

E. COASTAL/ CONSERVATION MANAGEMENT ELEMENT

COASTAL

Goal E.1

The County shall manage, use, conserve, protect and enhance coastal resources, along with protecting human life from natural disasters.

Objective E.1.1 Public Beach Access

The County will maintain, improve and increase public beach and waterway access through acquisition and other land use controls.

Policies

- E.1.1.1 As provided by the implementation regulations for the Optional Density Factors of the Future Land Use Element, the County will require the dedication of public access to beaches from developments located within the coastal area which receive the applicable density bonus.
- E.1.1.2 The County will not vacate or relocate existing easements, walkways and other access points to beaches, shores and waterways, without requiring the grant or dedication of equal or greater access points or easements as stated in the County's Beach Code, as amended.
- E.1.1.3 The County will promote increased access for public beaches and waterways through the implementation of Policy F.1.1.1 and through the implementation of regulations for the Optional Density Factors of the Future Land Use Element.
- E.1.1.4 Private landowners adjacent to public beach access points, including easements, will not be allowed to restrict public access to the beaches through such access points as stated in the County's Beach Code, as amended.
- E.1.1.5 The County shall continue to investigate and develop additional funding sources (e.g. user fees, parking fees, grants and other funding sources) for the purposes of funding beach and navigable waterway accesses, parking spaces, dune walkovers and other related facilities.
- E.1.1.6 St. Johns County shall encourage the construction and use of dune walkovers to protect dune vegetation and prevent pathways through the dune.
- E.1.1.7 Existing publicly owned ramp facilities shall be maintained and improved as necessary and economically feasible.

- E.1.1.8 St. Johns County shall continue to protect beaches, dunes, coastal vegetation and coastal wildlife from vehicular and pedestrian traffic by providing off-beach vehicular parking and dune walkovers.
- E.1.1.9 Off-beach vehicular parking areas shall be constructed with pervious surfaces (e.g. turf block, stone, crushed shell, etc.) which will allow water infiltration where feasible and appropriate.
- E.1.1.10 All walkways and other access points to beaches and shores shall be consistent with the St. Johns County Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP).

**Objective E.1.2
Dune Preservation**

The County shall ensure the protection, conservation and enhancement of the County's coastal areas, dunes and beaches through:

- (a) Coordination of County permitting activities with the activities of other regulating State and Federal agencies.**
- (b) Establishment or continued enforcement of construction standards for the coastal building zones.**
- (c) Establishment or continued implementation of procedures and Land Development Regulations including revisions to the County's Beach Code to protect the County's dune systems.**
- (d) Utilization of the State's approved dune walkover structures at all County-owned and maintained beaches to prevent impacts to native vegetation, wildlife and the dune systems.**

Policies

- E.1.2.1 The County shall provide technical support and assistance to applicable State and Federal agencies in identifying and inventorying all beaches and dune systems, so that they may be protected, enhanced or renourished.
- E.1.2.2 The County shall ensure the protection, enhancement or restoration of the County's dune systems through Land Development Regulations that provide for:
 - (a) Coordination with DEP on applications for development seaward of the established Coastal Construction Control Line (CCCL), in order to monitor and comment on DEP applications for variances to the CCCL requirements and to allow variances to County setback requirements where possible or appropriate to avoid or minimize development seaward of the CCCL.
 - (b) The County's use of beach ramp fees or tolls, consistent with applicable law, for dune restoration and enhancement programs such as, without limitation, the construction of dune walkovers, the use of native plant species, the establishment of a salt-tolerant revegetation program, and public education programs in cooperation with the Marine Extension Service and to further control beach access in order to prevent dune damage.
 - (c) Standards and enforcement mechanisms in the County Beach Code, as amended, to prevent destruction of dune vegetation.

- (d) Continued enforcement of the County's requirements and prohibitions against uncontrolled vehicular beach access pursuant to the Habitat Conservation Plan and the County Beach Code, as amended.
- (e) Continued enforcement through the development permit review process of applicable Federal, State or Local coastal construction zone requirements.
- (f) Improvements to beach access and off-beach parking facilities as provided in Policy F.1.1.1.

E.1.2.3 No motorized vehicles will be allowed on dune systems except for emergency vehicles.

E.1.2.4 The County shall work with the appropriate State agencies and the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) to increase public awareness of the economic value of the County's coastal resources, estuaries, marine resources and coastal wildlife.

Objective E.1.3

Post Disaster Planning, Coastal Area Redevelopment and Hurricane Preparedness

The County shall prepare post-disaster redevelopment plans which will reduce or eliminate the exposure of human life and public and private property to natural hazards. The County shall restrict or limit certain activities in the Coastal High Hazard Areas (CHHA) which is defined in Section 163.3178(2)(h), Florida Statutes.

Policies

- E.1.3.1 County shall update its Hurricane Evacuation Plan and Comprehensive Emergency Management Plan every four years and shall re-evaluate their effectiveness immediately after a major disaster event to recommend and adopt appropriate modifications.
- E.1.3.2 The St. Johns County's Comprehensive Emergency Management Plan shall be used as the operational guide to prepare for the response to, and recover from, a tropical storm, hurricane or other emergency.
- E.1.3.3 The County shall update its hurricane guide showing evacuation routes, hurricane hazards, safety procedures, shelters and other pertinent information for its citizens.
- E.1.3.4 Disaster preparedness plans shall include accommodations for the handicapped and indigent, including transportation and sheltering.
- E.1.3.5 The County shall coordinate disaster preparedness plans with adjacent counties and municipalities.
- E.1.3.6 The County shall reduce the risks to human life and to public and private property from natural disasters through the following post-disaster redevelopment planning and implementation of hazard mitigation measures:
 - (a) Prioritize immediate repair and cleanup actions and permitting activities following a natural disaster.
 - (1) The County shall ensure that damage assessment occurs pursuant to the local Comprehensive Emergency Management Plan to collect initial storm damage data following a disaster and to present this data to the Board of County Commissioners for prioritization and coordination of essential activities.
 - (2) Priority activities shall include immediate repair and cleanup actions needed to protect the public health and safety including repairs to potable water, wastewater and power facilities; the removal of debris; the stabilization or removal of structures about to collapse; and, minimal repairs to make dwellings habitable.

- (3) Long term repairs and redevelopment activities shall be postponed until the priority short term activities have been completed.
- (b) The County through its interdepartmental, regional and state efforts will continue to investigate redevelopment strategies, including build back standards, within the CHHA. By 2012, the County shall, by adoption of Land Development Regulations, as necessary or appropriate, adopt policies to direct long-term redevelopment activities within storm damaged areas. The policies shall, at a minimum, address the following issues:
- (1) A formal decision making process to evaluate options for damaged public facilities including abandonment, repair in place, relocation and reconstruction with structured modifications.
 - (2) Consider the need for Comprehensive Plan Amendments to effect hazard mitigation activities.
 - (3) Potential relocation of habitable structures which have incurred damage from a natural disaster event, where damage is greater than seventy-five (75%) percent of their assessed value, to new locations that are outside the CHHA, provided that sufficient land is available on the subject parcel for such relocation and property rights issues can be addressed.
 - (4) Utilization of improved construction site development practices during redevelopment, in a manner consistent with the land development regulations, to minimize the risk of recurrent damage.
- (c) Minimization of the disturbance of natural shoreline resources which:
- (1) Provide shoreline stabilization.
 - (2) Protect landward areas from the effects of storm events.
- (d) Require that all project approvals within the CHHA meet certain criteria, performance standards and procedures, as adopted in the County's Land Development Regulations, including at a minimum:
- (1) Where appropriate and consistent with applicable law, requirements for additional user fees or surcharges for CHHA infrastructure to ensure that additional costs of design, construction, maintenance or replacement of public infrastructure within the CHHA, not otherwise present in the areas outside the CHHA, are completely paid for by the projects within the CHHA, and not by the general public.

- (2) Special standards for the design and construction of all infrastructure within the CHHA to minimize risks of damage to such infrastructure, where increased risks of damage due to coastal flooding can be reasonably anticipated.
- (3) Consistent with applicable law, specific authorization for the use of special assessments within the CHHA to recoup expenditures for repair of damage to public or private infrastructure within a reasonable time frame, where storm related damage is incurred.
- (4) Required notification to residents and businesses located within the CHHA that specific standards or additional costs may be associated with locating within the CHHA.
- (5) Requirements for the development of hurricane evacuation plans for the proposed project, in coordination with the County's Emergency Management Division and requirements for the implementation of such planning by the developers of the project and their successors.

- E.1.3.7 New publicly funded buildings in St. Johns County should be designed to serve as evacuation shelters where feasible. Law enforcement, fire rescue and emergency medical buildings shall be designed to function as emergency shelters for their mission personnel and equipped with an emergency power supply.
- E.1.3.8 The County shall prohibit new development of adult congregate living facilities, nursing homes for the aged, total care facilities, hospitals, correctional facilities and similar developments within the CHHA.
- E.1.3.9 The County shall consider, and as necessary implement where appropriate, the recommendations of the St. Johns County Mitigation Strategy.
- E.1.3.10 The County shall not approve Comprehensive Plan Amendments that increase the residential density on the Future Land Use Map within the CHHA.
- E.1.3.11 St. Johns County will evaluate development orders for their impacts on traffic circulation, evacuation routes, on-site hurricane shelter provisions and proximity to off-site shelter facilities within the Storm Category Zone 1, 2 and 3.
- E.1.3.12 St. Johns County will coordinate with the School Board to make sure that future school facilities are located outside areas susceptible to hurricane or storm damage or areas prone to flooding or as consistent with Chapter 235 F.S. and Rule 6A-2 F.A.C. regarding flood plain and school building requirements.
- E.1.3.13 Amendments to the Comprehensive Plan in the Coastal High Hazard Area shall not be approved which will result in an increase in hurricane evacuation times,

without mitigation of the adverse impact to evacuation times.

- E.1.3.14 A proposed development in a hurricane evacuation zone which is anticipated to utilize ten percent (10%) or more of an identified hurricane evacuation route's level of service E hourly directional maximum service volume will be identified as having an adverse regional impact. The volume is based on the Florida Department of Transportation's Generalized Hour/Peak Direction Level of Service Maximum Volumes as presented in the Florida Highway Systems Manual. These adverse impacts shall be mitigated.
- E.1.3.15 Where shelter deficits exist, an adverse regional impact is a proposed development with anticipated public shelter space demand that will require 200 spaces or five percent (5%) of the shelter space capacity or where shelter deficits do not exist, an adverse regional impact is a proposed development with anticipated public shelter space demand that will cause a deficit of 200 spaces or more. These adverse impacts shall be mitigated.
- E.1.3.16 Consistent with the Northeast Florida Regional Council Strategic Regional Policy Plan (SRPP), the County shall strongly encourage new mobile home and RV parks to have on site shelter facilities for their residents or plans for alternative off-site shelters. On-site shelter facilities may include public meeting buildings, community centers and recreational centers as long as designed to hurricane shelter standards.
- E.1.3.17 Consistent with the Northeast Florida Regional Council Strategic Regional Policy Plan (SRPP), the County shall strongly encourage new apartment complexes and condominiums located outside of hurricane evacuation areas to provide on-site shelter space.
- E.1.3.18 The County will consider and update, as appropriate, hurricane related maps and information upon completion of the NOAA funded Northeast Florida Regional Council's Statewide Regional Evacuation Study.
- E.1.3.19 The County will monitor sea level rise data and the potential effects sea level rise has on the natural and built environment to consider the most current and credible sea level rise data when planning long term infrastructure, capital improvement expenditures, and encourage the use of adaptation and mitigation strategies.
- E.1.3.20 The County will participate with regional collaboration on sea level rise including efforts to reduce vulnerabilities, to implement possible adaptation measures where feasible, and to identify funding opportunities.
- E.1.3.21 When considering new development, redevelopment and requests for increased density the County shall consider the implications of potential rise in sea level and the hazards of developing seaward of the Coastal Construction Control Line.

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- E.1.3.22 The County has analyzed and mapped identified areas of the County vulnerable to tidal fluctuations, coastal erosion, hurricanes, tropical storms, high water tables, flooding and other impacts of rising water and shall consider development standards to address these areas.
- E.1.3.23 The County Emergency Management will coordinate with the Florida Division of Emergency Management and other agencies efforts to incorporate sea level rise effect on storm surge impacts into the remapping of potential hazard areas in coastal zones, and incorporate where appropriate in the relevant portions of the Local Mitigation Strategy (LMS) to reduce risk to human life and property from disasters.
- E.1.3.24 Any development or redevelopment in areas at high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff, and sea level rise shall meet or exceed the flood-resistant construction requirements in the Florida Building Code, as amended, including Section R322, *Flood Resistant Construction*. The County shall meet all applicable Federal, State, regional and local permitting regulations including 44 C.F.R. part 60, as may be amended.
- E.1.3.25 The County shall continue the St. Johns County Local Mitigation Strategy (LMS) which serves as the County's Floodplain Management Plan for the Community Rating System (CRS) and continue to participate in the CRS of the National Flood Insurance Program (NFIP). The County shall meet the requirements of the NFIP for community participation as set forth in the Title 44 Code of Federally Regulations, Section 59.22 in order to reduce flood losses and achieve flood insurance premium discounts for residents.
- E.1.3.26 New Development and redevelopment in areas at high risk of flooding due to storm surge, high tide events, flash flood, stormwater runoff, and sea level rise shall consider building design specifications, engineering solutions, site development techniques and management practices such as higher minimum floor elevations, retrofitting buildings for increased flood risk, designing infrastructure that can withstand higher water levels such as raising seawalls and installing tidal valves, and implementing natural drainage features; and is encouraged to use these building design specifications, engineering solutions and management practices to remove coastal real property from flood zone designations established by the Federal Emergency Management Agency.
- E.1.3.27 The County shall continue to require development and redevelopment seaward of the Coastal Construction Control Line (CCCL) established pursuant to Section 161.053 F.S. be consistent with Chapter 161 of the Florida Statutes.

**Objective E.1.4
Water Dependent Uses and Marina Siting**

The County will give priority to water dependent uses that maximize the protection and beneficial use of coastal natural resources.

Policies

- E.1.4.1 The County shall continue to implement the Land Development Code regulations for Ports, and Marinas that have been established based on the County's Water Dependent Uses and Marine Study of 2002, which considered land use compatibility, availability of upland support services, existing protective status or ownership, hurricane contingency planning, protection of water quality, water depth, environmental disruptions and mitigation actions, availability of public use and economic need and feasibility.

**Objective E.1.5
Coastal Protection**

The County shall cooperate with and provide technical support and assistance to the appropriate State and Federal agencies and it shall implement Policies in this Plan in order to protect, enhance and restore the environmental quality of the County's Coastal Area waterways and wildlife. Waters that flow into either the ocean or the estuary shall be protected through established conservation techniques identified in the County Land Development Regulations.

Policies

- E.1.5.1 The County shall coordinate and provide technical assistance to Federal and State agencies preparing applicable studies which will maintain and increase water quality based on established water body classification.
- E.1.5.2 The County shall monitor and when necessary coordinate, permitting activities with other regulatory agencies for projects which may impact the quality of the Coastal Area Waterways.
- E.1.5.3 The County shall protect or enhance Coastal Area water quality, for wildlife propagation, fishing, shell fishing, recreation, navigation and other related activities and shall improve Outstanding Florida Waters and Class II and Class III waters, as defined in Chapter 62-302, Florida Administrative Code, by:
- (a) Requiring On-site Sewage Treatment and Disposal System (OSTDS) users to connect to public or private waste water systems pursuant to Policies D.1.4.3 and E.2.1.5.
 - (b) Requiring new development to meet the standards and requirements of the County's Land Development Regulations pursuant to the requirements of Objective D.3.1 and supporting Policies.
 - (c) The County shall use its Master Stormwater Management Study to evaluate the stormwater design capacity of stormwater management systems so run-off shall not degrade the coastal resources.
 - (d) Prohibiting untreated direct discharge of stormwater runoff into Outstanding Florida Waters or Class II waters, as defined in Chapter 62-302, Florida Administrative Code, for all new development.
 - (e) Designing stormwater systems to County, State and Federal standards.
 - (f) Requiring new development to meet the standards and requirements of the County's Environmentally Sensitive Lands (ESL's) Land Development Regulations (LDRs) adopted pursuant to Policy E.2.2.4.

- (g) Requiring OSTDS to be inspected and permitted by the State Health Department as provided in Policy E.2.5.1.
- (h) Coordinating with DEP on the enforcement of waste water discharge standards into Outstanding Florida Waters, Class II and Class III waters, as defined in Chapter 62-302, Florida Administrative Code, pursuant to Policy A.1.1.1.
- (i) Continuing pursuit of agreements with private land owners for land application and other alternative means of wastewater reuse.
- (j) Encouraging new development to cluster in the Coastal Area through application of the County's Planned Development regulations and the Optional Density Factors established by the Future Land Use Element.

- E.1.5.4 The County shall coordinate with the applicable State and Federal agencies so that docks and piers will not obstruct or alter natural water flow or restrict navigation routes.
- E.1.5.5 Development orders shall be designed to protect the type, nature and function of floodplain, wetlands, waterways, inlets, estuaries and lakes by limiting encroachment, removal of native vegetation, wildlife, pollution discharge, dredge and fill, drainage, or other impacts associated with development.
- E.1.5.6 All new development shall be designed and constructed according to Federal, State and County specifications to minimize stormwater and pollutant discharge.
- E.1.5.7 The County shall continue to coordinate with the Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) and SJRWMD's Northern Coastal Basin (NCB) on the impact of development on water quality issues.
- E.1.5.8 St. Johns County shall support the SJRWMD's efforts to update and maintain current maps of submerged aquatic vegetation.
- E.1.5.9 St. Johns County shall permit the use of local funds for shoreline stabilization and beach renourishment projects. Priority shall be given to projects which demonstrate a high cost-benefit ratio with the least impact to the offshore reef, inshore area and beach and dune ecological communities.
- E.1.5.10 The County shall investigate alternatives to funding sources for projects in the Coastal Management Area to fund shoreline stabilization for the areas of critical erosion, improve and protect water quality, preservation of marine, estuarine and beach dune communities and manage coastal waterfront community revitalization, redevelopment and hazard mitigation.

**Objective E.1.6
Dredge and Fill**

Dredging and filling in the Coastal Areas shall be discouraged.

Policies

- E.1.6.1 The construction of canals and man-made waterways shall not be considered for final approval by the County until all Federal and State permits have been acquired.
- E.1.6.2 All approved dredge and fill activities within the Coastal Area shall meet or exceed all applicable Federal, State and Local drainage and floodplain standards, and shall be conditioned so as to:
- (a) Minimize impacts on Environmentally Sensitive Lands and water quality.
 - (b) If applicable, allow for flushing of any newly constructed waterway to maintain water circulation patterns within estuaries and tributaries.
- E.1.6.3 By December 2013, the County shall consider standards for designation of dredged spoil disposal sites in the County's Land Development Regulations (LDRs) based on the following criteria:
- (a) Sites should be located near waterways to be dredged.
 - (b) Preferred sites should be areas that have been previously altered or disturbed containing non-native vegetation.
 - (c) Sites should not abut residential land uses unless sites are sufficiently large to adequately buffer the residential areas.
 - (d) Sites should not support Essential Habitat, listed species or certain historically significant sites.
 - (e) Sites should not contain wetlands, unless the wetlands are degraded/non-functional and the wetland impacts are mitigated.
 - (f) Sites shall be approved by all agencies that have jurisdiction over these facilities.
- E.1.6.4 Approved Best Management Practices (BMPs), published by the Florida Department of Environmental Protection (DEP) or the St. Johns River Water Management District (SJRWMD) shall be used before, during and after construction to reduce siltation and erosion.

**Objective E.1.7
Infrastructure**

Routing of new infrastructure and public services within the Coastal Area shall be designed to direct growth away from Environmentally Sensitive Lands (ESL) and the Coastal High Hazard Area (CHHA) as defined in Section 163.3178(2)(h), Florida Statutes, and to limit public expenditures within the CHHA.

Policies

- E.1.7.1 New public infrastructure shall be planned and designed to be compatible with adjacent land uses, both existing and future, and shall not promote development located in Environmentally Sensitive Lands (ESLs).
- E.1.7.2 New public infrastructure and public services shall be constructed and expanded in an orderly manner, with costs shared as appropriate, on a proportionate basis, by those benefiting from the service.
- E.1.7.3 New roads, pipelines and other public infrastructure within the Coastal Area shall be planned and constructed in a manner that will minimize impact upon coastal marshes, wetland and surface water. New infrastructure development within the Coastal Area shall be subject to the Land Development Regulations and requirements established pursuant to Policy E.2.2.4.
- E.1.7.4 Consistent with applicable law, all new infrastructure, utilities and drainage improvements shall be constructed concurrently with the impacts of development, or in accordance with a phased plan approved by St. Johns County, all pursuant to the Concurrency Management System (CMS) established by Objective H.1.5 and supporting Policies.
- E.1.7.5 Public expenditures within the CHHA shall be limited pursuant to Objective H.1.4 and supporting Policies.
- E.1.7.6 Coastal utilities development and improvements shall be subject to the County Land Development Regulations and the St. Johns County Utility Ordinance, as amended.

Objective E.1.8
Protection of Coastal Historical /Archaeological Resources

The County shall provide for the protection, preservation and sensitive reuse of Coastal Area historic and archaeological resources.

Policies

- E.1.8.1 The County shall continue to implement historic and archeological preservation Land Development Regulations (LDRs) and the Historic Resources Review Board shall provide for the identification, protection, preservation and maintenance of significant historic and archaeological resources, including those within the coastal zone. The Land Development Regulations (LDRs) address or establish criteria, standards or procedures:
- (a) To provide protection for resources listed on the Florida Master Site File, the National Register of Historic Places or any existing or future local register of historic places.
 - (b) Outline standards for the identification and evaluation of historic and archaeological resources.
 - (c) Establish procedures for evaluating development proposals for their impact upon historic and archaeological resources.
 - (d) Establish procedures to require that all public and private development and redevelopment proposals within the Coastal Area, including those for infrastructure, to be reviewed for their impact upon designated historic resources.
 - (e) Establish procedures to require that all public and private development and redevelopment activities, including those for infrastructure, to cease for the minimum time necessary when historic or archaeological artifacts are discovered to allow for an evaluation of the find's historic significance.
- E.1.8.2 St. Johns County shall coordinate with the Division of Historic Resources to update the existing Master Site File Surveys, as appropriate.
- E.1.8.3 Utilize feasible, incentive-based techniques for the historic and archaeological preservation such as TDRs, tax abatement or waiving certain zoning requirements (setbacks, lot coverage and parking, etc.).

**Objective E.1.9
Hurricane Evacuation Time**

The County shall maintain hurricane evacuation times.

Policies

- E.1.9.1 The County shall maintain the hurricane evacuation time of 16 hours for a category 5 storm event for an out-of-county hurricane evacuation.
- E.1.9.2 The County shall, continue to implement Land Development Regulations that assess the impact of new development and redevelopment on hurricane evacuation times.
- E.1.9.3 The County shall annually review evacuation route needs to assure that the necessary improvements are incorporated within the Capital Improvement Element, Transportation Element, and the FDOT five year work program.
- E.1.9.4 St. Johns County shall attempt to limit the density within the Coastal High Hazard Area, as allowed by law.
- E.1.9.5 The County will consider and update, as appropriate, hurricane related maps and information upon completion of the NOAA funded Northeast Florida Regional Council's Statewide Regional Evacuation Study.

CONSERVATION

Goal E.2

The County shall conserve, utilize, preserve and protect the natural resources of the area, including air, water, wetlands, water wells, estuaries, water bodies, soils, minerals, vegetative communities, wildlife, wildlife habitat, groundwater recharge areas and other natural and environmental resources, ensuring that resources are available for existing and future generations.

Objective E.2.1 Groundwater Protection/Conservation

The County shall coordinate with the SJRWMD to address current and future water use, traditional and alternative water supply sources and water conservation strategies while sustaining water quality, water quantity and the protection of wetland and aquatic systems.

Policies

- E.2.1.1 The County shall address water supply and water conservation through coordination with the development of the St. Johns River Water Management District's Water Supply Assessment, Water Supply Plan and Water Shortage Plan.
- E.2.1.2 Free-flowing wells in the County shall be identified and plugged by the following measures:
- (a) The County's Health Department shall continue to work with the SJRWMD to identify free-flowing wells and to recommend measures to plug the wells.
 - (b) The County shall require new developments to identify, repair or plug all free flowing wells located within the boundaries of a proposed development as a condition to the development approval.
 - (c) Through an agreement with the SJRWMD, St. Johns County's Health Department will continue to implement the SJRWMD's free-flowing well abandonment program.
- E.2.1.3 By 2015, the County shall develop reuse regulations which requires all new developments within reuse zones to include a reclaimed water irrigation system constructed to applicable standards. The reuse regulations shall define types and sizes of developments which are appropriate to be served by a reclaimed water irrigation system.
- E.2.1.4 Future public water supply wellfields shall be located in areas where development and potential future contamination impacts are minimized.

- E.2.1.5 Pursuant to applicable law, users of On-site Sewage Treatment and Disposal Systems shall be required to tie into public or private sewer systems once service becomes available in that area.
- E.2.1.6 The County shall continue to implement its LDRs that encourage all development to be designed in accordance with the limitations of the natural environment and require the conservation of water resources and use of innovative land development techniques to decrease water use. Water conservation standards shall include, but not limited, to the following:
- (a) Minimum preservation of at least five percent (5%) of existing native vegetation on site.
 - (b) Minimum of fifty percent (50%) xeriscaping or Florida Friendly landscaping. Plant materials shall be native species or hybrids/cultivars of native species.
 - (c) All plantings shall be selected based on the principles of Florida Friendly landscaping including planting the right plant in the right place and providing for efficient watering. Exempt from this requirement are golf courses, sports fields, Agriculture and Silviculture.
 - (d) High Volume irrigation shall be limited to no more than fifty percent (50%) of the total irrigated landscape area. All plantings shall be grouped according to similar water needs for efficient irrigation zones. Exempt from this requirement are golf courses, sports fields, Agriculture, Silviculture or systems using Reclaimed water.
 - (e) Construction limitations within the 100-year floodplain, Environmentally Sensitive Lands and SJRWMD designated significant Surficial and Floridan recharge areas.
 - (f) Limit the amount of impervious surface (such as parking areas) within SJRWMD's designated significant recharge areas.
 - (g) Reclaimed water for irrigation of golf courses and common areas where available.
 - (h) The County wastewater treatment facilities shall maximize to the greatest extent possible the creation and use of reclaimed wastewater.
 - (i) Encourage the use of or the retrofitting of plumbing fixtures that are water saving devices such as ultra-low flow fixtures.

(j) Implementation of water loss prevention programs.

E.2.1.7 By 2015, the County shall establish a mechanism to protect the SJRWMD's designated Surficial and Floridan Aquifer Recharge Areas. The County will work with the SJRWMD to educate the public on major ground water issues of concern in the County.

E.2.1.8 The County, in cooperation with the St. Johns County Cooperation Extension Service (SJCCEs), Florida Department Agriculture and Consumer Services, Forestry Division (DOF), Natural Resources Conservation Service (NRCS) and SJRWMD shall provide technical assistance to agriculture operations and other large irrigation water users in the design of low-volume irrigation systems.

Objective E.2.2

Native Forests, Floodplains, Wetlands, Upland Communities, and Surface Water

The County shall protect native forests, floodplains, wetlands, upland communities and surface waters within the County from development impacts to provide for maintenance of environmental quality and wildlife habitats.

Policies

E.2.2.1 The County shall continue to work with the St. Johns County Cooperative Extension Service (SJCCES), the Natural Resources Conservation Service (NRCS), the Florida Department of Agriculture (FDACS), and the Division of Forestry (DOF) to develop and implement strategies such as, but not limited to, Best Management Practices (BMPs), conservation easements, tax incentives and federal and state grants (i.e. forest legacy, stewardship incentive program, farmland protection, wildlife habitat incentive program, etc.) in an effort to maintain agriculture and Silviculture activities as viable businesses in the County. In addition, the County shall protect natural resources and wildlife habitats by providing technical assistance Silviculture operations to implement the BMPs that are consistent with wildlife protection and stormwater GOPs.

E.2.2.2 The commercial harvesting of trees shall follow the Florida Department of Agriculture and Consumer Services Best Management Practices (1993), as amended and updated including, but not limited to, providing no harvesting zones within 150 feet of the banks of the St. Johns River and the Intracoastal Waterway, or within 75 feet of the banks of the streams and creeks listed below, whichever is more restrictive.

- (a) 75 foot Buffer
 - (1) Julington / Durbin Creek
 - (2) Cunningham Creek
 - (3) Trout Creek
 - (4) Six Mile Creek
 - (5) Toco Creek
 - (6) McCullough Creek
 - (7) Moccasin Creek
 - (8) Deep Creek
 - (9) Pellicer Creek
 - (10) Cracker Branch
 - (11) Moses Creek
 - (12) Moultrie Creek
 - (13) Pablo/Cabbage Creek
 - (14) Sampson Creek
 - (15) Orange Grove Branch/Kendall Creek
 - (16) Petty Branch

- (17) Turnbull Creek
- (18) Town Branch
- (19) Sixteen Mile Creek
- (20) Paines Branch
- (21) West Run/Cracker Branch
- (22) Smith Creek
- (23) Deep Creek
- (24) Stokes Creek
- (25) East Creek
- (26) San Julian Creek

(b) 150 foot Buffer

- (1) St. Johns River
- (2) Intracoastal Waterway

E.2.2.3 In order to protect the functional viability and productivity of forested wetland systems as natural resources, silviculture activities within forested wetlands:

- (a) Shall not significantly alter overall wetland community characteristics (i.e. hydrology, topography, plant species diversity, wetland forest composition, canopy cover or average forest age structure).
- (b) Shall not result in the conversion of historical forested wetlands into either upland systems or other types of wetland systems, except pursuant to restorative silviculture activities.
- (c) Shall comply with the ACOE's, DEP's, SJRWMD's, the Department of Agriculture and Consumer Services, and the Division of Forestry's Best Management Practices.

E.2.2.4 The County shall protect Environmentally Sensitive Lands (ESLs) through the continued implementation of Land Development Regulations (LDRs) which address the alternative types of protection for each type of Environmentally Sensitive Land and, at a minimum, address the following issues:

- (a) For Wetlands, Outstanding Florida Waters (OFW), and Estuaries:
 - (1) Maintain buffers between the wetlands/OFW/ estuaries and upland development as stated in the County's Land Development Regulations (LDRs) and as follows:
 - (a) A minimum natural vegetative upland buffer of twenty-five (25) feet shall be required and maintained between the developed areas and the contiguous wetlands to protect the water quality of the wetlands, except where buffer

averaging may allow less than the required minimum of twenty-five (25) feet in certain locations while achieving a greater buffer width or where a variance is granted. Except where a variance is granted, no buffer shall be reduced to less than ten (10) feet except in circumstances where an unavoidable wetland impact occurs such as but not limited to a road crossing. Such upland buffer shall be measured from the jurisdictional wetland line as determined by the SJRWMD and FDEP.

- (b) A minimum of a fifty (50) feet natural vegetative upland buffer shall be required and maintained between the development areas and the St. Johns, Matanzas, Guana and Tolomato Rivers and their associated tributaries, streams and other interconnecting water bodies, except where buffer averaging may allow less than the required minimum of fifty (50) feet in certain locations while achieving a greater buffer width or where a variance is granted. Except where a variance is granted, no buffer shall be reduced to less than twenty-five (25) feet except in circumstances where an unavoidable wetland impact occurs such as but not limited to a road crossing. Such upland buffer shall be measured from the jurisdictional wetland line as determined by the SJRWMD and DEP.
- (2) Continue to coordinate with DEP and SJRWMD on the status of the water quality data in all the County's major rivers, especially areas which abut designated shellfish harvesting areas. If the SJRWMD water quality data reveals the need for more stringent stormwater regulations or other water quality standards, the County will work with DEP and the SJRWMD in the development of these regulations.
- (b) For Coastal Resources and Beach and Dune Resources:
 - (1) Coordinate the consistency with Federal and State regulations and requirements applicable to the coastal resources.
 - (2) Coordinate the consistency with DEP regulations and requirements applicable to the Coastal Construction Control Line (CCCL).
 - (3) Prevent development activity which would negatively impact the beach and dune system or the coastal resources, unless such activity is required to protect public health and safety.

(c) Listed Species Habitat:

- (1) Establish criteria that will be utilized in the development review process for the identification of potential habitat areas by proposed developments.
- (2) Establish criteria for those areas of the County with a high probability of listed species habitat for additional review or habitat identification procedures.
- (3) Establish standards and procedures for the protection or acquisition of specific habitat areas which have been identified as necessary for the support of an existing listed species population.

E.2.2.5 The Environmentally Sensitive Lands Map shall be updated by December 2010. The Map shall include wetlands, estuaries, Outstanding Florida Waters (OFWs), Class II waters, Aquatic Preserves, the National Estuary Research Reserve, Conservation lands, submerged aquatic vegetation, environmentally managed land in public ownership, mitigation banks and Coastal resources.

E.2.2.6 Environmental surveys shall be required for all development. By December 2012, the County shall develop and adopt in the Land Development Regulations (LDRs) standards for environmental surveys. At a minimum, the focus of these surveys shall be, jurisdictional wetland boundaries, existing vegetative communities, the presence and location of existing wildlife habitat, rookeries, listed species, Significant Natural Communities Habitat, historical and archaeological locations and potential wildlife corridors.

E.2.2.7 The County shall provide technical support and assistance to State and Federal agencies including the U.S. Fish and Wildlife Service (USFWS), the Florida Fish and Wildlife Conservation Commission (FWC) and the St. Johns River Water Management District (SJRWMD) in their inventory, assessment and mapping of existing fish and wildlife habitat, significant upland communities and wildlife corridors.

E.2.2.8 By December 2012, the County shall develop and adopt guidelines and standards for the protection of wildlife corridors such as, but not limited to, wildlife crossings and open space preservation.

E.2.2.9 The County shall continue to implement guidelines and standards for the preservation and conservation of wetlands through various land development techniques including, but not limited to, the following:

- (a) The County shall protect wetlands, uplands and their associated wildlife habitats through the implementation of the Planned Development (PUD and PRD) land development regulations by requiring twenty five (25%)

percent preservation of open space. These preservation areas will be designed to complement the Florida Fish and Wildlife Conservation Commission's (FWC) wildlife and habitat data and the Florida Ecological Greenways Network so that these areas can be interconnected with adjacent ecological areas.

- (b) The County shall protect wetlands, uplands and their associated wildlife habitats through the implementation of natural vegetative upland buffers, the preservation of Significant Natural Communities Habitat and the protection of Listed Species within St. Johns County as provided in the County Land Development Regulations.
- (c) In recognition of the many natural functions and values of estuarine wetlands and the need to protect these resources from incompatible land uses, all estuarine wetland habitats shall be deemed as Environmentally Sensitive Lands (ESLs) as designated on the County Comprehensive Plan Map series.
- (d) Wetlands and natural functions of the wetlands shall be protected and conserved through the planning process which considers the type, value, function, size, condition and location of the wetlands.
- (e) Consistent with the Recreation and Open Space Element, the County will participate in various land acquisition programs to acquire important undeveloped estuarine wetlands. The land acquisition consideration will be based on the Recreation and Open Space Policies F.1.3.2. through F.1.3.5.

E.2.2.10 Illegal development in wetland areas shall be reported. Consistent with applicable law, it will be required that these areas shall be restored or mitigated.

E.2.2.11 The County shall implement Land Development Regulation standards and procedures, as provided in Objective D.3.1 and supporting policies, to ensure that stormwater management systems protect the hydrologic conditions of wetlands.

E.2.2.12 The County shall preserve and conserve uplands through various land development techniques as follows:

- (a) St. Johns County shall require a buffer zone adjacent to the wetlands and open water habitats on all new development sites as specified in the LDRs and policy E.2.2.4.
- (b) The County shall recognize the following vegetative natural communities as Significant Natural Communities Habitat. Due to the rarity of these vegetative communities, a minimum of ten (10%) percent of the total acreage of the Significant Natural Communities Habitat (excluding bona

vide Agriculture or Silviculture operations) shall be preserved and maintained by the development.

- (1) Beach Dune
- (2) Coastal Grasslands/Coastal Strand
- (3) Xeric Hammock
- (4) Maritime Hammock
- (5) Sandhill
- (6) Scrub

E.2.2.13 The County GIS computer mapping inventory shall coordinate with the State and Federal agencies on new available vegetative and wildlife data and update the County database as appropriate.

E.2.2.14 The County shall require the preservation of native vegetative communities and removal of exotic vegetation on County owned land to the maximum extent feasible.

E.2.2.15 The County shall continue to encourage cluster type developments in order to preserve large contiguous areas through implementation of the development review process.

E.2.2.16 By 2013, the County shall consider adoption of an Environmentally Sensitive Overlay Zone (ESOZ) for ecologically sensitive areas.

The ESOZ shall establish standards and procedures to address the following:

- (a) Protection of the County's shellfish harvesting areas and Outstanding Florida Waters.
- (b) Protection of surface water quality.
- (c) Protection of flood storage and floodplain capacity.
- (d) Protection of wetland dependent wildlife, listed species and unique vegetative communities.
- (e) Protection of environmental scenic views and vistas.
- (f) Provisions for development mitigation, revegetation, buffering and

setback measures within the ESOZ.

- (g) Provisions for building and development practices and techniques which protect the integrity of the ESOZ.

- E.2.2.17 The County shall continue to investigate Outstanding Florida Water designation(s) for major stream systems within the County, particularly the Julington/Durbin and Six Mile Creek systems.
- E.2.2.18 Dredge and fill activities shall be reviewed and permitted by the appropriate regulatory agencies to assure that environmental impacts are minimized, and that the requirements of the County Land Development Regulations (LDRs) are met before final approval is granted.
- E.2.2.19 St. Johns County, in coordination with DEP, shall encourage all new and existing Marinas or boatyards to participate in the DEPs Clean Marina Program or the Clean Boatyard Program.
- E.2.2.20 The County shall work with the appropriate Federal and State agencies in locating shellfish harvesting area signs at appropriate locations along the Intracoastal Waterway.
- E.2.2.21 The County shall implement the County Greenway, Blueway and Trails Master Plan to protect and enhance the natural, cultural and historical resources of the County while providing interconnecting accessways between public conservation and park lands. The established Greenways/Blueways/Trails shall be coordinated with the surrounding counties and municipalities.
- E.2.2.22 The County shall coordinate with the surrounding counties on protecting native vegetative communities, estuaries, surface waters, marine resources, wildlife habitats, wildlife corridors and reduce exposure to natural hazards that cross jurisdictional boundaries.
- E.2.2.23 The County shall support the Matanzas River Special Basin designation and Outstanding Florida Water (OFW) designation by the SJRWMD and DEP for the protection of the Matanzas River. If the Special Basin designation and OFW designations are approved by the state agencies then the County will review the Land Development Regulations for compliance with the potential state requirements for the Matanzas Basin.

**Objective E.2.3
Surface Water Quality**

The surface waters of St. Johns County shall be protected to ensure that their quality is maintained. Waters that enter the estuaries and the ocean shall be improved, at a minimum, to the standards established by Chapter 62-302, F.A.C. and the Clean Water Act, 33 U.S.C. 1251.

Policies

- E.2.3.1 St. Johns County shall support and encourage continued water quality monitoring by local, state and federal agencies that will identify and formulate plans to address point and non-point sources of surface water pollution.
- E.2.3.2 St. Johns County shall continue to coordinate with governmental agencies on the St. Johns River Surface Water Improvement (SWIM) program, the Northern Coastal Basin SWIM Program, the GTMNERR Management Plan, Pellicer Creek Aquatic Preserve Management Plan, Guana River Marsh Aquatic Preserve Management Plan, the Natural Resources of Regional Significance (NRRS), the St. Johns River American Heritage River designation and any future Management Plan, Habitat Conservation Plan, Manatee Protection Management Plan and Estuarine Sanctuary Plan to ensure that the County resource protection measures are implemented in conjunction with the existing resource protection plans.
- E.2.3.3 St. Johns County shall enhance or restore the degraded natural areas on County owned properties through the removal of non-native vegetation, revegetating, shoreline or dune restoration or the restoration of the natural hydrology, where feasible.
- E.2.3.4 The County shall develop native vegetative restoration plans for park sites within the County. All plans will include the removal of non-native vegetative plant materials, i.e. Brazilian pepper, Chinese tallow, Australian pine and air potato. The non-native vegetative plant materials shall be replaced with the appropriate native species.
- E.2.3.5 There shall be no reduction in the flood storage capacity or the other natural functions and values of the floodplain in St. Johns County by regulating development in areas designated as regulatory floodway as updated by FEMA Flood Insurance Studies in St. Johns County. Encroachments shall be prohibited within designated regulatory floodway including, but not limited to, fill, new construction, development improvements, that would result in any increase in flood levels.
- E.2.3.6 The County shall regulate development within the flood prone areas to minimize flood storage capacity reduction and to afford protection to life and property within the floodplain.

- E.2.3.7 Land uses should be restricted if they adversely affect the quality and quantity of the water resources such as natural groundwater recharge areas, wellhead protection areas and surface waters.
- E.2.3.8 The County shall seek new funding sources to implement the Best Management Practices for water resources identified as shellfish harvesting areas.
- E.2.3.9 The County shall work with the St. Johns River Water Management District (SJRWMD) and the Department of Environmental Protection (DEP) and the Environmental Protection Agency (EPA) to educate and distribute information on the surface water resources in the County.

**Objective E.2.4
Scenic Highway Designations**

St. Johns County shall continue to support local, state and federal Scenic Highway designations which promote community pride, provide a positive community self image, provide a pleasant driving experience, preserves and protects unique scenic, historical, archaeological, cultural, recreational, aesthetic and environmentally significant resources.

Policies

- E.2.4.1 The William Bartram Scenic & Historic Highway is designated as a State Scenic Highway and shall be protected through the adoption of new Land Development Regulations (LDRs) and the implementation of development controls as established in Future Land Use Policy A.1.3.8.
- E.2.4.2 By 2015, St. Johns County and William Bartram Scenic & Historic Highway Corridor Management Council (CMC) members shall complete Overlay District regulations that at a minimum, establish architectural, landscaping, buffer, screening, including retention of existing tree canopy, lighting and as necessary additional setback requirements for this state designated Scenic Highway.
- E.2.4.3 State Road A1A from the St. Johns/Duval county line to the St. Johns/Flagler county line is designated as a St. Johns County Scenic Roadway, a state designated Scenic Highway and a National Scenic Byway. The preservation of it's picturesque historic architecture, scenic land, and water vistas shall be protected through the implementation of development controls as established in Future Land Use Policy A.1.3.7 and A.1.3.9.
- E.2.4.4 By 2013, the County shall consider Land Development Regulations (LDRs) for the preservation of Old Brick Road in St. Johns County which is designated as a state Heritage Scenic Highway.
- E.2.4.5 By 2013, the County shall consider Land Development Regulations (LDRs) for the preservation of the portion of International Golf Parkway which is designated as a St. Johns County Scenic Roadway.
- E.2.4.6 By December 2015, the County shall develop a procedure for recognizing and nominating eligible local roads as Scenic Roadways.

**Objective E.2.5
Wastewater**

Protect the water resources of the County from contamination through the use of centralized water and sewer systems.

Policies

- E.2.5.1 New On-site Sewage Treatment and Disposal Systems (OSTDS) will continue to be inspected and approved by the County Health Department. OSTDS, including their associated drain fields, will be located as far landward as feasible on the waterfront properties so as to reduce or prevent unnecessary nutrient and pathogen loading into the surface waters.
- E.2.5.2 OSTDS shall, at a minimum, continue to be subject to state standards, as provided in Objective D.1.4 and supporting Policies.
- E.2.5.3 OSTDS shall be prohibited within wetland areas.
- E.2.5.4 Pursuant to applicable law, users of OSTDS shall be required to tie into public or private sewer systems once service becomes available in that area.
- E.2.5.5 New developments above the St. Johns County Health Department's thresholds for OSTDS use shall rely upon public or private sewer systems and wastewater treatment plants built to county and state specifications.
- E.2.5.6 The County shall discourage the discharge of any new or upgraded public or private sanitary sewer facility into the estuarine waters of the County.

**Objective E.2.6
Stormwater**

The County shall protect and appropriately use estuarine and fresh water systems.

Policies

- E.2.6.1 The County Land Development Regulations (LDRs) shall be reviewed and amended as necessary, based upon the findings of the St. Johns County Master Drainage Study, as provided for in Objective D.3.1, and its supporting Policies.
- E.2.6.2 St. Johns County shall continue to coordinate with the SJRWMD and participate in the ongoing programs of the St. Johns River Surface Water Improvement Management (SWIM) program and the Northern Coastal Basins programs and work with the SJRWMD on the long term ambient water quality monitoring program, establishing pollutant load reductions goals and monitoring freshwater inflow.
- E.2.6.3 The use, storage, transmission, or generation of hazardous substances, or substances which may artificially accelerate the eutrophication of the wetlands and water bodies, is prohibited within the wetland systems.
- E.2.6.4 St. Johns County shall continue to coordinate with Department of Environmental Protection (DEP) and participate in ongoing programs recommended by the Guana Tolomato Matanzas National Estuary Research Reserve (GTMNERR).
- E.2.6.5 The County shall seek new funding sources to implement the best management practices for the protection of water resources identified as shellfish harvesting areas.
- E.2.6.6 St. Johns County shall continue to work with DEP and SJRWMD to develop management practices for water resources to mitigate urban and non-point sources of water degradation.
- E.2.6.7 St. Johns County shall continue to implement the Stormwater Management Ordinance for the reduction and elimination of pollutant discharges to the Municipal Separate Storm Sewer System (MS4).
- E.2.6.8 Storm water ponds should be designed, wherever feasible, to use natural vegetation to create wildlife habitat and passive recreation areas consistent with Policy D.3.2.13.

**Objective E.2.7
Acquisition and Protection**

The County shall provide technical assistance to other governmental agencies and the private sector in the identification, acquisition, preservation or protection of areas identified for their ecological significance.

Policies

- E.2.7.1 The County shall use the Environmentally Sensitive Lands map, as necessary or appropriate, to identify areas for protection or acquisition. Priority areas shall be areas that provide the highest habitat and wildlife benefit.
- E.2.7.2 The County shall encourage and pursue the acquisition of ecologically significant land through existing state acquisition programs or through local acquisition programs to be funded through grants, bond issues, land trust funds or other appropriate local funding mechanisms.
- E.2.7.3 In addition to pursuing acquisition of ecologically significant land, the County shall continue to protect such areas through application and enforcement of the Land Development Regulations (LDRs).
- E.2.7.4 The County shall identify areas within the Development Area Boundaries appropriate for infilling and establish incentives to encourage the development of these areas.
- E.2.7.5 In selecting future park sites for public acquisition the County shall give full consideration to acquiring new lands according to the Recreation and Open Space Element's Policies F.1.3.2, F.1.3.3, F.1.3.4 and F.1.3.5.
- E.2.7.6 The County shall continue to review its land acquisition selection criteria on a regular basis and shall update these criteria, as deemed appropriate. Land acquisition and preservation shall be focused on lands that provide the greatest amount of habitat and wildlife benefit.

**Objective E.2.8
Listed Species**

The County shall protect habitats and populations of listed species.

Policies

- E.2.8.1 The County shall work with the Florida Department of Environmental Protection (DEP), the Florida Fish and Wildlife Conservation Commission (FWC) and other appropriate governmental agencies in the implementation of the St. Johns County Manatee Protection Plan (MPP) (2005).
- E.2.8.2 Marinas and ports shall not be located in or immediately adjacent to FWC designated manatee sanctuaries.
- E.2.8.3 The County shall work with FWC to monitor applications for Marina construction permits filed with applicable state agencies and shall comment on such applications during the permit review process to ensure that local knowledge of manatee foraging areas is appropriately addressed during such review.
- E.2.8.4 All species of sea turtles nesting on the beaches of St. Johns County shall be protected from human interference including, but not limited to, beach renourishment, beach front lighting, coastal construction, armoring, erosion control structures, mechanical beach cleaning and unregulated vehicular traffic which could harm sea turtles and their nesting sites during nesting season.
- E.2.8.5 The County shall protect sea turtles by implementing the St. Johns County Habitat Conservation Plan and through coordination with the DEP, FWC and U.S. Fish and Wildlife Service (FWS) on the enforcement and protection of sea turtles during their nesting times.
- E.2.8.6 The County shall protect Anastasia Island Beach Mouse (AIBM) by implementing the St. Johns County Habitat Conservation Plan and through coordination with the DEP, FWC and FWS on the enforcement and protection of AIBM habitat.
- E.2.8.7 Development of vacant lands adjacent to Outstanding Florida Waters, Aquatic Preserves, Wildlife Sanctuaries, State Preserves, Sanctuaries, National Estuarine Research Reserve and Wildlife Management areas shall be designed to a scale and intensity which is consistent with the existing adjacent uses pursuant to the adopted Land Development Regulations (LDRs) and shall be required, at a minimum, to meet all applicable Federal, State and Local drainage and water quality standards.
- E.2.8.8 By 2014, the County shall seek support and technical assistance from state agencies (such as DEP, SJRWMD and FWC) to develop a wildlife corridor plan

linking public lands of appropriate size to maintain species viability and diversity.

- E.2.8.9 The County shall work with the FWC to educate the public on the value of wildlife, native vegetative communities and other natural resources through the creation of information flyers, brochures, interpretive displays and the development of trails at appropriate County park sites.
- E.2.8.10 The County shall coordinate with the Natural Resources Conservation Service, Agricultural Extension Service and others, to provide suggestions and guidance to the agricultural and silviculture communities on methods for incorporating wildlife corridors in the management of their lands.
- E.2.8.11 The County shall protect listed species and critical habitats and both shall be evaluated on a site development basis. For developments on property known to support listed species of plants or animals, the developer shall be required to notify the appropriate Federal, State and Regional agencies and the County and must comply with the appropriate guidelines and laws that protect listed species.
- E.2.8.12 The County shall protect bald eagles through the continued implementation of Land Development Regulations (LDRs) that include bald eagle protection zones.
- E.2.8.13 Recognizing that submerged aquatic vegetation (SAV) protects water quality by stabilizing sediments, absorbing nutrients and providing essential habitats for many species of wildlife, the County shall consider regulations to protect SAV by 2010.

**Objective E.2.9
Air Quality**

Air quality in St. Johns County shall be suitable to safeguard human health and prevent damage to the natural environment. This shall be accomplished by meeting or exceeding air quality standards established by the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (DEP).

Policies

- E.2.9.1 The County shall coordinate with DEP to evaluate the need for additional air quality monitoring stations.
- E.2.9.2 New and existing industries which require air quality permits from EPA or DEP shall be required to receive those permit(s) prior to receiving County development approval.
- E.2.9.3 The County shall continue to require applicants for Development approval to investigate and incorporate methods to reduce vehicle traffic such as bikeways, pedestrian ways, public transportation, and other means.
- E.2.9.4 The County shall coordinate with the State Florida Department of Agriculture and Consumer Services, Division of Forestry to ensure that appropriate fire prevention methods are implemented for the burning of land clearing debris within the Rural/Silviculture areas.

**Objective E.2.10
Energy Conservation**

The County shall implement cost-effective energy efficiency measures to reduce energy consumption and promote energy conservation, carbon reduction, green building and economic development.

Policies

- E.2.10.1 The County shall continue to implement cost-effective energy efficiency measures to reduce energy consumption in the County's fleet management, operations, building construction and maintenance programs.
- E.2.10.2 The County shall promote energy saving techniques through the public information program established by Policy C.1.7.2. The County shall continue to enforce the Florida Energy Efficiency Code through the Development permit review and approval process.
- E.2.10.3 The County shall promote energy conservation by supporting alternative forms of transportation through the programs established in Objective B.1.5 and Policies B.1.62 and F.1.1.1.
- E.2.10.4 The County shall promote energy conservation by supporting alternative energy resources including biofuel, solar and wind and by ensuring that Land Development Regulations (LDRs) do not prohibit their use.
- E.2.10.5 The County shall encourage the research, development, demonstration and application of alternative energy resources, particularly renewable energy resources by allowing agribusiness renewable energy operations, solar farms, wood and debris recycling facilities as related to alternative fuel production operations consistent with Policy A.1.6.9 and by ensuring that Land Development Regulations (LDRs) do not prohibit the use of alternative energy resources, where appropriate.
- E.2.10.6 St Johns County public buildings shall be constructed with cost-effective efficiency construction standards and whenever feasible, shall meet or exceed standards set forth by the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) rating system, the Green Building Initiative's Green Globes rating system, the Florida Green Building Coalition standards or a nationally or state recognized, high-performance green building rating system as approved by the Florida Department of Management Services.
- E.2.10.7 The County shall encourage that all private buildings constructed in the County be constructed to meet the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) rating system, the Green Building Initiative's Green Globes rating system, the Florida Green

Building Coalition standards or a nationally or state recognized, high-performance green building rating system as approved by the Florida Department of Management Services.

- E .2.10.8 By 2011, the County shall modify the Land Development Code establishing Low Impact Development standards.
- E.2.10.9 By 2011, the County shall ensure that its vehicle fleet is used efficiently and is energy efficient by analyzing work priorities, standardizing the size, type and number of vehicles as may be necessary to meet functional requirements and, where possible, rotate between high and low utilization and work areas to maximize vehicle life/cost per mile/reliability, energy conservation and reduction of harmful emissions.
- E.2.10.10 Upon its completion, St. Johns County will investigate the Florida Residential Retrofit program to determine applicability in the retrofitting of older homes in St. Johns County in order for these homes to become more energy efficient. The County may investigate a long term market-based program that offers a whole-house approach for reducing energy use.
- E.2.10.11 Consistent with the State's initiative to improve the sustainability of Florida's energy production and consumption patterns and to minimize the County's own carbon footprint, the County shall identify opportunities and funding for local implementation of renewable energy options that apply to the built environment, infrastructure, utilities and transportation sectors, using the Florida Green Building Council, Green Local Government Standard as a guide.

Objective E.2.11
Agriculture/ Silviculture Soils

Agricultural and silviculture soils in St. Johns County shall be protected and conserved as an essential natural resource which is an integral part of the County's economy. This will be implemented through the County's Land Development Regulations (LDRs)..

Policies

- E.2.11.1 The County will continue to protect Agricultural lands through the agriculture exemption or "green belt" property tax assessments.
- E.2.11.2 The County shall work with local Natural Resources Conservation Service (NRCS) offices to develop methods of soil conservation and educate the agricultural community about soil conservation and erosion control practices including implementing appropriate Best Management Practices and erosion control strategies.
- E.2.11.3 The County shall protect Agricultural and Silviculture areas through their designation on the Future Land Use Map and through the development and application of Planned Rural Development Land Development Regulations.

Objective E.2.12
Mining and Excavation Activities

Mining and excavation activities in the County shall be conducted in a manner that minimizes the detrimental effects to the groundwater, surface water, wildlife and wildlife habitats, the surrounding land use values and the health, safety and welfare of the general public in addition to the appropriate use and protection of minerals.

Policies

- E.2.12.1 By 2011, the County shall review and update, as appropriate, Land Development Regulations (LDRs) for excavation activities. At a minimum, the LDRs shall address the regulation of excavation activities including, appropriate use, size, roadway use and maintenance, and any appropriate exemptions.
- E.2.12.2 Commercial mining and excavation activities shall be prohibited within the Conservation areas designated on the Future Land Use Map.
- E.2.12.3 Excavations for fish ponds, aquaculture or pisciculture activities shall be in conformance with the Florida Department of Agriculture and Consumer Services, Aquaculture Best Management Practices, January 2005, as amended, and the County LDRs.