Acreage of protected wetlands in the City.**

Reason for Amendment: Update.

**Policy 6-1.4.1: Wetland Development Restrictions.** Wetlands (i.e., wetlands shall be determined based on hydric soils, hydrology, and wetland plant species identified by the ~~DER~~ DEP pursuant to ~~§17-4.022~~62-340.450, F.A.C.) shall be protected from physical or hydrologic alterations in order to maintain natural functions. Wetland protection regulations shall be consistent with applicable State and federal regulatory policies affecting the specific sites. Wetlands have the following functions:

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

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

- Wetlands can be significant in shielding other areas from wave action, erosion, or storm damage;

- Wetlands serve as valuable storage areas for storm water and flood waters;

- Wetlands can be prime natural recharge areas. Prime recharge areas are locations where surface water and groundwater are directly interconnected; and

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

No development is permitted within wetlands, except where state and/or federal agencies having jurisdiction provide for development rights. ~~In such case, the governmental coordination in determining potential development rights. Cross reference Policy 1-2.1.1 and Policy 1-2.4.2. The land development regulations shall provide criteria for protecting and/or enhancing wetlands.~~

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**Policy 6-1.4.2: Protection of Upland Buffer Areas.** The upland buffer is an area landward of the upland edge of a wetland (i.e., the upland/wetland jurisdictional line if applicable). The buffer area has a direct groundwater or surface water influence and provides an upland buffer which separates developed upland from a wetland area. The purpose of the buffer area is to ensure the continuing function of respective wetland communities, prevent pollutants from surface water runoff from entering the wetlands, and to enhance water quality. The City shall retain the right to prohibit development within the buffer area. Wetland protection regulations shall as a minimum be consistent with applicable State and federal regulatory policies affecting the specific sites. The boundary of an upland buffer area shall be established by field investigation and shall be consistent with SFWMD permitting standards for upland buffers adjacent to wetlands. ~~The amended Land Development Regulations shall incorporate specific standards for upland buffers.~~ The City shall research certification programs which encourage responsible business practices by plant professionals.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**Policy 6-1.4.3: Dedication of Conservation Easements or Reservations.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations ~~to include performance criteria~~ designed to protect and preserve wetlands and upland buffer areas. The City shall ~~amend~~ utilize the Subdivision Ordinance and the Wetland Preservation Ordinance to provide for the dedication of conservation easements or reservations where the City finds that the dedication is reasonable in order to protect the value and function of a wetland. . The City will explore using conservation easements to help preserve wetlands and natural areas.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**OBJECTIVE 6-1.5: COMBAT SOIL EROSION.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations ~~which include performance criteria~~ designed to reduce the incidence of soil erosion caused by land clearing, breaches in stabilized shorelines, and lands having exposed soil without vegetative cover.

**Monitoring Measure: Reduced incidence of soil erosion.**

Reason for Amendment: Update.

**Policy 6-1.5.1: Implementing Erosion Control.** The City shall continue to enforce land development regulations ~~shall~~ which require that appropriate measures be taken during land clearing and building operations to ensure that exposed, destabilized or otherwise altered soil is expeditiously covered with an acceptable erosion control material. ~~These provisions shall be incorporated in the Subdivision Ordinance as well as in the Tree Protection and Land Clearing Ordinance.~~

Reason for Amendment: Update.

**OBJECTIVE 6-1.6: PREVENTING POTENTIAL ADVERSE IMPACTS OF FUTURE MINING OF MINERALS AND MINERAL EXCAVATION ACTIVITIES.** No mining activities shall be permitted within the City since the City is characterized by natural systems which would potentially receive irretrievable losses from the impacts of such operations.

**Monitoring Measure: No permitted mining activities in the City.**

Reason for Amendment: Add Monitoring Measure.

~~**Policy 6-1.6.1: Prohibition Against Mining Activities.** Land development regulations shall prohibit mining of minerals based on the irretrievable losses which such intense activities may potentially impose on the City's fragile coastal ecosystem.~~

Reason for Amendment: Not applicable.

**OBJECTIVE 6-1.7: PROTECT NATIVE VEGETATION AND MARINE HABITATS.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations ~~which include performance criteria~~ designed to protect and retain major vegetative communities and marine habitats, including the beach and dune communities, the hardwood hammock community, tidal and freshwater wetlands, mangroves, near and offshore reefs, patch reefs, seagrasses, and other living marine resources.

**Monitoring Measure: Acreage of protected vegetative communities and marine habitats.**

Reason for Amendment: Update.

**Policy 6-1.7.1: Implementing Protection of Vegetative Communities and Marine Habitats.** ~~Upon plan adoption the City shall adopt a Tree Protection and Land Clearing Ordinance together with a revised landscape ordinance which shall be used in managing and protecting the impacts of development on major vegetative communities and marine habitats.~~ ~~These~~ The City shall continue to enforce all adopted regulations ~~shall~~ which

mandate restoration in order to compensate for loss of vegetation and to enhance stabilization of fragile slopes and/or shorelines impacted by development.

Reason for Amendment: Update.

**Policy 6-1.7.2: Preservation of Native Plant Communities.** ~~Upon plan adoption the~~ The City shall ~~adopt a Tree Protection and Land Clearing Ordinance~~ continue to enforce all adopted regulations which mandate that new development preserve, as a minimum, all wetlands and ninety (90) percent of hardwood hammocks.

~~The ordinance shall provide for the conservation of native plant communities determined to be "rare or endangered." An incentive program shall be provided for conserving "rare or endangered upland."~~

~~The City may require payment of a fee in lieu of the above described mandatory "set aside" of habitat. However, any payment allowed in lieu of preservation must be in sufficient amounts to purchase equally sensitive habitat of equal or greater size. Such cash payment may be in the form of an impact fee in lieu of habitat preservation to be accumulated from development for the purchase of upland habit preservation off-site rather than on-site. Where mitigation is applied, the program should require a minimum 2:1 ratio to enhance survivability.~~

Reason for Amendment: Update.

**Policy 6-1.7.3: Removal of Undesirable Exotic Vegetation.** ~~Upon plan adoption the~~ The City shall ~~adopt a Tree Protection and Land Clearing Ordinance~~ continue to enforce all adopted regulations which requires that, prior to the issuance of a certificate of occupancy for a new development, the owner/applicant shall remove all nuisance and invasive exotic vegetation from the site for which a development order or permit is requested. Invasive species lists should be referenced from the peer reviewed rankings by Florida Exotic Pest Plant Council and the Florida Keys Invasive Exotic Task Force.

Reason for Amendment: Update.

**Policy 6-1.7.4: Protection of Manatee Habitats.** Although the City of Key West is not a prime area for manatee habitats, there have been sightings of manatees. The City shall continue to promote protection of manatee habitats in a manner consistent with guidelines of the ~~Marine Research Institute of the~~ State ~~Department of Natural Resources~~. For instance, the City shall continue to comply with the following State Guidelines:

- The City of Key West shall assist Monroe County, ~~The Department of Natural Resources~~the State, the U.S. Fish and Wildlife Service, and other State and federal agencies, in developing an area-specific manatee protection plan and

marina sighting plan in order to ensure long-range manatee and habitat protection.

- Construction and expansion of multislip docking facilities and boat ramps shall be directed to locations where there is quick access to deep, open water, where the associated increase in boat traffic will be outside the areas of high manatee concentration, and where wetlands supporting manatee habitat will not be disturbed.

- Permit applications for all boating facilities, including single family docks and dry storage, shall be evaluated in the context of cumulative impacts on manatees and marine resources.

- The City shall assist the State ~~DNR~~ in distributing State publications and educational materials on coastal and marine resource conservation, and manatees in particular, to boaters, and assist the display of such materials.

- Slow or idle speed zones shall be adopted, with or without channel exemptions as appropriate, in areas frequented by manatees. Enforcement of speed zones should be improved.

- The City shall assist the State ~~DNR~~ in protecting manatees from injury and disturbance resulting from aquatic commercial and recreational activities.

- Manatee food requirements shall be taken into account in all aquatic plant management activities where manatees may occur.

- The City shall assist the State ~~DNR~~ in ensuring the protection of habitat of special significance to manatees.

**Policy 6-1.7.5: Increase of Native Plant Communities:** The City shall increase use of native plants by creating a ~~Tree Master~~ Urban Beautification Plan which calls for increased canopy cover, and highlights the use of natives, and flowering non-natives in discrete entry and accent locations.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**OBJECTIVE 6-1.8: PROTECTING FISHERIES, WILDLIFE AND WILDLIFE HABITATS.** ~~Upon plan adoption the~~ The City shall ~~adopt amended~~ continue to enforce land development regulations which include performance criteria which prevent disturbance of seagrass beds, wetlands, mangroves, uplands and other habitats of endangered or threatened species. The performance criteria shall protect fisheries, wildlife, and wildlife

habitats from the adverse impacts of development by regulating the location, density, and intensity of those activities which cause the adverse impact. The City shall continue to enforce these land development regulations and shall coordinate with Monroe County, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the SFWMD, South Florida Regional Planning Council and the State in promoting protection of fisheries, wildlife, and wildlife habitats. The City shall enact or support certification programs which encourage environmentally responsible practices by businesses operating in or near natural areas.

~~In order to prevent "taking" of private property rights, the City's land development regulations shall provide for flexible development alternatives, including density transfers from wetlands to adjacent uplands and planned unit developments which shall mandate conservation of said resources while allowing more flexible development options on developable portions of the site~~.

**Monitoring Measure: Inclusion of performance criteria and protection mechanisms in the Land Development Regulations.**

Reason for Amendment: Update.

**Policy 6-1.8.1: Manage the Impacts of Development on Fisheries.** The City shall ~~incorporate~~ continue to implement procedures for coordinating with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the ~~DER~~ DEP, and the South Florida Water Management District, as appropriate, in reviewing the implications of development proposals, including proposed subdivisions and site plan review petitions. Such coordination shall be designed to assist in identifying potential adverse impacts of proposed development on marine habitats and fisheries, especially the coral reef tract. The City shall ~~incorporate~~ continue to implement ~~performance standards~~ ~~into~~ land development regulations which are designed to preserve the water quality and which protect marine grassbeds, tidal wetlands, mangroves, freshwater wetlands, and the coral reef tract in order to preserve marine habitats and fisheries.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**Policy 6-1.8.2: Protect Wildlife and Wildlife Habitats.** ~~Upon plan adoption the~~ The City shall ~~amend the~~ continue to enforce land development regulations ~~to incorporate provisions~~ which restrict development activities known to adversely impact endangered, threatened, or rare wildlife and wildlife habitats~~, including Stock Island Tree Snail,~~ as well as wildlife and wildlife habitats of special concern ~~as defined in Table VI-8 of the Conservation Element data inventory and analysis~~. The regulations shall ensure that standards are incorporated to ensure preservation of habitats supporting ~~the Stock Island Tree Snail and other~~ threatened and endangered species. The City shall further protect

wildlife and wildlife habitats by promoting public acquisition and the dedication of conservation easements or reservations as specified herein in Policy 6-1.4.3. The City shall continue to ~~coordinate with the Nature Conservancy and other public interest groups in~~ distributi~~ng~~e educational pamphlets designed to promote knowledge and awareness of endangered and threatened species.

Reason for Amendment: Update.

**Policy 6-1.8.3: Prevention of Invasive Exotics.** The City shall create Land Development Regulations to help protect wildlife and wildlife habitats from invasive exotic plants and animals. This will be done by prioritizing preventative policies, as well as building capacity for early detection rapid response actions for those species deemed highly invasive, with the exception of decorative plant species used in discrete entry and accent locations on public land and property, and implementing a comprehensive integrated pest management system. The City shall research certification programs which encourage responsible business practices by plant professionals.

Reason for Amendment: To address the issue of exotic invasive plant and animal species.

**OBJECTIVE 6-1.9: PROTECT CONSERVATION LAND RESOURCES.** ~~Upon plan adoption the~~ The City shall ~~amend the~~ continue to enforce land development regulations which ~~include performance criteria designed to~~ ensure that designated conservation land resources, are protected based on locally determined criteria which further the goals, objectives and policies of the Conservation Element.

The Future Land Use Map series delineates conservation land resources defined as upland and wetland vegetative communities, coastal shoreline resources, and the 100 year flood plain.

All conservation land resources shall either remain undeveloped or shall undergo "restricted development." The term "restricted development" means those development options provided for pursuant to development rights and restrictions stipulated in the Comprehensive Plan and Land Development Code as may be hereinafter amended.

**Monitoring Measure: Acres of designated conservation lands.**

Reason for Amendment: Update.

**Policy 6-1.9.1: Designation of Environmentally Sensitive Areas.** ~~In Policies 6-1.8 and 6-1.9 c~~Coastal shoreline resources, wetlands, and upland habitats ~~are addressed including~~ shall continue to be managed, protected and preserved through the regulatory framework ~~through which the City intends to manage, protect and preserve the resources~~. The Future Land Use Map series identifies these environmentally sensitive systems.

Reason for Amendment: Update.

**OBJECTIVE 6-1.10: HAZARDOUS WASTE MANAGEMENT.** The City shall continue to coordinate with Monroe County as well as appropriate State and regional agencies in developing effective plans for managing hazardous waste. ~~Upon plan adoption t~~The City shall ~~amend its land development regulations to include performance standards which~~ prohibit storage or disposal of hazardous waste in a manner which adversely impacts natural resources.

**Monitoring Measure: Interlocal agreements for handling hazardous waste, and continued prohibition of hazardous waste disposal in the City.**

Reason for Amendment: Update.

~~**Policy 6-1.10.1: Managing Hazardous Waste.** Upon plan adoption the City shall adopt and enforce land development regulations which incorporate development restrictions directed toward preserving natural systems.~~ The City shall continue to detect and eliminate non-stormwater discharges to protect marine habitats and near shore water quality.

Reason for Amendment: Update.

**6-1.11: INTERGOVERNMENTAL COORDINATION FOR MANAGING CONSERVATION ACTIVITIES.** ~~Establish an~~ Continue to implement the intergovernmental coordination mechanism in order to manage natural resources and assist in implementing appropriate laws, ordinances, and plans of existing federal, State, regional and local agencies sharing responsibilities for managing natural resources within the City.

**Monitoring Measure: Interlocal agreements and/or intergovernmental coordination mechanisms with agencies with jurisdiction over natural resources.**

Reason for Amendment: Update.

**Policy 6-1.11.1: Implementing Policies for Intergovernmental Coordination in Managing Conservation Activities.** Policy 5-1.12.1 in the Coastal Management Element identifies policies for coordinating planning issues surrounding natural resources within the City. These policies shall continue to be applied in managing intergovernmental activities associated with protecting, conserving, and preserving natural resources within the City. The City shall contact professionals with expertise in conservation resources, including the Urban Forester, Soil Conservationist, Agricultural Extension Agent and other similar professionals who may be employed with the County or the State in managing conservation issues including but not limited to protecting unique vegetative communities located within the City as well as other portions of Monroe County.

**Monitoring Measure: Achievement of stormwater drainage Level of Service Standard.**

Reason for Amendment: Update.

**OBJECTIVE 6-1.12: CONTINUING EVALUATION OF THE CONSERVATION ELEMENT EFFECTIVENESS.** The City shall use the following policies as criteria in evaluating the effectiveness of the Conservation Element.

**Monitoring Measure: Achievement of implementing policies.**

Reason for Amendment: Include Monitoring Measure.

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

Reason for Amendment: Address climate change.

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

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

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

**OBJECTIVE 6-1.13: IMPLEMENTING POLICIES FROM THE 2011 CITY OF KEY WEST STRATEGIC PLAN.** The City adopts the following conservation policies from the 2011 Strategic Plan:

**Monitoring Measure: Achievement of the implementing policies.**

Reason for Amendment: Consistency with the 2011 Strategic Plan.

**Policy 6-1.13.1: Conduct an Environmental Scan.** By 2014, the City shall conduct an Environmental Scan to provide a baseline for future environmental audits.

Reason for Amendment: Consistency with the 2011 Strategic Plan.

**Policy 6-1.13.2: Develop an Environmental Education Plan.** By 2015, the City shall develop and implement a comprehensive environmental education plan for residents and visitors which focuses on protecting and enhancing the environment.

Reason for Amendment: Consistency with the 2011 Strategic Plan.

**Policy 6-1.13.3: Community-wide Environmental Agenda.** By 2014, the City shall collaborate with state, Monroe County and partners to develop a community-wide Environmental Action Plan, including measurable goals and timetables.

Reason for Amendment: Consistency with the 2011 Strategic Plan.

**Objective 6-1.14 : Carbon Sequestration Through Plants.** As part of an overall landscaping plan to increase beautification and walkability, the City shall incorporate greenhouse gas sequestration goals and priorities to meet the City's Climate Action Plan goals.

**Monitoring Measure: Inclusion of greenhouse gas sequestration goals in landscaping and urban design plans.**

Reason for Amendment: Consistency with the Climate Change Action Plan.

**Objective 6-1.15: Planning for Resiliency and Adaptation in Natural Areas.** The City shall research and pilot conservation actions which enhance the resiliency and adaptation of fisheries, wildlife and wildlife habitats. This may include identification of Adaptation Action Areas.

**Monitoring Measure: Identification of Adaptation Action Areas and implementation of pilot conservation projects.**

Reason for Amendment: Consistency with Climate Change Action Plan.

**Objective 6-1.16: Promotion of Responsible Stewardship.** The City shall research and implement business certification programs which encourage responsible conservation practices.

**Monitoring Measure: Implemention of business certification programs.**

Reason for Amendment: Consistency with the Climate Change Action Plan.