THE REGIONAL PLAN OF COASTAL GEORGIA

Prepared by:
Coastal Regional Commission
Planning and Government Services Department
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www.crc.ga.gov

Updated January 11, 2017

Resolution

Whereas, the Regional Plan must be prepared pursuant to the Georgia Planning Act of 1989 and consistent with Minimum Standards and Procedures for Regional Planning developed by the Georgia Department of Community Affairs (DCA); and

Whereas the Regional Plan Update of Coastal Georgia provides guidance to regional and business leaders, local government, state and federal agencies, and citizens as they help shape coastal Georgia's future; and

Whereas, the Regional Plan of Coastal Georgia advances the state's planning goals of a growing and balanced economy; protection of environmental, natural and cultural resources; provision of infrastructure and services to support efficient growth and development patterns; access to adequate and affordable housing for all residents; coordination of land use planning and transportation planning to support the above mentioned assets; and coordination of planning efforts with other service providers, authorities, communities and state and regional plans; and

Whereas, the Coastal Regional Commission developed and adopted the Regional Plan of Coastal Georgia in 2010, and amended and updated it January 2012; and

Whereas, beginning 2012 the Coastal Regional Commission utilized the Quality Growth Effectiveness (QGE) Assessment Survey as an Evaluation and Monitoring tool to measure performance standards as they relate to ongoing implementation and effectiveness of the Coastal Georgia Regional Plan; and

Whereas, the Quality Growth Effectiveness survey acquired responses from local jurisdictions regarding consistency with the Regional Plan; and

Whereas, these answers were used to determine the Plan's effectiveness and to identify implementation barriers and areas of the Plan that may require modification moving forward; and

Whereas, beginning in 2013, the CRC with the University of Georgia assessed how well existing planning tools address community resilience with the goal of integrating resilience guidelines and performance standards into the Regional Plan Update; and,

Whereas issues for adaptation include the need for information and data as a basis for understanding potential risks and vulnerabilities, meaningful and effective stakeholder engagement shaped by local contexts; and

Whereas, the Coastal Regional Commission approved the transmittal of the Regional Assessment document which proposed Resilient Communities as a topic of importance, along with the Stakeholder Involvement program to by the Georgia Department of Community Affairs for review, and were approved by the Department as the first elements of the Regional Plan Update.

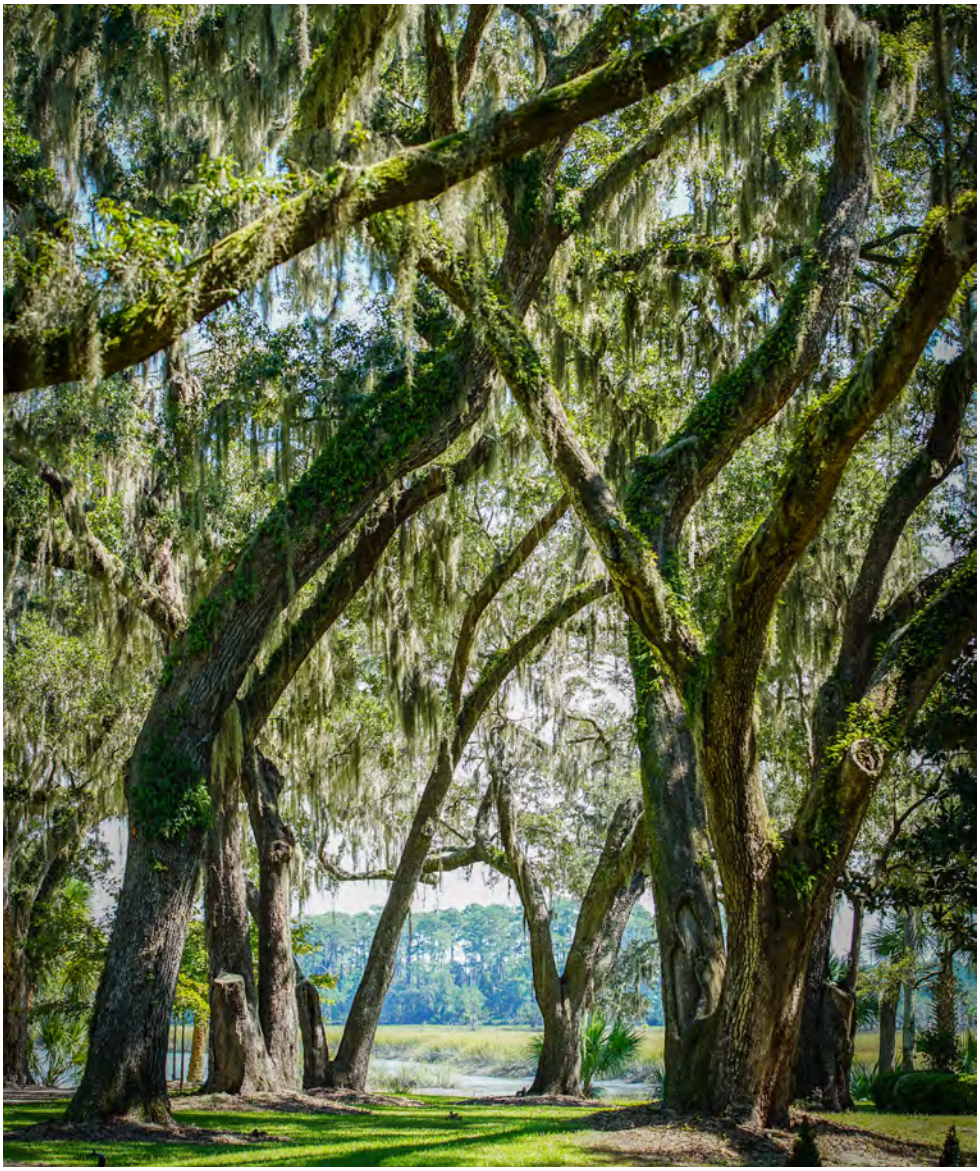
Now therefore, be it resolved, that the Coastal Regional Commission Council hereby approves the transmittal of the Regional Plan Update to the Georgia Department of Community Affairs.

Coastal Regional Commission

Adopted this 11th day of January, 2017.

By: _____
Thomas J. Ratcliffe, Jr., Chairman

Attest _____
Allen Burns, Executive Director



Acknowledgments

The Regional Plan of Coastal Georgia was funded in part by the Georgia Department of Community Affairs. Under the leadership of the Coastal Regional Commission Council, with direction from the Stakeholder Committee, and participation from coastal cities and counties, involvement of stakeholders, support from higher institutional partners and collaboration with other regional leaders, the Regional Plan empowers government officials and policy makers to usher in sustainable behavior and practices throughout the next twenty-years. Thank you for your role in making and maintaining Coastal Georgia as a unique place to work, live and play.

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The Regional Plan represents the culmination of collaborative efforts by the region's 10 counties and 35 cities:

BRYAN
- Pembroke
- Richmond Hill

BULLOCH
- Brooklet
- Portal
- Register
- Statesboro

CAMDEN
- Kingsland
- St. Marys
- Woodbine

CHATHAM
- Bloomingdale
- Garden City
- Pooler
- Port Wentworth
- Savannah
- Thunderbolt
- Tybee Island
- Vernonburg

EFFINGHAM
- Guyton
- Rincon
- Springfield

GLYNN
- Brunswick

LIBERTY
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- Gum Branch
- Hinesville
- Midway
- Riceboro
- Walthourville

LONG
- Ludowici

McINTOSH
- Darien

SCREVEN
- Hiltonia
- Newington
- Oliver
- Rocky Ford
- Sylvania

THE FUTURE BELONGS TO THOSE WHO PREPARE FOR IT.

-Ralph Waldo Emerson

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Purpose

In accordance with O.C.G.A. 50-8-1 et seq the Georgia Department of Community Affairs (DCA) established Standards and Procedures for Regional Planning, known as "Regional Planning Requirements" effective July 1, 2009. Those standards and procedures are embodied in the Regional Plan of Coastal Georgia, and can be read about in more detail in Appendix C: Components of the Regional Plan.

DCA established standards and procedures for regional planning to provide a guide to everyday decision-making for use by government officials and other regional leaders. In order to remain eligible for state funding programs, the Coastal Regional Commission must prepare, adopt, maintain, and implement a regional plan that meets these planning requirements.

The planning requirements also provide technical guidance to Regional Commissions for advancing the state's planning goals of:

- **A growing and balanced economy**
- **Protection of environental, natural and cultural resources**
- **Provision of infrastructure and services to support efficient growth and development patterns**
- **Access to adequate and affordable housing for all residents**
- **Coordination of land use planning and transportation planning to support sustaiable economic development, protection of natural and cultural resources and provision of adequate and affordable housing**
- **Coordinations of local planning efforts with other local service providers and authroities, neighboring communities and state and regional plans**

Introduction

The Regional Plan of Coastal Georgia is updated to provide guidance to regional and business leaders, local government, state and federal agencies, and citizens as they help shape coastal Georgia's future. It is the result of a comprehensive review and analysis of coastal Georgia's 10 counties and 35 municipalities' land development trends and patterns that identified opportunities and challenges facing the region. The Regional Agenda is the most important part of the Regional Plan as it includes the region-wide vision for the future, its guiding principles, key issues and opportunities, performance standards, and the implementation program.

The Regional Plan of Coastal Georgia Update is the result of a two-year study and planning process, which included involvement of our partnership with the University of Georgia, College of Environment + Design, and regional stakeholders who assisted with the analysis of the coastal region.

The Regional Plan is not a static document, nor is it a regulatory document. The Plan discusses principles, strategies and performance standards and serves as the framework for the implementation by local government, state agencies and the Regional Commission's partners.

As economic and social conditions evolve in the region, so must the Regional Plan. The Coastal Regional Commission is tasked with reviewing, monitoring, evaluating and updating the Regional Plan on an annual basis.

The Regional Plan is a shift from growth management to growth leadership. Growth leadership is described as a proactive approach to plan for future growth that is both sustainable and environmentally-friendly. To support the call for growth leadership, the Regional Plan offers a policy framework and recommendations for planning in coastal Georgia. Growth leadership requires long-term coordination between land-use controls and public capital investment, on local, regional, and state-wide scales to be effective.

The greatest departure from growth management to growth leadership lies in the geographic scale of interest. Growth leadership proactively addresses land use, infrastructure, and economic development issues from a regional perspective, with the recognition that decisions have impacts that extend across local jurisdictional boundaries.

This policy framework for growth leadership is designed to link the following essential elements that contribute to quality growth:

Patterns	Patterns of development refers to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of different land uses.
Preservation	Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation, and working lands. The long-term preservation of natural areas, open spaces, and agricultural and timber lands, is an enduring legacy.
Passages	Passages refers to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links places and people.
Places	Places not only seek to safeguard the intrinsic qualities of Coastal Georgia, but also focuses investment on areas with existing infrastructure.

Together, these weave a complex network that shapes the environment. They require balancing redevelopment of existing urban areas, with new land development; countering urbanized places with protected lands to protect natural functions and create healthy environments for people; and preserving the identity of Coastal Georgia, while building its image in response to a changing world and population.

Growth Leadership Recommendations

State, local government and citizens can direct the course of development through deliberate growth leadership. The Plan update establishes a new element, community resilience, for growth in coastal Georgia—one that accommodates growth and development in ways that improve quality of life for current and future citizens.

The Regional Plan advocates for economic progress and environmental stewardship to enhance social capital in communities.

Update of the Regional Plan 2016: The update to the Region Plan began in 2013 with an extensive Risk and Vulnerability Assessment conducted in partnership with the University of Georgia's Regional Environmental Planning Studio. The Risk and Vulnerability Assessment provided an assessment of current conditions by using existing data and information for each county, reviewing existing literature, conducting an assessment of comprehensive plans, ordinances, emergency management plans, and included tasks defined in the FEMA guidelines (risk assessment, with a description of hazards), description of community "assets", analysis of risk or impacts of the hazards to those assets, and a summary of results and overall vulnerability for each community. See Regional Assessment of Coastal Georgia.

Results were summarized by an index of risk, vulnerability, and resilience, which varied with each theme or topic (e.g. built environment, infrastructure, and natural environment) based on a ranking system. This system addressed the level of risk and vulnerability by county or by hazard area, and provided a general assessment of how resilient a community is to any future hazards. These recommendations, as well as a review of growth-related issues in coastal Georgia are outlined in the Regional Plan of Coastal Georgia.

Balancing Various Competing Interests

The natural areas of the Coastal Region include sensitive shoreline areas and wetlands. The way the physical layout, or land uses of communities are planned is fundamental to sustainability. Land use decisions are far-reaching, and include determinations involving the commitment of finite resources by local governments and private investment. Such decisions must be coordinated so as to achieve efficient, effective and timely use of finite resources. The resource investment, both public and private, in land use decisions is long-term and therefore a process which provides a certain and stable climate for decision-making is necessary to foster investment of these resources.

The process of reexamining codes and policies that shape how communities grow was assessed and the Plan describes strategies and programs local jurisdictions can use to implement best practices for sustainable development.

The location of residential and employment land uses greatly impacts the level of demand on the transportation system. I-95 is the primary north-south highway facility and I-16 facilitates east-west travel. The transportation links of the ports and I-95 are critical to the region's economic growth. Many daily trips on the region's transportation system occur during the commute between home and work. Typical daily commutes often span multiple counties and with relatively few major employment centers, commuter travel in the region is on average 30 minutes. The ability of the region's major roadway network to meet existing and future travel needs is essential to the economic vitality of the region.

The challenge to create new economic opportunities grows out of the recognition that coastal Georgia's places serve a major role in the economic, social and cultural well-being of the state as a whole. Future prosperity require strategies that build on the assets, needs and desires of each community within the region. Regionalism, or identifying opportunities and partnerships beyond municipal boundaries, and cross--jurisdictional partnerships can help communities pool resources toward shared objectives.

How We Plan and Grow Today Shapes our Tomorrow

The CRC is committed to working with communities to implement quality growth. The agency is also committed to maintain coastal Georgia as a destination distinct in character. Through technical assistance, workshops, research and grant programs, the CRC helps local governments achieve broader social impacts –o ur aim is to advocate and promote good policy and professional practice by keeping abreast of innovative approaches and sustainable practices.

The Regional Plan focuses on improving the places that are most important to us. It promotes regional value and assists with building local value. The Plan supports regional needs which in turn serve local government's needs. It builds a regional identity which contributes to our sense of place. Coastal Georgia shares a compelling vision for its future. Together we can work translating the regional vision and seeing the vision through.

Vision

The vision of Coastal Georgia is to be a unique and cohesive region based upon innovation and excellence in all we do to preserve, nurture, enhance and develop our abundant human, natural, historic, cultural and economic resources.

Coastal Georgia 2030

Coastal Georgia in the year 2030 will have:

- Preservation, restoration and management of natural and cultural resources;
- Quality growth-mixed use developments;
- Walkable communities, clustered development that utilizes infrastructure wisely;
- Transportation alternatives;
- Abundant green-space and greenways;
- Healthy, families and communities;
- Diverse population;
- Quality education systems; healthy diversified economy;
- Essential port and federal government facilities;
- Coordinated planning and cooperation among local, regional, and state agencies;
- Economic development with public/private investments, an enhanced business environment, and quality jobs for area residents; and
- Livable communities which include those elements that helps to maintain independence and quality of life.
- Increased their resiliency to potential coastal hazards.

Regional Development Patterns

The Regional Development Map (RDM) was created by incorporating the Regionally Important Resources Map. The Regional Development Map was also analyzed for current trends as it relates to developing, developed and rural development patterns. Future land use designations were grouped into one of the four future development area categories and cross referenced with Regionally Important Resources. The Regional Development Map reflects the most recent trends and projected land use patterns from local Comprehensive Plans created or updated under DCA's Local Planning Requirements and the most recent comprehensive inventory of the Region's natural and cultural resources.

As local comprehensive plans are amended and updated, local development trends inherently evolve. The Coastal Regional Commission continues to update the Regional Development Map as necessary to reflect the most responsible, appropriate and desired, long range development patterns for the Coastal Region of Georgia. Factors affecting future amendments to the Future Development Map may include:

- Changes to Regionally Important Resources,
- Areas Requiring Special Attention,
- Developments of Regional Impact,
- Regional Transportation Plans,
- Local Comprehensive; and
- Strategic plans and other applicable studies or projections affecting the region, including U.S. Census.

Regional Development Patterns include:

Conservation: Areas to be preserved in order to protect important resources and environmentally sensitive areas of the region. Primary conservation areas include, but are not limited to, wetlands, flood plains, streams, endangered species and critical habitat and prime agricultural lands, federal or state listed species. Conservation areas include essential buffers along streams and wetlands, and water bodies that require riparian buffers.

> *Identifying and preserving coastal Georgia's Green Infrastructure network will support biodiversity and functional ecosystems, protect native plant and animal species, lessen the disruption to natural landscapes, limit invasive species, which in turn will enhance and support water quality, provide for quality growth land use planning, support the implementation of stormwater management plans and regulations, encourage the creation of transportation corridors and connections, foster ecotourism, tourism and outdoor recreation, enhance the business climate, and ensure a high quality of life for coastal residents.*

Rural: Areas not expected to urbanize or require urban services.

Efforts to maintain the character of rural areas are encouraged to protect viewsheds by providing for tree buffers along roadways, endorsing landscaping and significant tree preservation plans, and regulating unsightly uses such as junk yards or outdoor storage of heavy equipment. Local governments should make a conscientious effort to withstand pressure to provide water and sewer services to dispersed areas and discourage urban development to occur in areas at substantial distance from existing urban areas, or to leap over undeveloped land suitable for development.

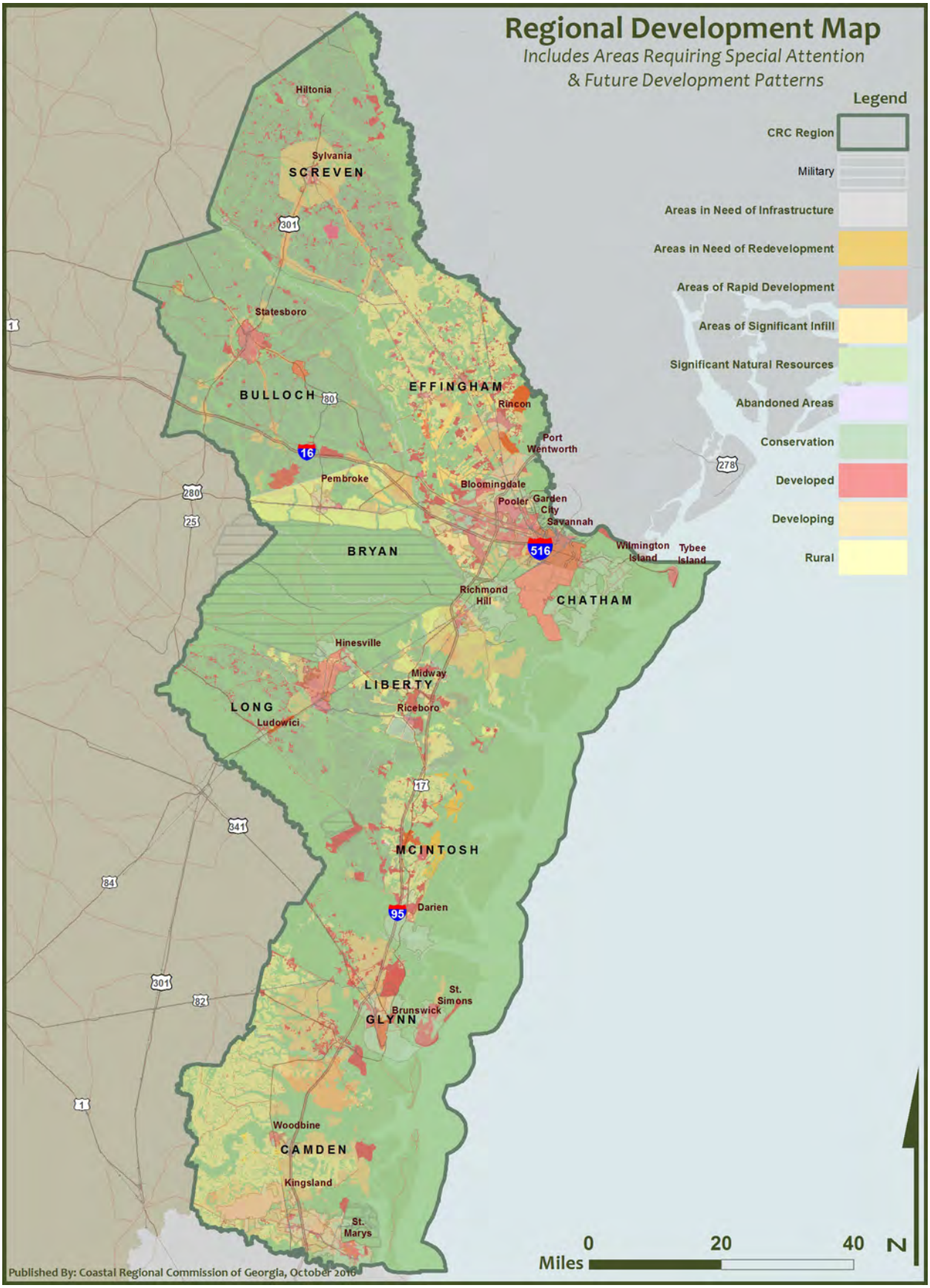
Developed: Areas demonstrating urban development patterns and also illustrate the areas where water and sewer services are being provided.

A coordinated land use and infrastructure planning policy encourages the concentration of new development in and around cities; promotes infill and redevelopment. Local governments should give top priority to repair and reinvest in existing infrastructure such as roads, water, sewer and utilities, by fixing and maintaining what exists. Funding for expansion, growth, and new purchases is limited and such a strategy helps communities avoid subsidizing sprawl. Exercising this approach promotes reinvestment in blighted areas and combats disappearing rural scenery. It also avoids excessive costs in providing public services and facilities for developments outside of urban boundaries.

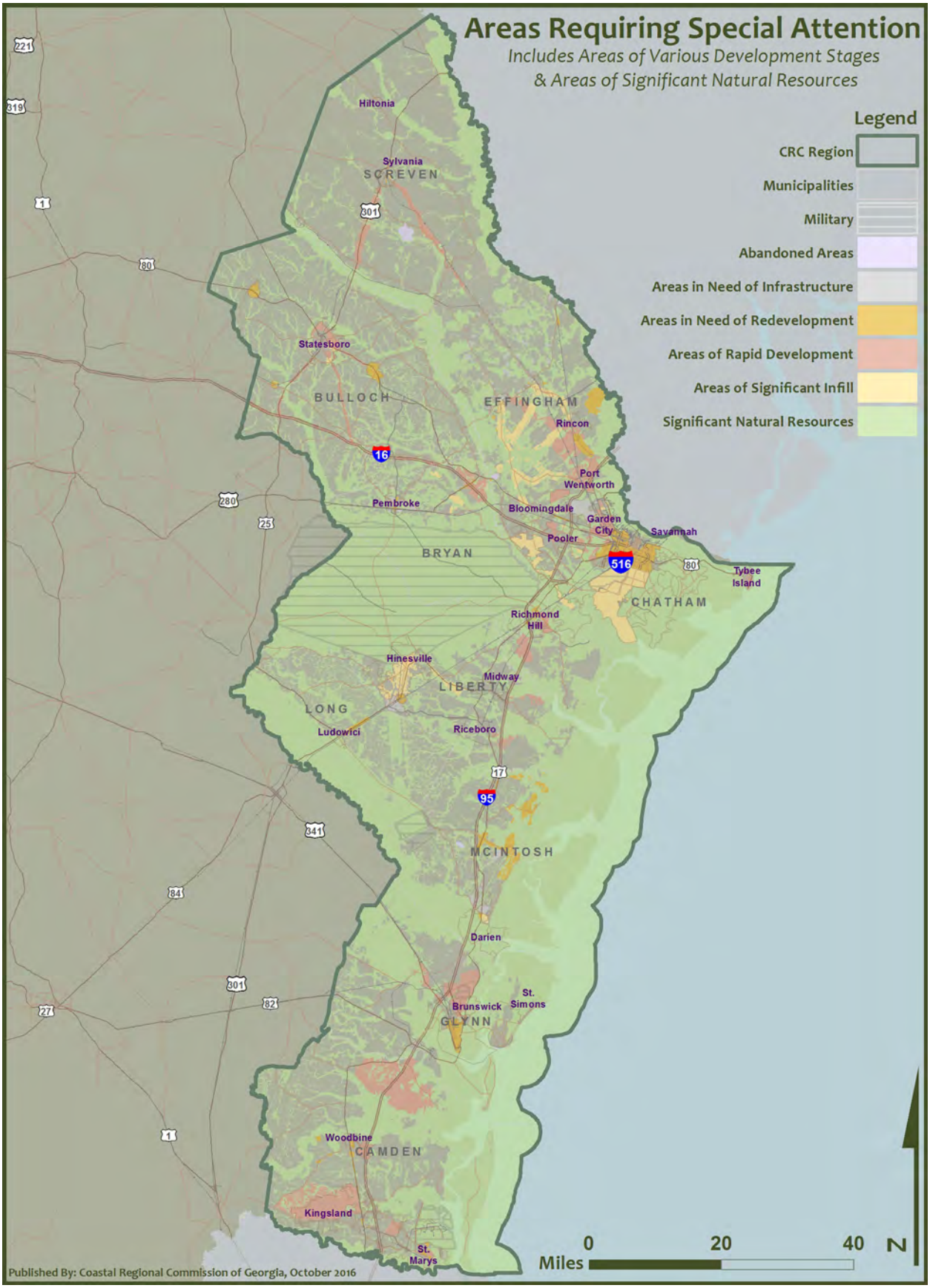
Developing: Areas likely to become urbanized and require urban services in the next 20 years.

New development should be planned with mixed uses, blending residential development with schools, parks, recreation, retail business and services, linked in a compact pattern that encourages walking and minimizes the need for auto trips. Policies should include connectivity and continuity between planned developments. Safe and reliable vehicular and pedestrian or bicycle connections to retail and commercial services as well as internal street connectivity, connectivity to adjacent subdivisions, and multiple site access points are basic elements for establishing quality growth.

Coastal Georgia Regional Development Map



Coastal Georgia Areas Requiring Special Attention Map



Defining Narrative for Areas Requiring Special Attention

The Areas Requiring Special Attention Map was developed considering the projected development patterns map with adopted local comprehensive plans and the regionally important resources map to evaluate land use trends within the region and identify areas requiring special attention, including:

- Areas where significant natural or cultural resources are likely to be impacted by development;
- Areas where rapid development or change of land uses are likely to occur, especially where the rate of development has and/or may outpace the availability of community facilities and services, including transportation;
- Areas in need of redevelopment and/or significant improvements to aesthetics or attractiveness (including strip commercial corridors);
- Areas with significant infill development opportunities.

Areas Requiring Special Attention (ARSA) in Coastal Georgia are broad with sub-categories which allow for more specific and detailed implementation measures. These are:

Areas of Significant Natural Resources:
Green Infrastructure
Recharge Area
Prime Agricultural Lands
Rural Character
Open Space and Parks

Areas of Significant Infill and Areas in Need of Redevelopment:
Infill
Traditional Neighborhood

Areas in Need of Infrastructure and Areas of Rapid Development:
Water
Wastewater
Transportation

Areas with Significant Natural Resources include regionally important resources, they also occur within the Areas of Significant Infill and Areas in Need of Redevelopment and Areas in Need of Infrastructure and Areas of Rapid Development.

The ARSA Defining Narrative weaves the policy framework for regional planning – Patterns, Preservation, Passages and Places - discussed in the introduction into the larger context because together, these elements shape the environment. They require balancing redevelopment of existing urban areas with new land development; countering urbanized places with protected lands to protect natural functions and create healthy environments for people; and preserving the identity of Coastal Georgia.

The ARSA Defining Narrative also includes lists of:

- Quality Community Objectives to be Pursued
- Recommended Development Patterns
- Types of Land Uses
- Steps to Implementation, and
- Expected Benefits

Areas of Significant Natural Resources

Patterns of human development - physical, social, and economic - affect natural resources at the local and the regional level. Planning is integrally related to defining how, where, and when human development occurs, which ultimately affects the use of the resource.

Natural Resources in the ARSA Map and Defining Narratives include:

- Green Infrastructure
- Recharge Areas
- Prime Agriculture Lands
- Rural Character
- Open Space and Parks

Quality Community Objectives to be Pursued

Resource Conservation

Environmentally sensitive areas should be protected from negative impacts of development, particularly when they are important for maintaining traditional character or quality of life of the community or region. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.

Regional Identity

Regions should promote and preserve an "identity," defined in terms of traditional regional architecture, common economic linkages that bind the region together, or other shared characteristics.

Heritage Preservation

The traditional character of the community should be maintained through preserving and revitalizing historic areas of the community, encouraging new development that is compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining the community's character.

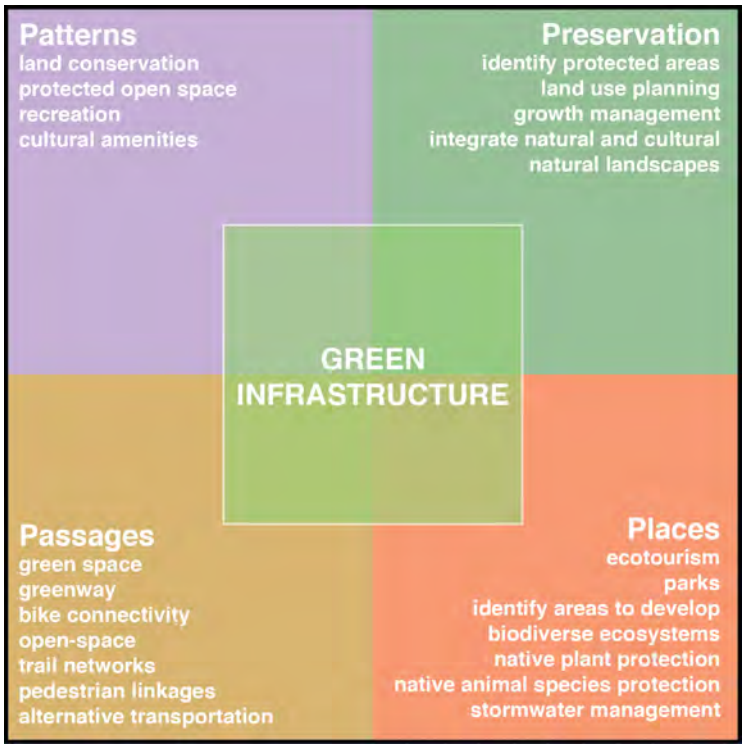
Open Space Preservation

New development should be designed to minimize the amount of land consumed, and open space should be set aside from development for use as public parks or as greenbelts/wildlife corridors.

Green Infrastructure

The U.S. Environmental Protection Agency defines Green Infrastructure as "management approaches and technologies that utilize, enhance and/or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration and reuse"[1]. This management approach attempts to keep stormwater onsite. It incorporates vegetation and natural resources as much as possible in development and redevelopment.

Green Infrastructure has a number of benefits, including reduced runoff, groundwater recharge, higher air quality, better aesthetics, reduces costs, lowers impacts on climate change, and provides environmental benefits that surpass improved water quality.



Coastal Georgia's Green Infrastructure network is defined as a natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, greenways and other natural areas all with conservation value. A potential impact as a result of premature or poorly planned conversion of land to other uses is the failure to adequately protect and conserve natural resources such as wetlands, flood plains, native vegetation, lakes, streams, rivers, natural groundwater aquifer recharge areas, and other significant natural systems. The river corridors, floodplains and tributary streams are considered to be critical green infrastructure components, as they supply key social, economic and environmental benefits for local communities and provide important habitats for wildlife.

[1] United States Environmental Protection Agency (USEPA). 2008. Managing Wet Weather with Green Infrastructure Action Strategy 2008.

Patterns: Green Infrastructure

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Green infrastructure planning provides an alternative to what is common practice in many communities: conserving land on a piecemeal basis without the benefit of a large framework plan that allows a comprehensive approach to land conservation.

Areas of protected open space should follow natural features for recreation and conservation purposes, including greenways that link ecological, cultural and recreational amenities.

Green Infrastructure shall be considered first in the planning process and in reviewing comprehensive plans, zoning, development review processes and performance standards.

Preservation: Green Infrastructure

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

Principles for green infrastructure include identifying what is to be protected in advance of development; providing for linkage between natural areas; and designing a system that operates at different functional scales, across political jurisdictions, and through diverse landscapes. Additional principles include sound scientific and land use planning practices, providing funding upfront as a primary public investment (for example, through a dedicated tax or other funding mechanism), emphasizing the benefits to people and nature, and using the green infrastructure as the planning framework for conservation and development.

The concept of green infrastructure planning is based on a strategic approach to ensuring environmental assets of natural and cultural value are integrated with land development, growth management and built infrastructure planning at the earliest stage.

Passages: Green Infrastructure

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

Green space or greenway land needs to be set aside for pedestrian, equestrian, and bicycle connections between schools, churches, recreation areas, city centers, residential neighborhoods, and commercial areas.

Open-space, parks, trails, greenways, and natural undeveloped land are not individual but an integrated and organized system. Green infrastructure is as an interconnected system.

Key physical, natural, ecological, landscape, historical, access and recreational assets contribute to the functionality of the green infrastructure network.

The green infrastructure network weaves together a network of recreational and nature areas. Properly planned greenways provide efficient pedestrian linkages that can serve as alternative transportation to and from work, to services and other daily destinations.

Greenway linkages serve as outdoor recreation for biking, walking, and jogging.

Green infrastructure encourages the creation of transportation corridors and connections, which can foster ecotourism, tourism and outdoor recreation.

Places: Green Infrastructure

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Green infrastructure planning provides multiple benefits. A benefit to a developer is greater certainty and predictability about where development can go because the lands to be protected, how they are to be protected, and the best locations for development are laid out in advance.

The public benefits from cleaner air and water and because highly valued natural and water resources and processes, parks, and greenways are protected. Green infrastructure can also be used to provide urban services more efficiently and at a lower cost (for example, retention and treatment of stormwater and provision of areas for recreation).

Proper due diligence in creating a green infrastructure network aids in the land development process by proactively identifying areas to be left undisturbed while identifying areas for development.

Coastal Georgia's Green Infrastructure network preserves and supports biodiversity and functional ecosystems.

Green infrastructure protects native plant and animal species and lessens the disruption to natural landscapes.

Green infrastructure supports the implementation of stormwater management plans and regulations.

Green infrastructure planning adheres to the Vision of the Regional Plan of Coastal Georgia.

Recommended Development Pattern: Green Infrastructure

HUBS anchor green infrastructure networks and provide an origin or destination for wildlife and ecological processes moving to or through it. Hubs come in all shapes and sizes, including:

- RESERVES — Large protected areas, such as state parks and wildlife refuges;
- MANAGED NATIVE LANDSCAPES — Large publicly owned lands, such as state forests, managed for natural and recreational values;
- WORKING LANDS — Private farms, forests, and timberlands that are managed for commodity production yet remain in a predominantly open and undeveloped state;
- REGIONAL PARKS AND PRESERVES — Less extensive hubs of regional ecological significance; and
- COMMUNITY PARKS AND NATURAL AREAS — Smaller parks and other sites at the community level where natural features and ecological processes are protected and/or restored.
-

LINKS are the connections that tie the system together and enable green infrastructure networks to work. They range in size, function and ownership, including:

- LANDSCAPE LINKAGES — Large protected natural areas that connect existing parks, preserves, or natural areas and provide sufficient space for native plants and animals to flourish while serving as corridors connecting ecosystems and landscapes. Landscape linkages may also provide space for the protection of historic sites and opportunities for recreational use;
- CONSERVATION CORRIDORS — Less extensive linear protected areas, such as river and stream corridors that serve as biological conduits for wildlife and may provide recreational opportunities;
- GREENWAYS — Protected corridors of land managed for resource conservation and/or recreational use;
- GREENBELTS — Protected natural lands or working lands that serve as a framework for development while also preserving native ecosystems and/or farms; and
- ECOBELTS — Linear buffers that can ease the zone of tension between urban and rural land uses while providing ecological and social benefits for urban and rural residents.

Specific Types of Land Uses: Green Infrastructure

- Parks and preserves
- Managed networks of natural lands
- Working landscapes
- Other open spaces that conserve ecosystem values and functions
- Agricultural working lands
- Trails and other recreational features
- Cultural and historic sites

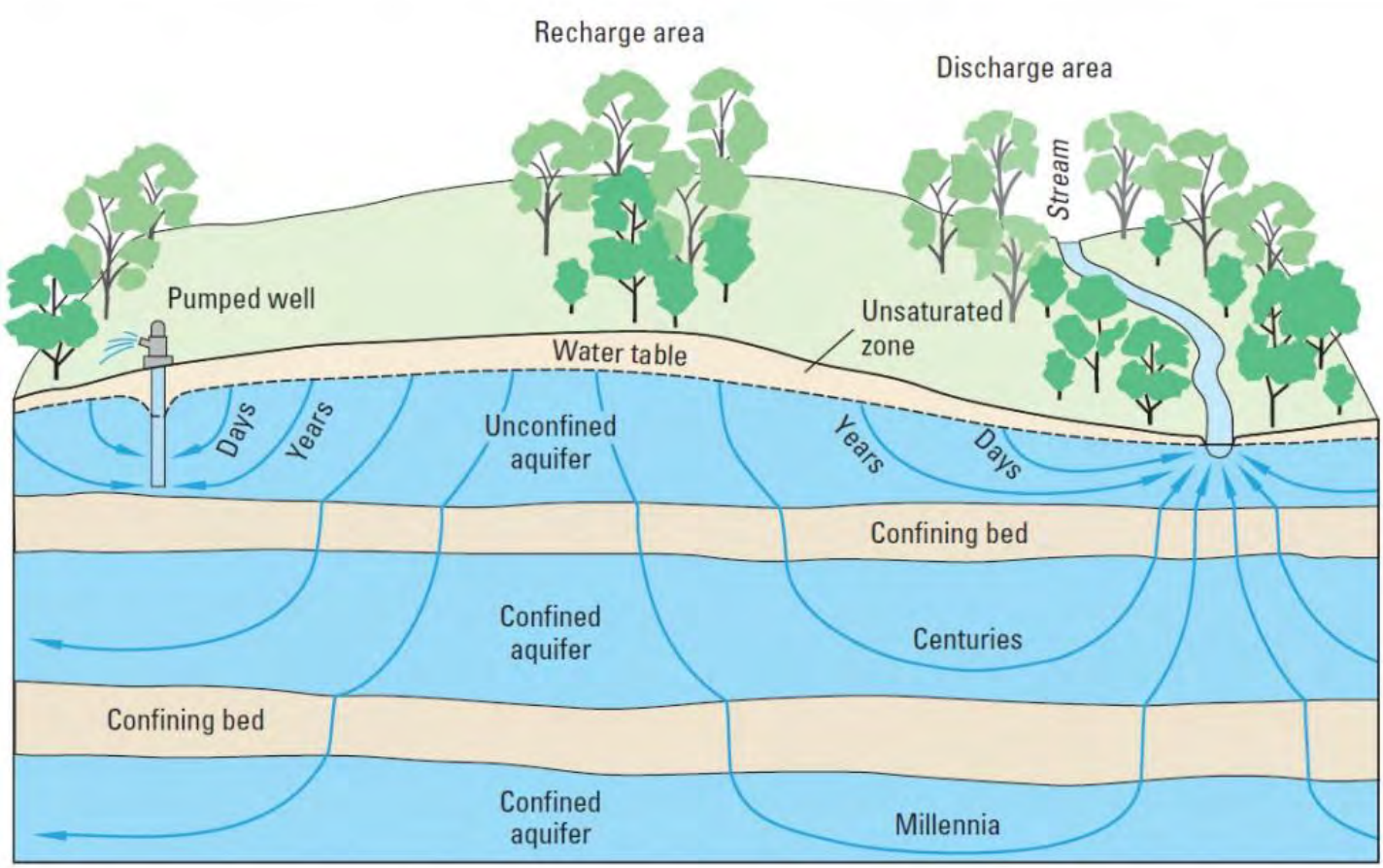
Steps to Implementation: Green Infrastructure

- Establish green infrastructure planning as the first step in the land-use planning and design process
- Identify the key physical, natural, ecological, landscape, historical, access and recreational assets that contribute to the functionality of the green infrastructure network
- Coordinate green infrastructure planning with planning for gray infrastructure — roads, bike trails, water, electric, telecommunication and other essential community support systems
- Identify new and enhanced assets required to improve the functionality of a green infrastructure network - including opportunities for landscape and habitat enhancement, and the provision of new green spaces and green links
- Provide guidance such as Green Growth Guidelines (G3) for developers and planners on the integration of green infrastructure into development plans
- Provide a strategic framework for the implementation of a connected and multi-functional green infrastructure network of wildlife

Recharge Areas

Recharge occurs where rainfall, infiltration from lakes, wetlands and streams, or irrigation water infiltrates into the ground and adds to the water underground that can supply a well.

Recharge areas are portions of the earth's surface where water infiltrates the ground to replenish an aquifer. Recharge areas are any stratum or zone of rock beneath the surface of the earth capable of containing or producing water from a well. Water is an essential life-sustaining element. The quality of ground water in an aquifer is inextricably linked to its recharge area.



Source: Barlow, P.M., and Leake, S.A., 2012, Streamflow Depletion by Wells

Recharge areas in the region need additional attention as some jurisdictions current regulations, although in compliance with state mandates, do not specifically identify or protect these areas.

Patterns: Recharge Areas

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Development has a profound effect on the hydrology of an area. The increase in impervious surfaces and disturbance of natural vegetation result in increasing runoff and decreasing groundwater recharge. Local jurisdictions can encourage methods that increase recharge, such as low impact development.

Development in "High Susceptibility" areas should be limited to very low impact activities in which little to no area is covered with impervious surfaces such as roads, parking lots and/or building sites. The sub-surface integrity of these areas should also be maintained by avoiding development that may contaminate water supplies, such as landfills.

Because population, housing and economic development growth is projected to increase in the region, individual counties and cities will need to ensure that future development is limited in groundwater recharge areas.

Preservation: Recharge Areas

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

In order to avoid toxic and hazardous waste contamination to drinking water supplies, groundwater recharge areas must be protected. While recharge takes place throughout practically all of Georgia's land area, the rate or amount of recharge reaching underground aquifers varies from place to place depending on geologic conditions.

Preliminary research suggests that hydraulic exchange occurs between the Miocene aquifer, which is recharged within the Coastal Region, and the deeper Floridan aquifer, is recharged more than a hundred miles inland, along the "fall-line". If this exchange does occur, the importance of protecting the Miocene aquifer through proper restrictions on surface activities in and around recharge areas becomes even more critical. Because nearly all major public water supplies in the Coastal Region are withdrawn from the Floridan aquifer, protecting the Miocene aquifer is therefore imperative to ensuring adequate water quality for public supplies.

Protection of groundwater recharge areas are governed under Georgia Department of Natural Resources regulations 391-3-16-.02 Criteria for Protection of Groundwater Recharge Areas. The applicability of these requirements depends on the level of susceptibility of the ground water in a particular location.

Passages: Recharge Areas

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

Most of the water supply in coastal Georgia originates from the groundwater aquifer, and indirect potable reuse or groundwater recharge is a viable reuse strategy. The key to a successful groundwater recharge program is that it indirectly recharges the aquifer where potable water withdrawals are occurring. Alternatively, a successful groundwater recharge program could be used to accomplish some other related objective such as reducing salt water intrusion.

Places: Recharge Areas

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Clean and abundant flows from the Aquifer help promote and protect the economic activity that sustains the region.

Recommended Development Patterns: Recharge Areas

- Very low impact activities with limited impervious surfaces
- Cluster developments

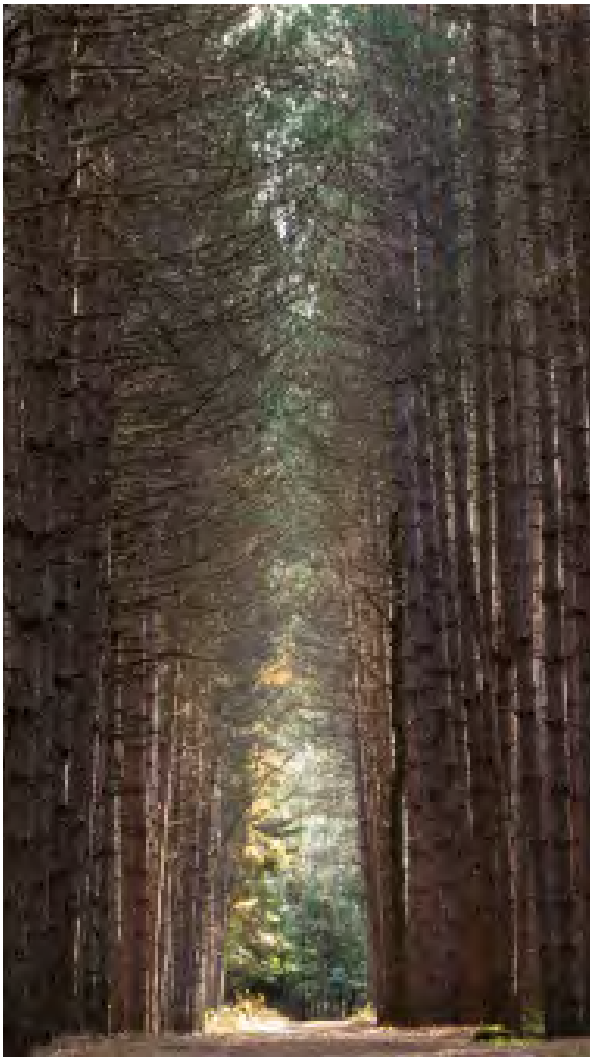
Specific Types of Land Uses: Recharge Areas

- Low-density residential
- Passive recreation and nature preserves

Steps to Implementation: Green Infrastructure

- Adopt an ordinance to protect groundwater recharge areas
- Locate, identify and plug abandoned wells or other potential surface pollution sources
- Analyze the susceptibility of the natural setting where ground water occurs
- Inventory existing potential sources of groundwater contamination
- Classify the relative vulnerability of ground water to contamination events
- Designate areas that are most at risk to contamination events
- Minimize activities and conditions that pose contamination risks
- The use of porous pavement, concrete, turf blocks and other innovative technologies shall be encouraged as a method of protecting aquifer recharge
- Purchase or secure conservation easements on significant aquifer recharge lands
- Maintain pre-development net retention in a manner that protects ground and surface water quality within a high aquifer recharge area or in areas most vulnerable to contamination

Prime Agriculture Lands



Prime agricultural farmland is an important part of this region's natural area. Prime agricultural farmland has conservation value, and agricultural as a traditional industry contributes to the region's rich culture. Ample agricultural land and open space exists and great care should be taken to identify and ensure the preservation of these lands.

The rural character and scenery may disappear in portions of the region with conversion of land and development of existing farmland into suburban residential neighborhoods. The conversion of prime farmland to urban uses represents a loss to the region's landscape. As suburban residential development continues in the region, it is likely that more farmland properties will be converted to housing subdivisions. If this trend continues, the conversion of these lands to urban uses will be the greatest threat to a natural area with inherent conservation value.

Maintaining traditional farmland that utilizes best management practices has a role too in keeping and maintaining natural resources environmentally sound. Irrigation practices, the use of pesticides and fertilization and providing appropriate incentives to preserve the area and account for its value should be explored with stakeholders including property owners and local government.

Patterns: Prime Agriculture Lands

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

For a community seeking to protect agricultural lands, the focus must be twofold: limiting development in predominantly agricultural areas, and providing for development away from prime agricultural lands. The conversion of prime farmland to urban uses represents a loss to the region's landscape. Wise use and protection of basic soil and water resources helps to achieve practical water quality goals and maintain viable agriculture. Viable agriculture is the backbone of maintaining a functioning network of working farmland, open space, and natural areas, and a range of strategies should be used to ensure the value of these areas within the region.

Preservation: Prime Agriculture Lands

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

Saving the region's farmland is a prudent investment in traditional food supply and the region's economic future. Well-managed agricultural land supply important non-market goods and services for our environment. Farm lands provide food and cover for wildlife, help control flooding, protect wetlands and watersheds and maintain air quality. They can absorb and filter wastewater and provide groundwater recharge.

Passages: Prime Agriculture Lands

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

Agricultural and forest lands are protected primarily for their long-term productive resource value. However, these lands also provide secondary benefits such as open space.

Urban development should be directed to those areas least desirable for agriculture based on factors of soil, slope, water, wind and location.

Investments in infrastructure improvements should be directed into existing urban areas in order to increase urban population capacities and to avoid positioning agricultural lands for eventual development.

Places: Prime Agriculture Lands

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Saving prime agriculture lands is focused on protecting the quality of life in communities—scenic and cultural landscapes, farmers' markets, recreational opportunities, local jobs and community businesses.

Farms and open land contribute more in tax revenues than they receive in public services (e.g., schools, fire and police protection, infrastructure and road maintenance).

Preservation of farmland maintains the most productive agricultural land for food production today and for future generations.

Preservation of farmland reduces development pressures on protected farmlands and discourages fragmentation of farmland for other land uses.

Farmland provides for stormwater infiltration and groundwater recharge and protects rural character.

Specific Types of Land Uses Allowed: Prime Agriculture Lands

- Limited amount of residential activity
- Farm-support businesses
- Non-farming activities restricted to the least productive areas of the farm parcel
- Clustering of uses

Recommended Development Pattern: Prime Agriculture Lands

- Continuation of productive agricultural areas through effective agriculture zoning

Steps to Implementation: Prime Agriculture Lands

- Identify, define and preserve prime agricultural farmland
- Preserve areas for agricultural production by designating areas for rural residential development
- Limit potential conflicts between farms and residential subdivisions
- Adopt Transfer of Development Rights (TDR) and Purchase of Development Right (PDR) or Planned Resource Districts (PRD) for agricultural lands ordinances

Rural Character

The rural outdoors has become a major asset for rural communities—and a key advantage that some rural areas have over urban areas. The rural outdoors can be enhanced through the construction of recreation facilities, but undeveloped rural landscapes have appeal on their own, both for recreation and as attractive places to live.

The rural areas of the region are diverse, with different places facing different conditions. Development in small towns and rural areas poses a host of unique challenges. Many small towns and rural areas have few financial, technical and staff resources to draw on in responding to growth pressures.

Low density development pattern has been one of the fastest growing sectors of the rural housing market, fueled by a variety of factors including a move to rural communities for quality of life, an expanding market for lower cost homes in rural areas, a desire by rural communities to grow and generate jobs and the development community's ability to receive entitlements through less complicated development review processes.

The desire of these communities to remain rural or "maintain their small town character" is a common theme in the region. Many of the region's smaller community's codes and subdivision ordinances only allow development with lower density often encouraged by the belief that they translate to a rural character. Often however, these densities translate into low density standard subdivision using suburban land use regulations relating to streets, landscaping, setbacks, and lot sizes.
Directing growth towards developments serviced by public water and sewer is identified in issues and opportunities, and also identified as strategy for local government to achieve Minimum Performance Standards.

Patterns: Rural Character

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

To preserve rural character the Regional Plan recommends utilizing planning techniques for residential subdivisions, such as “cluster development” and “conservation subdivision design.” These techniques separate density from lot size, permitting development at the allowable density on small lots in exchange for permanently protecting the remainder of the parcel as open space. Well planned higher-density developments with dedicated open space fit better with a town’s rural character than low-density, uniform sprawl development.

The rural areas of the region consist primarily of open space and woodlands. To maintain the character of rural areas the Regional Plan recommends protecting natural area viewsheds by prohibiting clear cutting, endorsing landscaping and significant tree preservation plans, and prohibiting unsightly uses such as junk yards or outdoor storage of heavy equipment.

Counties and cities are urged to undo the pressure to provide water and sewer services to dispersed areas. A strong approach is to discourage urban development to occur in areas at substantial distance from existing urban areas, or to leap over undeveloped land that is available and suitable for development. Stopping the trend lifts the pressure of costs borne by the consequences of prematurely or poorly planned conversion of land to urban uses.

Preservation: Rural Character

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

Rural areas have traditionally offered a retreat from the urban life. The existence of rural resources lands, open spaces, scenery and natural areas adds an important dimension to the region’s quality of life.

Passages: Rural Character

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

Rural areas and their communities are where unique historic character, its functions, and pioneering spirits are retained and enhanced.

Natural resource activities, such as forestry and agriculture contribute to the rural character and economy.

Traditional rural recreational opportunities exist including equestrian, hunting, fishing, outdoor trails and facilities plus other traditions that contribute to rural experiences.

Places: Rural Character

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

A landscape that recognizes where towns and urban areas stop and the countryside begins supports the character and sense of place found in rural areas. A clear distinction between rural and urban character supports regional identity of small town character.

Density management maintains rural character while accommodating new residential development. Incorporating significant amounts of open space into subdivision or rural cluster design and compatible architectural styles maintains the region's rural character.

The rural area offers opportunity to promote historic, cultural and recreational experiences.
The rural areas offers a unique opportunity to produce and distribute food grown locally offering long term benefits such as reduced vehicles miles traveled , economic opportunities and the promotion of healthy lifestyles.

Specific Types of Land Uses Allowed: Rural Character

- Open space, natural landscape, and vegetation predominate over the built environment
- Traditional rural homesteads
- Rural-based businesses
- No extension of water and sewer services

Recommended Development Pattern: Rural Character

- Mixed-use activities including, but not limited to, single- and two-family residential use, small-scale businesses, public facilities such as post offices, schools, and fire departments, and open space
- Neighborhood commercial districts providing limited, small-scale neighborhood commercial activity including retail, service and office uses
- Commercial uses and services to meet every day needs of rural residents and provides employment opportunities for residents of the area
- Goods, services, and lodging for travelers and tourists
- Recreational commercial district for uses related to the region's abundant recreational opportunities and scenic and natural amenities

Steps to Implementation: Rural Character

- Provide for small, rural communities and commercial nodes
- Preserve large contiguous blocks of open space and natural resource areas such as recharge areas, wetlands and wildlife habitat
- Identify and map preferred growth areas in comprehensive plans and zoning ordinances, as well as sensitive natural areas lands where development should be avoided
- Designate appropriate locations for rural development/conservation subdivisions in rural areas on zoning maps
- Allow cluster/conservation subdivisions at the edge of town to provide open space transition to rural areas
- Require minimum densities in areas targeted for growth
- Adopt design regulations which call for connectivity as well as integration with adjacent neighborhoods and create specific transitions to undeveloped areas

Open Space and Parks

Parks and open lands can establish the image of a region and provide a much coveted amenity. Among the numerous benefits that parks and open lands provide to communities are tourism opportunities and improved public health which makes the preservation of open space a critical public investment. Parks and open lands can provide city and suburban residents with access to open space while saving local habitats and indigenous wildlife.

Patterns: Open Space and Parks

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Preserving open space and creating parks and greenways are key tools to limit imperviousness and create riparian buffers in a watershed. These programs are often the specific means of implementing larger growth management goals, but can also been seen as one of the most cost-effective means for reducing and managing stormwater runoff and protecting water quality.

By focusing efforts to preserve and protect open space to those lands around waterways, water quality goals can coincide with growth management goals. These riparian lands are often targeted for open space protection for other reasons – they offer good habitat or are aesthetically appealing – but they help protect water quality as well, serving as buffers for stormwater runoff, or preserving natural infiltration processes. Conversely, efforts to protect water quality can drive land preservation. Jurisdictions may utilize tools such as down-zoning, open space requirements, conservation subdivisions/design, or transferring development rights in order to improve their water quality, all of which can result in natural lands being preserved.

Preservation: Open Space and Parks

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

In order to promote and encourage a suitable environment devoted to parks, recreation, passive or active open space uses, open space preserves, public parks and recreation facilities including regional and neighborhood parks, trails and bike path uses are encouraged to preserve and protect land areas of special or unusual ecological or geographic interest.

Secondary uses encouraged in the open space and park land use category include accessory buildings and uses such as concession stands, maintenance buildings, restroom buildings as well as public recreational amenities such as athletic courts and fields and picnic facilities.

Passages: Open Space and Parks

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

The preservation of green space needs to be linked to pedestrian, equestrian and bicycle connections. Properly designed greenways serve as an alternative transportation network, accommodating commuting to work or shopping as well as recreational uses.

Parks and open lands improve biodiversity, as measured through habitat connectivity.

Places: Open Space and Parks

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Parks and open lands improve air quality by removing pollutants from the air and open lands reduce stormwater runoff by reducing imperviousness.

Preserving open lands and creating park land preserves natural processes of infiltration and limits imperviousness, both of which are intimately linked to stormwater management and water quality.

Well-planned parks and open lands are linked to increased property values, more efficient use of public resources, and healthier local economies where implemented.

Specific Types of Land Uses Allowed: Rural Character

- Passive recreation
- Active recreation and its customary uses
- Neighborhood parks and its customary uses

Recommended Development Pattern: Rural Character

- Preservation or conservation of a community or region's rural natural or historic character
- Conservation or preservation of a land area for the sake of recreational, ecological, environmental, aesthetic, or agricultural interests
- Urban, suburban or rural open space
- Designated areas, zoning districts or overlays where development is limited or controlled to create undeveloped areas of land
- Recreational areas for the primary purpose of passive or active enjoyment
- Playgrounds and recreational fields
- Picnic areas and trails
- Neighborhood parks

Steps to Implementation: Rural Character

- Require new development projects to provide a system of connected open space that includes greenway, trails, recreational nodes, and green infrastructure in proximity to new residents
- Plan for parks and preserved lands in coordination with other systems
- Adopt Open Space Standards as an action program to implement an open space policy framework
- Review proposals for new residential development to ensure each project complies with minimum standards for park land dedication
- Develop a trails system that provides for maximum connectivity, so that trails are linked for greater use as recreational and travel routes

Areas of Significant Infill and Areas in Need of Redevelopment

The need for redevelopment should be assessed based on the following factors: 1) building conditions; 2) socio/economic characteristics; 3) land to improvement value ratios; 4) non-conforming uses; and 5) potential for private investment.

Local Governments are encouraged to identify and address the needs of specific areas that are deteriorated, blighted, underutilized, threatened or generally inconsistent with the community's character including but not limited to:

- Neighborhoods
- Redevelopment Areas
- Potential Redevelopment Areas
- Annexation Areas
- Gateway
- The Waterfront
- Corridors
- Brownfields
- Urban Infill and Redevelopment Areas

Quality Community Objectives to be Pursued

Infill Development

Communities should maximize the use of existing infrastructure and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.

Traditional Neighborhood

Traditional neighborhood development patterns should be encouraged, including use of more human scale development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.

Infill Development

Communities within the region recognize that spread out patterns of growth, which have shaped communities for the past several decades, cannot be sustained. Problems of increased traffic congestion overstretched public facilities and increased infrastructure costs, loss of open space, and even reduced physical activity are typically associated with sprawl patterns. Instead, an increased emphasis on developing passed-over parcels within developed areas and on maximizing use of existing public facilities is needed.

By minimizing infrastructure, communities reduce long-term costs causing the tax rate to diminish while the tax base expands, creating a cycle of fiscal growth. Infill development drives down the need for expanded infrastructure by concentrating construction along fewer roads, sewers and utility lines than auto-oriented sprawl would require.

Patterns: Infill Development

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Successful infill integrates various land uses promoting growth within the existing city limits including existing commercial and industrial zoned lands; downtowns and existing neighborhood districts. Older towns and cities can be revitalized by managing growth, cleaning up environmentally contaminated land, reinvesting in existing neighborhoods, and changing governmental infrastructure financing policies.

Infill development is the process of developing vacant or under-used parcels within existing urban areas that are already developed. Most communities have vacant land within city limits, which, for various reasons, has been passed over in the normal course of urbanization.

Ideally, infill development involves more than the piecemeal development of individual lots. Instead, a successful infill development program focuses on crafting complete, well-functioning neighborhoods.

Successful infill development is characterized by residential densities high enough to support improved transportation choices as well as a wider variety of convenience services and amenities. Attention to design of infill development is essential to ensure that the new development fits the existing character and context of the area.

Preservation: Infill Development

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

As an environmental conservation strategy, infill provides opportunities for growth without consuming additional agricultural or environmentally sensitive land areas; and compact development contributes to non-renewable energy savings. Infill preserves natural resources by the very nature of developing vacant, abandoned, passed over or underutilized land within communities where infrastructure is already in place.

Infill is important to the long term preservation of open space. Infill provides an opportunity to reinvent areas and create economic and social value where now none exists. It can also help establish both a renewed sense of place.

Passages: Infill Development

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

The goal of infill is to create vibrant communities with a strong sense of place in a manner that enhances public health and the local environment. Infill and mixed-use development revitalize previously developed communities in the urban center at higher densities, and put services closer to residents, thereby reducing traffic, encouraging walking and bicycling, and conserving energy. Infill development supports transportation choices and connectivity. It supports walkable neighborhoods and, where applicable, transit-supportive development.

Infill development is an excellent strategy for decreasing commuter road congestion.

Places: Infill Development

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

As a redevelopment strategy, infill enhances the vitality, diversity and economic health of cities. Infill development supports economic development and an improved tax base and promotes revitalization of downtown and close-in neighborhoods.

Infill development addresses needed housing in close proximity to employment, services and is an efficient use of existing urban services and facilities as it supports the alternative of extending new infrastructure.

Infill development supports energy conservation through reduced reliance on the automobile thus supporting public cost savings (i.e., over sprawl development).

Specific Types of Land Uses Allowed: Infill Development

- Single family
- Two family
- Multi-family
- Group Homes
- Mixed-Uses
- Neighborhood Commercial
- Light Commercial – restaurants, lodging, Bed and Breakfast
- Community Scale Businesses
- Retail
- Professional Offices

Recommended Development Pattern: Infill Development

- Infill development on vacant sites in currently urbanized areas
- Redevelopment of urban areas where urban services and facilities have capacity to accommodate additional demand
- A variety of housing types with a broad range of housing costs allowing for the integration of differing age groups and socioeconomic classes
- Neighborhood commercial intended to provide for limited commercial uses within easy walking and biking distance of residential neighborhoods
- Compact development
- Accommodate alternative transportation modes

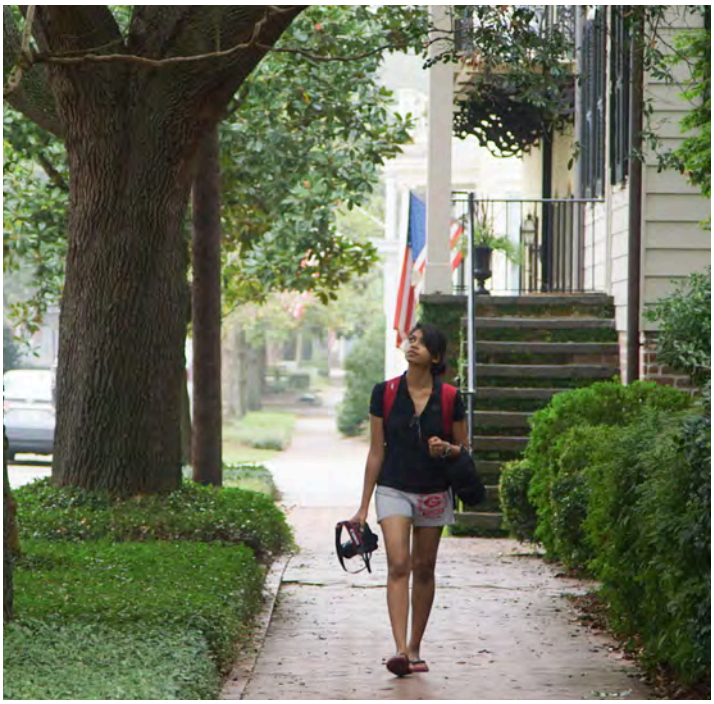
Steps to Implementation: Infill Development

- A development code “audit” to identify barriers to infill and redevelopment
- Allow significant density and height
- Allow a mix of uses and housing types
- Reduce parking requirements as much as possible
- Adopt form-based codes to guide the general appearance of new development without restricting density, allowing more flexibility for developers
- Adopt design guidelines to enable more detail about the look of new development and preserve local history and character
- Allow small lot development (5,000 square feet or less) for some uses
- Conduct an inventory of vacant sites and buildings that are available for redevelopment and/or infill development
- Plan for nodal development concentrated near intersections rather than spread along a major road

Traditional Neighborhoods

Traditional neighborhoods have specific development characteristics that result in a compact, mixed-use, pedestrian oriented community. Traditional Neighborhood Development (TND) finds its inspiration in the town centers and neighborhoods that were built before the automobile dictated transportation and land use patterns. Transit-Oriented Development (TOD) espouses similar principles to TND, but also incorporates at least one form of public transportation.

Traditional neighborhood development patterns are encouraged, including use of more human scale development, compact development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.



Patterns: Traditional Neighborhoods

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Traditional Neighborhood Development (TND) includes a variety of housing types and land uses in a defined area. The variety of uses permits educational facilities, civic buildings and commercial establishments to be located within walking distance of private homes.

Public and private spaces have equal importance, creating a balanced community that serves a wide range of home and business owners. The inclusion of civic buildings and civic space -- in the form of plazas, greens, parks and squares -- enhances community identity and value.

A challenge to TND's is traditional or Euclidian zoning. Euclidian zoning addresses only land-use and not the form of the built environment. The result is a patchwork style of development that keeps housing, businesses and industry separate, preventing the complex integration of structures that walkable communities require.

As commute times lengthen, energy prices rise, and housing preferences change, compact, walkable urban designs have gained a higher profile.

Preservation: Traditional Neighborhoods

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

TND is limited to the scale of a neighborhood or town. Its central focus is on the creation of a true sense of place which is unique and special as well as the establishment of a walkable environment. Open space is threaded throughout the neighborhood and represented in various forms such as large parks, pocket parks, greens, preserves, etc. Open space allows the community to experience the outdoors, interact with one another and engage in recreation.

Passages: Traditional Neighborhoods

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

A Traditional Neighborhood Development is served by a network of paths, streets and lanes suitable for pedestrians as well as vehicles. This provides residents the option of walking, biking or driving to places within their neighborhood.

Streets in TND's are designed to accommodate the needs of all modes of transportation. The neighborhood consists of an interconnected network of small thoroughfares. An interconnected street pattern with smaller blocks provides multiple routes, diffusing automobile traffic and shortening walking distances. This pattern keeps local traffic off regional roads and through traffic off local streets.

Neighborhood streets of varying types are designed to provide equitably for pedestrian comfort and automobile movement. Slowing the automobile and increasing pedestrian activity encourage the casual meetings that form the bonds of community.

Traffic calming street design combines narrower streets with on-street parking and has been shown to slow down vehicle speeds. Narrower streets enhance walking by making it easier to cross the street.

On-street parking provides a safety barrier of parked cars to protect pedestrians from moving traffic. Stop signs at regular intersections combined with other traffic-calming measures can also slow traffic to pedestrian-friendly speeds.

Places: Traditional Neighborhoods

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Traditional Neighborhood Development is a community design approach based on principles of traditional planning and architecture that work together to create human-scale, walkable communities. TND includes the creation of new towns, neighborhoods, villages, infill projects, transit-oriented development.

Traditional Neighborhood Development District is provided for the development of new neighborhoods and the revitalization or extension of existing neighborhoods, which are structured upon a fine network of interconnecting pedestrian oriented streets and other public spaces. A central plaza or square often is used for public events and activities.

TND neighborhoods are limited in size to encourage pedestrian activity. The optimal size of a neighborhood is 1/4 to 1/3 of a mile from center to its edge, a distance equal to a five to ten minute walk at an easy pace. Its limited area gathers the population within walking distance of many of its daily needs.

A TND is structured to provide a balanced mix of residences, shops, workplaces, civic uses, and recreation within the neighborhood. The integration of multiple land uses allows residents to meet more of their daily needs through shorter trips.

A variety of housing is provided in a TND. This includes single-family residential, duplex, townhomes, condominiums, and apartments. With a variety of housing types, the needs of varied age and income groups are more easily accommodated within a TND, and a greater diversity of residents is encouraged.

Compact site design provides savings in land area consumed and in infrastructure costs, both capital outlay and ongoing maintenance.

Connected street patterns create a more efficient transportation network than one with dead-end streets and only a few connector roads. Greater connectivity enables traffic to disperse rather than be concentrated.

Connected street patterns enables greater choice of routes, increases response times for emergency services, and makes public transportation more viable.

Specific Types of Land Uses Allowed: Traditional Neighborhoods

- Various housing types
- Variety of densities with a mix of non-residential uses (neighborhood office, commercial, institutional, recreation) to meet the needs of the community and surrounding single-purpose residential communities
- Single family, two-family, multi-family
- Group homes
- Mixed-Uses and Neighborhood Commercial
- Light Commercial – restaurants, lodging, Bed and Breakfast Inns
- Community scale businesses and retail

Recommended Development Pattern: Traditional Neighborhoods

- Compact site design
- Connected street patterns
- Mixed use zoning

Steps to Implementation: Traditional Neighborhoods

- Adopt mixed-use zoning which can be accomplished through zoning overlays
- Adopt or revise codes so zoning does not separate commercial, residential and retail uses in every district
- Adopt ordinances allowing neo-traditional development “by right” so developers do not have to go through the variance process
- Adopt design standards that focus on the pedestrian over the automobile while retaining automobile convenience

Areas in Need of Infrastructure and Areas of Rapid Development

The building and maintaining of public infrastructure (water systems, sewers, and roads) absorbs a substantial amount of our public resources. Prioritizing where to build or maintain infrastructure affects the economic health, the environmental quality, and social equity of the region.

Local governments should coordinate the provision of the following facilities and services concurrent with the needs of the existing and future land uses, and adopt minimum level of service standards for:

- Drainage
- Solid Waste
- Potable Water
- Sanitary Sewer
- Recreation/Open Space
- Roadways
- Mass Transit
- Public School Facilities

Public facilities and utilities should be located to: (1) maximize the efficiency of services provided; (2) minimize their cost; and (3) Minimize their impact on the natural environment.

Co-locating important infrastructure such as sewage, water, gas and cable lines underneath planned trails, as an example, could serve an important dual purpose. Not only could this help pay for the cost of building trails, it could also bring important services - such as high-speed internet - to rural areas.

Quality Community Objectives to be Pursued

Growth Preparedness

Each community should identify and put in place the prerequisites for the type of growth it seeks to achieve. These might include infrastructure (water systems, sewers, roads) to support new growth, appropriate training of the workforce, ordinances and regulations to manage growth as desired, or leadership capable of responding to growth opportunities and managing new growth when it occurs.

Water

Water supply options in Coastal Georgia have become more limited in recent years due to the moratorium placed on the Upper Floridan aquifer, a vast underground reservoir of water that has been the primary source of water. It is recommended that long range planning include a contingency for other supplemental sources of water supply to assist with overall potable water demands in the region. These alternatives include the development of the Upper and Lower Brunswick aquifer, the confined surficial aquifer, and the Lower Floridan aquifer, or surface water sources. As the region looks to alternative water supplies, the advantages of a regional approach to these supplies remains important. Each of the alternate water supply options: the Miocene aquifer, Lower Florida aquifer, surface water, and sea water requires expensive and sophisticated treatment. When such treatment is required, the economies of scale justify larger facilities.

Wastewater

The region currently has many small wastewater treatment systems with a limited capacity, built to meet local needs. Existing collection systems can be renovated to increase hydraulic capacity.

In certain areas of development isolated from other areas of central sewer and in unsuitable conditions for septic tanks, decentralized wastewater systems may be a logical solution.

Transportation

The ability of the region's major roadway network to meet existing and future travel needs is essential to the economic viability of the region. Therefore, the Regional Plan focuses on the primary and secondary transportation corridors that provide mobility to people and goods within this region. Many of these corridors span multiple counties and are main travel routes within the region. These corridors serve multiple mobility functions. They serve as commuter routes, connecting major residential and employment centers. They provide connectivity to regional activity centers and serve commercial traffic as well as tourist/recreational traffic. These corridors also serve as the primary road freight routes as well as evacuation routes. The ability of these primary regional corridors to provide safe and efficient mobility now and in the future is of critical importance to the coastal Georgia region.

Patterns: Public Infrastructure

Patterns of Development refer to the spatial organization of developed lands. Patterns refer to the location, intensity, and variety of land uses.

Logical and rational management of infrastructure is required to provide the mechanisms for growth while also ensuring that uncontrolled growth does not endanger the environment or destroy the quality of life that is currently bringing people to the area.

Preservation: Public Infrastructure

Preservation refers to the systematic protection of land for natural resource management, wildlife habitat, parks and recreation and working lands. The long-term preservation of natural resources, open spaces and agricultural lands is an enduring legacy.

By encouraging growth in areas that are provided with public services water, sewer, roads, schools, and emergency services communities save infrastructure development costs, and reduce the impacts of development on water quality and other natural resources.

Infrastructure planning that makes decisions to locate public services water, sewer, roads, schools, and emergency services and direct new growth into previously developed areas, discourages low-density development by default preserves natural resources.

Passages: Public Infrastructure

Passages refer to the ways in which places are connected. Passages can take the form of transportation systems, greenways, water systems, or anything that links people.

Transportation systems that include multi-modes of transportation encourage healthier, more mobile lifestyles by making possible places to walk, bike and more. Multi-modes of transportation support a healthier climate and environment by making active transportation a viable alternative to the automobile. Multi-modes of transportation contribute to healthier, more vibrant community interaction, connecting people to the places they live, work and play.

Places: Public Infrastructure

Places not only seek to safeguard intrinsic qualities of Coastal Georgia but also focus investment with existing infrastructure.

Infrastructure like roads, water pipes, and sewage systems, is simultaneously the most crucial element of urban form while also being the least appreciated. It represents the building blocks of our built environment, and therefore typically comes first in most urban construction.

Specific Types of Land Uses Allowed: Public Infrastructure

- All land uses that provide for planned growth and development

Recommended Development Pattern: Public Infrastructure

- Define where growth is to occur and where public services will not be extended

Steps to Implementation: Public Infrastructure

- Control sprawl by directing development to sites with access to existing infrastructure
- Provide services equitably throughout the region
- Generate public understanding of infrastructure necessary activities (maintenance, upgrades, etc…)

Water: Steps to Implementation

- Develop strategies for alternative water supplies, and subsequent waste management strategies, that involve a regional concept for either the land disposal or sea disposal
- Develop standardized protocol to forecast water needs to meet reasonable future water demands throughout the region

Wastewater: Steps to Implementation

- Adopt an Adequate Public Facilities Ordinance (APFO) which addresses the link between land use planning, capital improvements planning, and zoning
- Require new development to locate where public facilities and infrastructure have capacity
- Identify in comprehensive plans a land use plan that reflects where adequate facilities exist, and where facilities will be added at a later date to allow for growth
- Adopt in comprehensive plans, or through a capital improvement element, a plan for staging infrastructure growth to accommodate growth tied to specific “level of service” measurements
- Set a threshold level of service for each type of infrastructure that communities within the region will commit to maintain
- Reflect comprehensive plan policies allowing development only where the plan indicates adequate facilities exist or are scheduled for construction in the near future
- Connect existing wastewater treatment facilities and send effluent to larger treatment facilities
- Meet tertiary effluent standards and maximize beneficial use of the effluent in new wastewater treatment facilities
- Identify general locations of future wastewater treatment plans based on proximity to suitable effluent disposal sites
- Prioritize future wastewater treatment plants by need and by level of treatment required
- Place higher priority on wastewater treatment plants having less stringent effluent limits since more stringent effluent limits translate to higher wastewater treatment costs

Transportation: Steps to Implementation

- Reduce vehicle miles traveled (VMT) by linking transportation planning and land use planning
- Recommend projects endorsed by the Metropolitan Planning Organizations and the non-MPO counties

Regional Issues and Opportunities

Below is the list of regional issues and opportunities to be addressed in the Plan. This list is a compilation of many, but not all, of the issues and opportunities identified during the planning process. This list was refined through stakeholder input, and the need to correspond these issues and opportunities with the implementation measures. The identification code is provided to easily cross reference which strategy in the Regional Work Program corresponds to these issues and opportunities.

Infrastructure: Water and Wastewater Issues

ID	The Issue is...
IWW-1	Impacts from inter-basin transfers.
IWW-2	Degradation of water quality and decreasing quantity.
IWW-3	Effect of salt water intrusion on the Upper Floridan Aquifer leading to withdrawal limits.
IWW-4	Impacts from point and non-point source pollution on groundwater.
IWW-5	Contamination of groundwater through the improper use, design for soil type and/or lack of maintenance of septic systems.
IWW-6	Risk of contamination from aquifer injection.
IWW-7	New developments with wells and/or septic systems produce a development pattern which does not support efficient delivery of government services.
IWW-8	Impacts from exotic invasive aquatic species.
IWW-9	Adequate water supply affects fire insurance ratings.

Infrastructure: Water and Wastewater Opportunities

ID	The Opportunity is...
O-IWW-1	Participate in the Coastal Regional Water Council plan development process.
O-IWW-2	Explore fresh, surface waters as a potential water supply source.
O-IWW-3	Encourage a regional approach to development of alternative water supply.
O-IWW-4	Reduce costs to local governments through creation of regional water and sewer authorities.
O-IWW-5	Defray costs of infrastructure with impact fees, tap-on fees, etc.

Infrastructure: Stormwater Issues

ID	The Issue is...
ISW-1	Some local storm drainage regulations/ordinances do not require water quality considerations.
ISW-2	Not all communities regulate or manage stormwater effectively.

Infrastructure: Stormwater Issues

ID	The Opportunity is...
O-ISW-1	Adopt and use of the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual and Coastal Stormwater Utility Handbook.
O-ISW-2	Defray costs of stormwater infrastructure with a utility fee.

Infrastructure: Transportation Issues

ID	The Issue is...
IT-1	Lack of coordination between land use and transportation planning.
IT-2	Increased development creates the need for capacity expansion.
IT-3	Growth creates a need for capacity expansion to accommodate hurricane evacuation.
IT-4	Pedestrian and bicycle paths should link residential areas, public parks and recreation facilities.
IT-5	Impacts of port development on highway infrastructure and natural resources.
IT-6	Lack of trail networks leaves many to rely on their vehicles.
IT-7	Lack of context-sensitive street design discourages pedestrian and bike activity.
IT-8	Lack of transportation choices for access to housing, jobs, services, goods, health care and recreation.
IT-9	Congested transportation corridors.
IT-10	Lack of transportation corridor management results in inappropriate developments and unattractive signage.
IT-11	Need for region-wide minimum Traffic Impact Analysis (TIA) standards to prevent bottlenecks along regional corridors.
IT-12	Lack of funding for transportation improvements.

Infrastructure: Transportation Opportunities

ID	The Opportunity is...
O-IT-1	Coordinate land use and transportation planning to increase mobility and connectivity while considering land uses and transportation decisions.
O-IT-2	Amend subdivision regulations to require bicycle and pedestrian access in new developments to connect to existing local multi-use trails as appropriate.
O-IT-3	Concentrate high intensity uses along major corridors and/or activity centers that could support public transportation.
O-IT-4	Apply context-sensitive design principles to new or expanded infrastructure projects.
O-IT-5	Enhance road connectivity and reduce traffic congestion by providing multiple routes to major destinations.
O-IT-6	Distribute traffic mitigation costs and reduce degradation in roadway level of service with impact fees.
O-IT-7	Improve or maintain the efficiency of existing roadway facilities by employing access management techniques.

Intrinsic Resources: Cultural and Historic Issues

ID	The Issue is...
CH-1	Neighborhoods that potentially qualify for historic designation are subject to loss due to demolition by neglect or inappropriate redevelopment.
CH-2	Current DOT standards can impact scenic roadways.
CH-3	Development pressure on culturally significant communities.
CH-4	Loss of community character and architectural heritage through demolition or neglect.
CH-5	Abundance of aging and un-kept structures can create a negative concept of an area.
CH-6	Lack of documented resources may leave some vulnerable to loss.

Intrinsic Resources: Cultural and Historic Opportunities

ID	The Opportunity is...
O-CH-1	Develop regional design guidelines for contextual sensitivity.
O-CH-2	Promote the abundance of well-developed cultural and historic resources.
O-CH-3	Develop an Integrated Cultural Resources Management Plan (ICRMP).
O-CH-4	Seek support for preservation through development of a coastal heritage museum.
O-CH-5	Promote and protect historic sites and structures to enhance opportunities for tourism and economic development and maintain the region's heritage and character.
O-CH-6	Educate and inform local citizens of the significance of the region's historic and cultural resources.
O-CH-7	Increase interest in maintaining the historic integrity of communities and structures.
O-CH-8	Preserve salvaged historic material for proper renovations.
O-CH-9	Development of inventories of historic resources.
O-CH-10	Allow owners to qualify for tax incentives by promoting listing on the National Register of Historic Places.
O-CH-11	Create local historic districts.

Intrinsic Resources: Natural Issues

ID	The Issue is...
NR-1	Loss of environmentally sensitive and ecologically valuable resources.
NR-2	Absence of farmland protection ordinances.
NR-3	Development within wetlands and floodplains impacts drainage patterns and property values.
NR-4	Loss of land cover and tree canopies due to development.
NR-5	Removal of natural vegetation that buffers marshlands.
NR-6	Damage to marshland through wake-related wave erosion.
NR-7	Dock construction activity in the marsh, as well as subsequent impacts caused by shading of marsh grasses.
NR-8	Impacts of unrestricted access to barrier islands and hammocks.
NR-9	Increasing pressure to relax regulation of development of hammocks.
NR-10	Impacts from invasive exotic plants and animals.
NR-11	Development pressure to increase intensity and density of land uses on developed islands.
NR-12	Erosion to protective coastal dunes from natural and man-made causes.
NR-13	Impacts of development and beach re-nourishment on hatchling sea turtles.
NR-14	Escalating land values make open space less affordable for developers.
NR-15	Impacts of pollution from septic tanks associated with residential development.
NR-16	Impacts of pollution from recreational boating.
NR-17	Impacts to endangered species from boating activity.
NR-18	Development in wetlands and the cumulative impact of filling wetlands for development.
NR-19	Impacts of air pollution.
NR-20	Inconsistent protection of environmentally sensitive resources from one local government to another.
NR-21	Development processes and practices often discourage or preclude preservation or conservation of on-site natural resource features.
NR-22	Development can negatively impact groundwater recharge areas.
NR-23	Lack of public access to natural resources for recreation, education, and tourism.

Intrinsic Resources: Natural Opportunities

ID	The Opportunity is...
O-NR-1	Encourage local adoption of tree regulations applicable to residential and commercial development requiring protection of native vegetation or replacement of mature specimens with approved native species or species.
O-NR-2	Maintain natural state of undeveloped barrier islands and hammocks through conservation easements or acquisition.
O-NR-3	Create incentives for TDR's and PDR's that allow development to be directed to areas away from environmentally sensitive areas.
O-NR-4	Provide incentives to protect and preserve open space and other sensitive natural resources.
O-NR-5	Maintain and improve air quality.
O-NR-6	Advance green space preservation through protection of wetlands and floodplains.
O-NR-7	Increase education on the importance of the protection of environmentally sensitive resources, such as marshes, buffers, etc.
O-NR-8	Enhance boater education regarding wake-induced erosion.
O-NR-9	Identify the types of existing units that merit protection for their consistency with the desired community character, and provide incentives that direct redevelopment activity to other properties.
O-NR-10	Provide incentives for local governments to adopt night lighting ordinances that shine lights away from the beach, during sea turtle nesting season.
O-NR-11	Provide incentives for the local governments involved in beach re-nourishment to require the use of beach materials that are similar to original beach materials.
O-NR-12	Develop programs that analyze the value of resources typically overlooked in the development decision-making process and establish mechanisms to factor costs associated with the impacts to these resources into the development process.
O-NR-13	Develop incentives and disincentives to direct growth toward planned developments served by public water and sewer systems.
O-NR-14	Create incentives for all local governments adjacent to coastal waters to adopt standards consistent with the clean marina program.
O-NR-15	Develop incentives for speed limits on estuarine waters.
O-NR-16	Provide educational programs for school age students and for recreational boaters.

Regional Growth Management Issues

ID	The Issue is...
GM-1	Regional leadership needs to be nurtured.
GM-2	Ability for the region to effectively guide development patterns because of different or conflicting development regulations or limited regulations.
GM-3	Need to promote partnerships between local governments and community stakeholder groups.
GM-4	Perception of the idea that design or environmental regulations will drive away new development, which limits the political will for such regulation.
GM-5	Local governments often lack the ability to pay for infrastructure to accommodate growth patterns.
GM-6	Lack of coordination between school boards and local governments regarding siting of, and service provision for new facilities.
GM-7	Land use policies that foster rural and urban sprawl.
GM-8	Competition among local governments for limited state and federal grant monies hinders cooperative efforts.
GM-9	Lack of a regional all-hazard plan, as well as protocols and procedures to manage a catastrophic event.

Regional Growth Management Opportunities

ID	The Opportunity is...
O-GM-1	Encourage participation in existing regional leadership programs.
O-GM-2	Develop effective public relations and public involvement processes to include all stakeholders in a way that promotes consensus building.
O-GM-3	Preserve the region's rural character and encourage connectivity through promotion of well-planned mixed-use communities.
O-GM-4	Capture more of the retirement community by promoting lifelong communities.
O-GM-5	Reduce public costs (and taxes), share revenues, protect environmentally sensitive areas, manage economic opportunities, and maintain local control of growth and development by fostering cooperation between jurisdictions.
O-GM-6	Provide improved and more efficient services through consolidation of services or a more unified approach to service delivery.
O-GM-7	Learn best practices from other regions and national and international developers.
O-GM-8	Identify critical corridors important to both quality growth and environmental sustainability and provide increased incentives for land owners and developers in these areas.
O-GM-9	Adopt policies that foster mixed-use, higher densities in places where infrastructure and facilities are already in place, making these places developed activity centers that serve daily needs of the community while reducing the cost of infrastructure and services.
O-GM-10	Develop programs that analyze the value of resources and establish mechanisms to factor costs associated with the impacts to these resources into the development process.
O-GM-11	Enhance catastrophic incident preparedness by working with the All Hazards Council in preparation of a Regional Catastrophic Preparedness Plan.

Economic Development: Business and Industry Issues

ID	The Issue is...
ED-1	Shift from higher paying manufacturing jobs to lower paying service jobs.
ED-2	Lack of sufficient jobs or economic opportunities for rural residents.
ED-3	Few jobs for skilled laborers.
ED-4	Need for more employment diversity – too much reliance on a few large industries.
ED-5	Lack of labor skills to support a diverse group of industries.
ED-6	Perception of low educational attainment for local residents in Coastal Georgia.
ED-7	Only a minor portion of local economies are small and minority businesses.
ED-8	Lack of communication between governments, authorities, businesses and citizens in planning and implementing economic development plans.
ED-9	Viability of many downtowns is diminished by a shift from locally owned retail stores to regional shopping centers.
ED-10	Some developers perceive Coastal Georgia as a tough place to do business.
ED-11	Lack of support programs for entrepreneurs.
ED-12	Competition from South Carolina and Florida to attract desired businesses.
ED-13	Need more local services and retail so residents can meet their consumer needs in their community.
ED-14	Need to promote expansion of existing businesses and new industry.
ED-15	New development is favored over existing redevelopment opportunities.
ED-16	Decline in coastal commercial fisheries industry.
ED-17	Global economic factors and anti-forestry attitudes threaten the traditional silviculture industry in Coastal Georgia.
ED-18	Jobs lost due to competition with lower labor costs, lower taxes, and relaxed environmental regulations available in foreign countries.
ED-19	Water consumption limits on industry, commercial, forestry, pose constraints for growth and development.
ED-20	Economic growth and development may be constrained by limits on processing wastewater.
ED-21	Need to coordinate the location of available housing with major employment centers.
ED-22	High number of brownfield sites in the region.

Economic Development: Business and Industry Opportunities

ID	The Issue is...
O-ED-1	Promote more high value, environmentally sound industries.
O-ED-2	Market regional labor force, especially for industries requiring large numbers of highly trained employees.
O-ED-3	Market existing industrial parks with the infrastructure in place.
O-ED-4	Promote proximity to the ports and regional transportation.
O-ED-5	Capture skills and knowledge of retirees relocating to the region.
O-ED-6	Support the quality K-12 educational systems already in place.
O-ED-7	Take advantage of the numerous options for advanced education and workforce development.
O-ED-8	Promote the strong healthcare and engineering educational opportunities in the region.
O-ED-9	Tap into the supply of professionals, technical information, and expertise available in the region (i.e. SCORE)
O-ED-10	Market competitive tax and utility rates.
O-ED-11	Support existing local chambers of commerce and development authorities in their promotion the area's towns, counties, and local businesses.
O-ED-12	Coordinate efforts with two regional development authorities operating in Coastal Georgia.
O-ED-13	Attract businesses with airports, transit systems, and other regional transportation initiatives.
O-ED-14	Promote available commercial property and infill properties in the already-populated areas of the region.
O-ED-15	Encourage private and public partnerships to redevelop neglected areas under Georgia's Urban Redevelopment Act.
O-ED-16	Support the viable coastal fisheries industry through state and local programs.
O-ED-17	Maintain undeveloped land in the region that is best suited for forestry purposes.
O-ED-18	Recruit growth industries that can use the skills of workers in declining industries.
O-ED-19	Develop use of alternative fuels.
O-ED-20	Develop or enhance collaboration between local economic development agencies and community based organizations.
O-ED-21	Begin international outreach by tapping into Georgia Department of Economic Development mechanisms.

Economic Development: Tourism Issues

ID	The Issue is...
EDT-1	Corridor management on I-95 and I-16 and the interchange gateways is needed to ensure orderly and attractive development.
EDT-2	Lack of funding for attractive landscaping and litter management programs necessary to maintain the scenic quality of corridors.
EDT-3	Coordinated informational and directional signage along entrance corridors to direct tourists.
EDT-4	Need for scenic routes as alternatives to the Interstates.
EDT-5	Balancing the need for billboards and signs with character and aesthetics of the region.
EDT-6	Important natural, cultural and historic sites and structures are undeveloped and/or underutilized.
EDT-7	Lack of access to undeveloped barrier islands constrains tourism potential.
EDT-8	Lack of regional tourism marketing collaboration.
EDT-9	Lack of regional tourist attraction information resource.

Economic Development: Tourism Opportunities

ID	The Opportunity is...
O-EDT-1	Make the most of tax collections and funding for tourism in lieu of new state and local tax increases.
O-EDT-2	Focus limited financial resources toward infrastructure improvements such as sidewalks, lighting, and crosswalks along critical gateway intersections and corridors.
O-EDT-3	Draft a regional way-finding master plan.
O-EDT-4	Promote coordination of marketing for festivals and events related to the important natural, historic, and cultural resources of the coast.
O-EDT-5	Seek funding and support for implementation of the Coastal Georgia Greenway, Georgia Coastal Rail Trail and Southern Passages development plans.
O-EDT-6	Develop and adopt regulations that will create uniform billboard standards and amortization of non-conforming billboards.
O-EDT-7	Establish regional water taxis along the coast to barrier islands and the Savannah River.
O-EDT-8	Capture a greater share of regional tourism dollars.
O-EDT-9	Promote and support agro-tourism and associated programs.
O-EDT-10	Highlight pristine nature of barrier islands in tourism materials.
O-EDT-11	Focus efforts to share cost where appropriate across the region to promote tourism.
O-EDT-12	Disseminate existing model ordinance for community appearance and property maintenance.

Preservation of Agricultural Land Issues Opportunities

ID	The Issue is...
PAL-1	Development pressures threaten to diminish the region's agricultural and silviculture activity.
PAL-2	Maintaining the region's agricultural land to preserve community character.
PAL-3	Sprawling residential development on large lots served by septic systems and private wells, consuming sizable amounts of agricultural lands.
PAL-4	Loss of large-lot agricultural and rural character.

Preservation of Agricultural Land Opportunities

ID	The Opportunity is...
O-PAL-1	Implement farmland protection strategies for keeping productive farmland in agricultural uses.
O-PAL-2	Protect agricultural uses to retain vital farmland and support local business by providing agriculture services and materials.

Communities for a Lifetime Issues

ID	The Issue is...
CLT-1	A region-wide "aging readiness" assessment is needed.
CLT-2	Limited mix of housing types to meet the needs of the aging population.
CLT-3	Older adults need for continued independence includes the need for social interaction, either with other older people their own age or with younger people who share their interests.
CLT-4	Access to health care and proximity of health services in rural, urban and suburban areas for those older adults who cannot drive and/or lack transportation alternatives.
CLT-5	Local zoning laws can be a barrier to senior housing alternatives.

Communities for a Lifetime Opportunities

ID	The Opportunity is...
O-CLT-1	Realize the largest population of educated and skilled people in the coastal region is projected to be older adults.
O-CLT-2	Consider recommendations of the 2010 Elder Needs Assessment.
O-CLT-2	Prepare the region for growth by consulting *The Maturing America Final Report 2006 Getting Communities on Track for Aging Population.*
O-CLT-2	Adopt principles to prepare for the social transition and the pending impacts based on the recently completed a Coastal Community for All Ages project.

Coastal Vulnerability and Community Resilience

ID	The Issue is...
CR-1	A region-wide “community resilience” assessment is needed.
CR-2	Major roads, bridges communication tower,and water facilities are most important in terms of resilience as they serve the core daily needs of the population.
CR-3	The threat of flooding throughout the region is of concern, especially along U.S. Highway 17, where bridges and roads are near sea level elevation.
CR-4	The condition an location of evacuation routes should be reevaluated to ensure that the age and condition o major arterials and bridges meets quality performance standards.
CR-5	There are common gaps in the County Comprehensive Plans, Community Agendas, and Hazard Mitigation Plans. The majority lack specificity when addressing concerns related to infill development, the presence of aquifers and/or reservoirs, and shoreline, riparian and estuary protection.

Coastal Vulnerability and Resilience

ID	The Opportunity is...
O-CR-1	To assess the region, analyze through the lens of sustainability and to provide education and outreach on land use planning, investments and decisions utilizing various tools, including GIS, planning retreats and through technical assistance.
O-CR-2	Consider recommendations of the Resilience Assessment for the Coast completed by University of Georgia, Environment and Design.
O-CR-3	Prepare the region by incorporating recommendatinos from FEMA Guidelines.
O-CR-4	Adopt principles to prepare based on the recently completed GeoDesign project for the Coast of Georgia.

Implementation Program

Introduction

The issues of Infrastructure (Water and Wastewater; Stormwater; Transportation), Intrinsic Resources (Natural Resources; Cultural and Historic Resources), Regional Growth Management, Economic Development (Business and Industry; Tourism), Preservation of Prime Agricultural Lands, and Communities for a Lifetime are of regional importance and require a unified management approach. The approach for each issue is identified on the following pages using the format described below.

Vision for the Issue Area

The vision is a clear statement of why the issue is important to the region and what we as a region will strive to do over the next 20 years.

Guiding Principles

Guiding Principles identify those overarching values which are to be utilized and evaluated for all decisions within the region. The Guiding Principles form the foundation for implementing the shared regional vision.

Performance Standards

Performance standards are actions, activities or programs a local government may undertake or participate in that will advance their efforts to meet the vision of the Regional Plan. This Plan establishes two achievement thresholds (a Minimum Standard and an Excellence Standard) with associated incentives and technical assistance to encourage attainment of thresholds.

These standards should be considered by all organizations in the Coastal Region, including the CRC, State and federal agencies, local governments, non-governmental organizations, developers and other coastal stakeholders. However, the standards are of particular importance to local governments, as maintaining Qualified Local Government status is dependent on attaining and/or maintaining the Minimum Standard within three years.

Although implementation of best practices identified are encouraged, local governments and other actors may select to implement performance standards from either list. A point system is established and defined in each section where implementation of each practice builds toward a threshold score to achieve either standard. The one and two point system was developed in order to provide a baseline by which to rate existing policies and practices.

Standards worth two points are considered more advanced, thus garnering greater value if a local government accomplishes the item. The point values and thresholds be evaluated annually and adjustments made accordingly.

Strategies and Regional Work Program

This section includes strategies, policies, and action items consistent with the Vision, Guiding Principles, and Performance Standards for each regional issue. These items should be considered by all organizations in the Coastal Region, including the CRC, State and federal agencies, local governments, non-governmental organizations, and other coastal stakeholders. Specific strategies may be conducted by various parties which are identified in the work program.

The CRC, in collaboration with local governments, State and federal agencies, non-governmental organizations, and others, is responsible for leading the implementation of the Plan. The functions of the CRC fall primarily in one of four tasks as outlined below.

Planning and Coordination

These actions are performed by the CRC to assist local governments and to act as a liaison between local governments to promote a regional perspective. Actions identified in this section also include outreach, education, and technical assistance such as more detailed sub-area planning, new or revised local development regulations.

Review

Conduct periodic Quality Growth Effectiveness assessments of each local government in the region, to determine if they are achieving prescribed performance standards **As part of the Report of Accomplishments included with each annual update of the Regional Work Program, survey changes and developments in the region to determine whether the plan is being effectively implemented and if it is having the desired impact on regional development patterns. Based on the results of this survey identify impediments to implementation and possible solutions or needed amendments of the regional plan.**

Infrastructure: Water and Wastewater

Vision

Infrastructure, including potable water and wastewater systems, can be used as a tool to manage growth, protect our environment and influence our development patterns. The vision is that Coastal Georgia will have regional resources and adequate funding allocated to the institutions to provide adequate infrastructure in-advance of development.

We encourage growth to occur in and near those areas with adequate infrastructure and use the investment in infrastructure to shape our development patterns. We encourage the State to enable regional agencies to address transportation, water supply and conservation, wastewater treatment, and the protection of natural areas consistent with this goal.

Water is a crucial resource in every community, with uses ranging from recreation and wildlife habitat, to domestic drinking water, to providing the basic resource for many industrial and economic activities. Communities in some parts of the region have little or no margin of error for sustainable use of their water source, whether it is surface water or ground water.

Good water quality is necessary for protecting public health and sustaining a growing economy. Maintaining and improving the quality of our nation's waterways has long been a national priority. The Federal Water Pollution Control Act of 1972 (commonly referred to as the Clean Water Act) calls for all waterways to ultimately be "fishable and swimmable." Its principal goal is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" which "provides for the protection and propagation of fish, shellfish, and wildlife (Federal Water Pollution Control Act, Title I).

Guiding Principles

1. Where new wastewater facilities are necessary to support development, require the use of green building strategies to minimize water demand.
2. Promote the use of a standardized protocol to forecast water needs to meet reasonable future water demand throughout region.
3. Promote use of purple pipe and grey water techniques and use of surface water in addition to groundwater where appropriate.
4. Promote water conservation through use of a tiered rate system.
5. Promote the use of the best available technology, dependent on soil type, for wastewater treatment.
6. Large areas of Coastal Georgia are beyond the reach of urban wastewater infrastructure, or centralized wastewater treatment facilities. To ensure sustainable communities, require proper siting, design, construction, use, and maintenance of decentralized wastewater treatment, or ISTS (Individual Sewage Treatment Systems).
7. Pursue regional coordination in provision of water and wastewater facilities.

Performance Standards

To achieve minimum ranking requirements for Water and Wastewater Infrastructure, one must obtain a total of seven (7) points. To achieve excellence ranking requirements one must obtain a total of twelve (12) points.

Performance Standard = 1 point

1. Allow community water and wastewater treatment systems only when public systems are unavailable or cannot meet the needs of the development.
2. Prohibit installation of new septic systems within 100 feet of any marsh or river or any State water body.
3. Adopt a rate structure to promote water conservation.
4. Require proper siting, design, construction, use, and maintenance of decentralized wastewater treatment, or ISTS (Individual Sewage Treatment Systems).
5. For rural communities, allow alternative wastewater technologies such as small-diameter gravity, pressure and vacuum systems.
6. In rural communities allow alternative treatment methods, including sand filters, land treatment, lagoons and constructed wetlands. These technologies eliminate the need for individual septic systems, thereby promoting more compact development and improving the environment.
7. In rural areas, permit cluster septic systems that allow the filtration function for multiple units to be placed in one large area, avoiding the need for a separate absorption field for each house. Cluster systems can be used for subdivisions of up to 100 houses, which allow lot sizes to be significantly reduced.
8. Participate in Practicum or training hosted by the CRC as it relates to water and/or wastewater issues.
9. Adopt water conservation ordinance.

Performance Standard = 2 point

1. Conduct and keep a current inventory of private wells and septic systems.
2. Develop and implement a community well inspection and monitoring program.
3. Develop and implement a water quality monitoring program.
4. Require an analysis of the impacts of new community wells on the service delivery strategies.
5. Evaluate the cumulative impact of community systems on public infrastructure investments.
6. Adopt ordinances requiring a local maintenance and operation bond for all private community water and wastewater treatment systems.
7. Develop an inspection, maintenance and monitoring program for private septic systems.
8. Adopt a groundwater recharge ordinance per DNR's Part V Environmental Planning Criteria.
9. To promote regionalism, develop a joint Water Sewer Authority.
10. Seek designation of a Water-Smart, Water-First and/or Water Sense Community.

Infrastructure: Stormwater

Vision

Infrastructure, including stormwater management, can be used as a tool to manage growth, protect our environment and influence our development patterns. A suite of strategies should be considered for stormwater management, both structural and non-structural. Our vision is that Coastal Georgia will have regional resources and adequate funding allocated to the institutions that will provide adequate infrastructure in advance of development.

We encourage growth to occur in and near those areas with adequate infrastructure and use the investment in infrastructure to shape our development patterns. We encourage the State to enable the creation of regional agencies to address stormwater management and conservation and protection of natural areas consistent with this goal.

Guiding Principles

1. Encourage development practices and sitings that do not significantly impact wetlands and habitat areas or allow for the preservation and conservation of wetlands and habitat areas through appropriate land use practices.
2. Promote the use of coast-specific quality growth principles and programs, such as the Green Growth Guidelines, Earthcraft Coastal Communities and the Coastal Supplement to the Georgia Stormwater Management Manual, to guide site planning and development.
3. Minimize impervious coverage wherever possible. The level of impervious cover in a development, rather than population density, is the best predictor of whether development will affect the quality of water resource.
4. Develop stormwater programs across the region.
5. Pursue State-level funding for regional water quality monitoring activities due to the statewide importance of coastal waters and estuaries.

Performance Standards

To meet minimum ranking requirements for Stormwater Infrastructure, one must obtain a total of five (5) points. To meet excellence ranking requirements one must obtain a total of eight (8) points.

Performance Standard = 1 point

1. Adopt the Coastal Stormwater Supplement to the Georgia Stormwater Management Manual.
2. Require the use of the Stormwater Quality Site Development Review Tool (under development), which is a companion to the Georgia Stormwater Manual, or similar tool to review proposed development plans.
3. Allow low impact development techniques to minimize the quantity and improve the quality of runoff.
4. Require that new developments consider and accommodate stormwater runoff, and do not negatively impact downstream areas.
5. Adopt a stormwater management ordinance that limits discharge to pre-developed conditions for appropriate types and intensities of storms.
6. Participate in Practicum's and/or training hosted by CRC regarding best management practices for stormwater management.

Performance Standard = 2 point

1. Develop an inspection and maintenance program for public and private stormwater management systems.
2. Adopt standards or ordinances that provide incentives for developments that utilize low impact design, follow green growth guidelines, or follow other quality growth approaches.
3. Adopt standards or ordinances that require developments to minimize the impervious area.
4. Implement a stormwater utility.

Infrastructure: Transportation

Vision

Infrastructure, including transportation, can be used as a tool to manage growth, protect our environment and influence our development patterns. Our vision is that Coastal Georgia will have regional resources and adequate funding allocated to the institutions that will provide adequate infrastructure in advance of development.

Transportation and land use coordination will be a priority, utilizing a proactive, rather than reactive, approach. We will direct growth to those areas with adequate infrastructure and use the investment in infrastructure to shape our development patterns. We encourage the State to enable the creation of regional agencies to address transportation and protection of natural areas consistent with this goal.

Guiding Principles

1. Provide the forum and the support to coordinate regional multi-modal transportation, including rail, airports, and public transportation, and also the planning and development of street connectivity and transit oriented developments.
2. Promote the establishment of regional transportation compact(s) to provide a forum for local governments and MPO's to communicate and discuss transportation issues and decisions in the Coastal Region. These compacts do not replace the existing federal and State processes mandated in law, but provide a forum to communicate issues, ideas and discussions.
3. Promote coordination among agencies and jurisdictions in development of a region-wide, multi-modal transportation network, including transit, where applicable.
4. Encourage the coordination of transportation network improvements and land use planning.
5. Promote coordinated public infrastructure and school location planning with land use planning.
6. Maintain a human scale environment with context sensitive design practices.
7. Work to establish dedicated revenue source(s) for transportation improvements.

Performance Standards

To meet minimum ranking requirements for Transportation Infrastructure, one must obtain a total of five (5) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Require a comprehensive impact assessment for all developments that meet or exceed identified thresholds based on professionally identified sources, as established by ordinance of local governments.
2. Require mitigation of significant transportation impacts from developments by implementing traffic impact fee systems based on the number of vehicle trips expected to be generated by developments.
3. Incorporate into local comprehensive plans policies to implement multiuse corridors with significant residential and/or commercial densities and corridors with potential for increased density.
4. Identify regional corridors needing widening that the jurisdiction can purchase within 5 to 10 years.
5. Jurisdictions with higher population and employment densities set thresholds and guidelines for appropriate pedestrian and bicycle facility requirements.
6. Participate in the Transportation Coordinating Committee (forthcoming implementation measure) to coordinate regional transportation planning activities for the coastal region.
7. Participate in the Practicums and training hosted by the CRC as it relates to transportation issues.
8. Implement Coastal Georgia Greenway.

Performance Standard = 2 point

1. In downtown or urban areas, require context sensitive design practices to better integrate the road and its design.
2. Implement street connectivity ordinances to increase the number of street connections in a neighborhood to improve access and mobility.
3. Implement transit oriented developments in areas with transit service.
4. Implement policies for pedestrian and bicycle facilities in urban or urbanizing areas within the region.
5. Implement special local option sales tax (SPLOST) programs that dedicate all or a portion of revenues to transportation improvements.

Intrinsic Resources: Cultural and Historical

Vision

Coastal Georgia contains some of the most significant heritage assets in the State, which are important elements of education, tourism development, economic development, health, and quality of life.

We will protect, restore, enhance, and manage these resources for the benefit of our citizens, our visitors, and future generations.

Guiding Principles

1. Encourage local governments to examine proposed development areas prior to development approval and require mitigation to significant resources.
2. Encourage development practices and sitings that do not significantly impact cultural and historical areas.
3. Maintain viewsheds of significant cultural and historic assets.
4. Maintain a range of landscapes and environments that provide diversity of habitats, species, resources and opportunities for recreation, commerce, community enjoyment and cultural practices.
5. Designate culturally and/or archaeological and/or historically significant resource management areas for potential acquisition and/or protection.
6. Educate residents and visitors regarding the statewide importance of this region's cultural and historic resources.
7. Encourage utilization and cooperation of museums, universities, foundations, non-government organizations, professional associations, and private firms to advise and monitor management.
8. Promote the establishment of partnerships for the development and utilization of incentives to restore, remediate or reuse cultural resources as appropriate.
9. Compile the traditional lore and knowledge of local people and integrate their understandings and practices into planning and development.
10. Encourage coordination among agencies and jurisdictions in developing and funding heritage conservation land uses and ensuring public access to publicly held and supported conservation areas.
11. Promote designation of MainStreet and Better Home Town Communities.

Performance Standards

To meet minimum ranking requirements for Cultural and Historic Resources, one must obtain a total of four (4) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Develop a comprehensive inventory of cultural, archaeological and historic resources, as well as important cultural and historical viewsheds (as defined by each local government).
2. Develop a process to evaluate cultural and historic resources identified in the Regionally Important Resources Plan during the land development process.
3. Adopt ordinance to require identification and evaluation of cultural, archeological and historic resources prior to development.
4. Identify cultural and historic resources eligible for the National Register of Historic Places.
5. Require mitigation to significant resources impacted by development.
6. Nominate cultural, archeological or historic resources to the Regionally Important Resource Plan.
7. Adopt design guidelines that protect viewsheds of significant cultural and historic assets.
8. Participate in assisting and identifying sites, historical data, associated with the Gullah/Geechee culture for the benefit and education of the public.
9. Participate in Practicums or training hosted by the CRC as it relates to cultural, archeological or historic resource and/or Regionally Important Resource training.
10. Seek designation as MainStreet, or Better Home Town Community.

Performance Standard = 2 point

1. Adopt a historic preservation ordinance under the Georgia Historic Preservation Act that establishes a Historic Preservation Commission and a process for designating local historic districts and properties.
2. Restrict incompatible features from encroaching upon important cultural, archaeological and historical viewsheds.
3. Integrate Cultural and Historic Resource plans and treatment with heritage tourism plans.
4. Integrate Cultural and Historic Resource plans and treatment with educational plans for students and citizens.
5. Develop a comprehensive inventory of traditional ways of life and artistic crafts and skills.
6. Integrate Cultural and Historic Resources plans and treatment with housing plans.
7. Require mitigation/minimization measures for all cultural, archaeological, and historic resources damaged during the land development process.
8. Seek State and national designation for landmark properties and/or local historic districts.
9. Incorporate the appropriate treatment of historic resources into the catastrophic preparedness plan.
10. Establish a process for preservation of historically and culturally significant properties for preservation.
11. Become a Certified Local Government by the Georgia Historic Preservation Division (HPD) and the National Park Service.

Intrinsic Resources: Natural

Vision

Coastal Georgia contains some of the highest biodiversity and natural productivity and most significant habitats in the State, which are important elements of education, tourism development, economic development, health, and quality of life. Protecting, restoring, and managing natural and cultural resources will be a priority in coastal regional planning. Coastal Georgia will be promoted for our globally important resources and our successful efforts to protect and sustain them.

We will protect, restore, enhance, and manage these resources for the benefit of residents, visitors, and future generations, which include placing a high priority on maintenance and enhancement of access to our public rivers, coastal waters, and beaches. A system of managed areas will conserve ecosystem functions and values, sustain clean water and flow, clean air and provide benefits to people and wildlife.

Guiding Principles

1. Promote the protection, restoration, enhancement and management of natural resources.
2. Continue the traditional use of land and water (such as farming, forestry, fishing, etc.) as feasible, provided that any significant impacts on resources can be prevented or effectively mitigated.
3. Protect and enhance Coastal Georgia's water resources, including surface water, groundwater, and wetlands and ground water recharge areas.
4. Protect and enhance water quality, quantity and flow regimes.
5. Commit to investing in the protection of natural resources before any restoration and/or remediation is needed.
6. Encourage the restoration and protection of wetlands to provide flooding, storm and habitat protection.
7. Maintain viewsheds of significant natural resources.
8. Enhance access to natural resources for recreation, public education, and tourist attractions as appropriate within the protection mission.
9. Encourage utilization of universities, foundations, and non-government organizations to advise, monitor, and enhance management.
10. Promote the establishment of partnerships and funding mechanisms for the development and utilization of incentives to restore, rehabilitate, protect or reuse natural resources as appropriate.
11. Encourage development practices and sitings that do not significantly impact environmentally sensitive areas.
12. Promote low impact design practices that protect natural resources.
13. Promote to local governments a program of monitoring installation and impacts of individual and community docks along the coast.
14. Promote the monitoring of cumulative impacts of waterfront development along the coast.
15. Maintain a range of landscapes and environments that provide diversity of habitats, species, resources and opportunities for recreation, commerce, community enjoyment and cultural practices.
16. Encourage the development and use of a method to place a value on ecosystem services.
17. Promote the identification of innovative funding sources and development of ecosystem services markets (e.g. carbon, storm buffers, traditional land and water uses).
18. Promote the Adopt-a-Wetland program in areas that can be used as reference sites and that are within projected development areas.
19. Encourage coordination among agencies and jurisdictions in developing and funding conservation land uses and ensuring public access to publicly held and supported conservation areas.
20. Encourage coordination among agencies in studying the impacts of climate change and sea level rising.

Performance Standards

To meet minimum ranking requirements for Cultural and Historic Resources, one must obtain a total of four (4) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Develop a comprehensive assessment and resource management plan which includes an inventory of significant natural resources and viewsheds. This inventory should assess resource significance, with Regionally Important Resources ranked as most significant.
2. Develop an ordinance consistent with the resource management plan to require examination of tracts prior to development that identifies and evaluates impacts to significant natural resources (including habitats) and viewsheds.
3. Provide developers a statement of Best Management Practices (BMP's) for Coastal Development.
4. Nominate significant resources to the Regionally Important Resources Plan.
5. Adopt conservation subdivision ordinance to protect environmentally sensitive areas and promote proper siting.
6. Participate in Practicums or training hosted by the CRC as it relates to natural resources.

Performance Standard = 2 point

1. Implement a program for public and private acquisition and conservation easements in natural resource areas of special significance.
2. Adopt and implement a tree ordinance (with appropriate consideration of silvaculture).
3. Provide incentives for shared docks for all new residential development.
4. Protect undisturbed marsh hammocks identified in the Regionally Important Resource plan.
5. Provide incentives for best management practices for timber, agriculture, and/or fishing activities.
6. Provide incentives for new development to conserve and/or protect open space of at least 30 percent of each development, through cluster or similar development approaches.
7. Provide incentives for new development/redevelopment to pursue certification for "green" site planning, construction, and post-construction practices.
8. Undertake a restoration project that restores an environmentally significant resource.
9. Identify potential sites for public access to waterways.
10. Adopt ordinance that protects groundwater recharge area.
11. Adopt river corridor protection ordinance.
12. Adopt ordinance for the protection of open waters, streams and wetlands.
13. Adopt riparian buffer protection ordinance.
14. Adopt wellhead protection ordinance.
15. Adopt sea turtle habitat protection ordinance.

Regional Growth Management

Vision

We will enhance and preserve the character of our communities through regional growth management strategies that encourage sustainable development and redevelopment and follow "quality growth" principles where our coastal environment is respected, protected and enhanced.

We will promote sustainable communities through uniform application of regional quality growth management principles and standards where each local government will adopt its own land use and development standards that meet or exceed the regional minimum standards.

Guiding Principles

1. Encourage development that enhances the desired character of each of the region's cities and towns.
2. Avoid establishment of new land uses which may be incompatible with existing adjacent land uses.
3. Protect our military installations from land use changes that jeopardize their mission through creation or implementation of Joint Land Use Studies (JLUS).
4. Promote growth in those areas that can be efficiently served by infrastructure, such as water, wastewater and transportation.
5. Encourage infill development as an alternative to expansion.
6. Focus new development in compact nodes that can be served by public or community infrastructure providers.
7. Maintain and enhance the scenic character of our rural highways and county roads.
8. Encourage clustered developments, particularly in areas that are suitable and proposed for development, that maximize open spaces, protect natural, cultural and historic resources, preserve wildlife habitat, and include green, low impact development strategies.
9. Encourage local governments to allow green, low impact developments as an alternative to traditional development standards and develop incentives encouraging their use.
10. Limit development in sensitive areas located near marshes and waterways, to low impact development that maintains our coastal character, while recognizing and protecting the sensitive environment.
11. Strongly encourage that new developments have minimal impacts on vital wetlands, coastal hammocks, marshes, and waterways.
12. Discourage lot-by-lot water and wastewater treatment systems for multiple lot developments.
13. Promote green building techniques to maximize energy efficiency and water conservation and minimize post construction impacts on the environment.
14. Encourage the development of a "transfer of development rights" (TDR) program.
15. Encourage development and compliance with minimum uniform land use and development standards for all local governments to adopt within the region.
16. Encourage coordination among agencies and jurisdictions in land use planning, regulation, review and permitting.
17. Promote affordable housing options.
18. Encourage the placement of new schools near existing infrastructure.
19. Partner with state, federal, non-governmental organizations and local governments to provide guidance on critical natural areas, land conservation efforts, and land use practices within each jurisdiction. Provide assistance in all outreach efforts forthcoming from this initiative.
20. Pursue opportunities for continuing education as it relates to regional issues.
21. Encourage enactment of impact fees to defray costs of new development.
22. Consider planning and/or managing a catastrophic event.
23. Promote reduction, reuse and recycle practices.

Performance Standards

To meet minimum ranking requirements for Regional Growth Management, one must obtain a total of five (5) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Define growth boundaries and include the types and limits of service delivery, per Service Delivery Strategy (SDS) regulations.
2. Focus new development in compact nodes that can be served by public or community infrastructure providers.
3. Allow growth only in those areas that can be efficiently served by water, wastewater and transportation infrastructure.
4. Permit the development of clustered developments, particularly in areas that are suitable and proposed for development, that maximize open spaces, protect natural, cultural and historic resources.
5. Include density bonuses and other incentives that provide for affordable housing.
6. Participate in the creation of a regional catastrophic preparedness plan to enhance regional resilience.
7. Update Floodplain Management Plan.
8. Identify the key physical, natural, ecological, landscape, historical, access and recreational assets that contribute to the functionality of the green infrastructure network.
9. Adopt a Memorandum of Understanding with military installations that promote communication and coordination of land use decisions.

Performance Standard = 2 point

1. Adopt design guidelines to support and enhance the desired character of the region.
2. Adopt and implement an ordinance that requires a fiscal impact analysis on public costs and revenues for large scale developments.
3. Adopt and implement an ordinance that requires an environmental impact analysis for large scale developments.
4. Adopt and implement an impact fee ordinance in accordance with State law.
5. Adopt and implement architectural and design overlay ordinances for important gateways, corridors, and center city areas.
6. Adopt ordinances that encourage developers to permanently protect valuable resources or habitat areas.
7. Adopt ordinances that allow for innovative development while protecting the sense of place as well as natural and cultural resources.
8. Develop and implement a program that encourages use of recommended BMP's (includes incentives) in all new developments/redevelopment (see http://www.georgiaplanning.com/coastal/BMP/default.htm).
9. Implement the development of a "transfer of development rights" (TDR) program, purchase development rights (PDR) and/or planned resource district (PRD) for agricultural lands.
10. Participate in the Community Rating System Program.
11. Adopt minimum uniform land use and development standards.
12. Apply for a Plan-First Community Designation.

Economic Development: Business and Industry

Vision

Develop and facilitate the implementation of successful strategies that leverage existing regional economic engines, regional resources, state and federal government guidance and create a quality of life to attract compatible and strategic business opportunities, high wage jobs and investment to Georgia's coastal communities.

Our goal is that the entire region shares in jobs and investment created through an integrated balance of sustainable economic development initiatives such as:

- Comprehensive Economic Development Strategy (CEDS) for Coastal Georgia
- Leveraging Regional Economic Engines
- Promotion of Strategic Industry Sectors identified by the Commission for A New Georgia
- Identification and Promotion of Marketable Resources
- Leveraging Regional Support Mechanisms
- Implementation of a Regional Marketing Strategy
- Identification and development of Project and Marketing funding sources
- Leveraging workforce development mechanisms
- Promotion of Coastal Georgia's Quality of Life and applicable amenities

Guiding Principles

1. Promote strategic distributions of business and industry across the region consistent with natural, cultural, historic and industrial resource strategies and encourage partnerships and collaboration between economic development agencies.
2. Investigate ways to share costs and benefits across jurisdictional lines for both regional marketing and project support.
3. Incorporate community plans for the strategic use of land for manufacturing, distribution, etc., while recognizing and respecting natural resources and the unique differences between communities.
4. Coordinate with the Georgia Ports Authority (GPA) to identify their needs and identify mechanisms for the economic development industry to strengthen the GPA and its presence in logistics, distribution, and workforce development.
5. Leverage and incorporate the region's military installations (Fort Stewart Army Base, Hunter Army Airfield and Kings Bay Naval Base) and the Federal Law Enforcement Training Center to recruit economic development projects.
6. Incorporate Herty Advanced Materials Development Center's experience and position as a development center for the commercialization of materials and create incentives to retain a portion of pilot plant opportunities as new Georgia industries and to assist development authorities in increasing recruitment win rates.
7. Promote the historic nature, natural beauty and successful past and present performance of Coastal Georgia as a location site for film and clean high-tech industry and as a recruitment tool for opportunities.
8. Incorporate the Center of Innovation's (COI) statewide logistics plan into a regional strategy to assist in the recruitment of companies and leverage as support for industry.

9. Coordinate federal, State and local economic development funding programs and initiatives that affect the coast.
10. Enhance workforce development by collaborating with business, industry, and planning of educational entities that provide necessary workforce skills.
11. Increase existing industry retention and expansion rates.
12. Promote downtown revitalization efforts to enhance job creation and location of business and offices within downtown areas.
13. Incorporate current and future needs for housing, infrastructure, and natural resource protection into economic development initiatives.
14. Encourage international economic developments that support strategic industry sectors.
15. Enhance economic development and tourism opportunities by increasing cross functional communication.

Performance Standards

To meet minimum ranking requirements for Regional Growth Management, one must obtain a total of five (5) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Provide an inventory of the strategic assets--educational, natural, healthcare, military, types of businesses, etc.--which are important to the local economy.
2. Develop a recruitment strategy based on inventory lists.
3. Participate in the development of and contribute to the Regional Economic Development Marketing Strategy designed to develop and market assets.
4. Provide a current inventory of available sites and buildings suitable for the development of manufacturing, distribution, office and other businesses and for the accurate development of a regional buildings and sites database.
5. Provide an inventory of available sites and buildings suitable for the development of industry and the film locations.
6. Coordinate among appropriate local agencies for economic development.
7. Support Main Street, Better Hometown and downtown development authority efforts.
8. Support initiatives that promote international economic development.

Performance Standard = 2 point

1. Participate in the entrepreneur friendly community initiatives such as small business incubators.
2. Develop a specific plan for marketing local strategic businesses. Share the plan with the economic development partners so they know what the community is seeking.
3. Provide opportunities for collaboration among cultural tourism/artisans and small businesses.
4. Collaborate between agencies and coordinate city, county and regional initiatives.
5. Coordinate and integrate economic initiatives on a regional basis.
6. Participate in the development of a regional land use plan.
7. Participate in the development and implementation of a distribution centers master plan.
8. Participate in the regional strategy to address Brownfields.

Economic Development: Tourism

Vision

Economic development via tourism is closely tied to our coastal resources through our coastal waterways and the natural, historic, and cultural resources which drive the industry. Our vision is that tourism will be successful through integrated land use, water resource management, transportation, and infrastructure decisions which protect and promote our coastal resources.

Guiding Principles

1. Promote balanced, cooperative and coordinated cultural and resource-based tourism.
2. Promote traditional and emerging Coastal Georgia products such as Wild Georgia Shrimp, the paper industry and wood pellet production.
3. Promote regional anti-litter campaigns.
4. Promote and develop incentives to enhance and grow regional cultural tourism, eco-tourism and agro-tourism.
5. Promote Southern Passages (US 17) as a scenic route and encourage designation as a National Heritage Corridor.
6. Promote character and aesthetics at all interstate interchanges.
7. Balance recreational uses of coastal resources with appropriate protection of the environment on which our economy and quality of life depends.
8. Promote heritage tourism by enhancing access to natural, historic, and cultural core areas for recreation, public education, and tourist attractions as appropriate within the protection mission.
9. Encourage local governments to actively pursue elimination of junkyards and other eyesores, especially along major thoroughfares and gateways.
10. Coordinate the development of the Coastal Georgia Greenway, Rail Trail and scenic byways.
11. Leverage Coastal Georgia's success as a destination for tourism as a template for regional growth.

Performance Standards

To meet minimum ranking requirements for Tourism, one must obtain a total of three (3) points. To meet excellence ranking requirements one must obtain a total of eight (8) points.

Performance Standard = 1 point

1. Inventory the natural, historic, cultural and recreational resource areas that are important for local tourism.
2. Participate in tourism initiatives that promote regional tourism.

Performance Standard = 2 point

1. Adopt and implement a sign control ordinance.
2. Adopt and implement a way-finding (directional signs) system to attractions/events.
3. Adopt and implement community appearance ordinances for litter control.
4. Adopt and implement an ordinance that facilitates the cleanup of dilapidated properties.
5. Implement strategies for enhancing public access to water and natural resources beneficial to tourism while protecting those assets.
6. Support tourism product development and promotion.
7. Include regional assets in local/smaller tourism promotional materials to attract more visitors to smaller sites in an effort to cross-sell the region.
8. Consistently prepare and report local tourism statistics.
9. Implement the Coastal Georgia Greenway.
10. Identify sites for tourism operations and/or opportunities such as agro-tourism, eco-tourism and heritage tourism.
11. Participate in the development of a regional tourism plan.

Agricultural Land

Agricultural farmland is an important part of the region's natural area and serves as a tradition that contributes to the region's rich culture. The conversion of prime farmland to urban uses represents a loss to the region's landscape.

Vision

For a community seeking to protect agricultural lands, the focus must be twofold: limiting development in predominantly agricultural areas and providing for development away from prime agricultural lands.

Additionally, the Coastal Region promotes saving regional foods and small producers. It seeks to raise awareness to the more urbanized areas on how and where food is grown to foster actively supporting and promoting producers.

Guiding Principles

1. Strongly discourage the conversion of prime farmland to urban uses as it represents a loss to the region's landscape.
2. Wise use and protection of basic soil and water resources helps to achieve practical water quality goals and maintain viable agriculture.
3. Viable agriculture is the backbone of a functioning network of agriculture, open space, and natural areas and a range of strategies should be used to ensure the value of agricultural land.
4. Promote learning about culinary traditions and culture.
5. Encourage agricultural biodiversity.
6. Promote local food traditions and provide opportunity for education of where food comes and how our food choices affect the rest of the world.
7. Promote connecting producers of foods with consumers through events and farmers markets.
8. Promote biodiversity through educational events and public outreach, promoting consumption of seasonal and local foods.
9. Promote community gardens within urban settings.
10. Encourage regional tasting events of local foods, music, talks, forums, workshops, and exhibitions in favor of local agricultural products.

Performance Standards

To meet minimum ranking requirements for Preserving Agricultural lands, one must obtain a total of four (4) points. To meet excellence ranking requirements one must obtain a total of ten (10) points.

Performance Standard = 1 point

1. Preserve areas for agricultural production by designating areas for rural residential development—thus limiting potential conflicts between farms and acreages.
2. Direct urban development to those areas least desirable for agriculture based on factors of soil, slope, water, wind and location.
3. Implement mixed-use development with higher density in appropriate urban areas to reduce encroachment into productive agricultural areas.
4. Implement a program that supports and promotes local farmers and fishermen and connects them to local consumers.
5. Implement a program that encourages chefs and local restaurants to use locally produced foods.

Performance Standard = 2 point

1. Adopt ordinances that support Transfer of Development Rights (TDR) and Purchase of Development Right (PDR) and Planned Resource Districts (PRD) for agricultural lands.
2. Implement an education program concerning food issues to the broader public.
3. Implement a program that discusses the crisis of our oceans and other waterways and explore ways of advancing the responsible enjoyment of seafood.
4. Build a network of food producers and representatives of local communities, cooks, academics and others to establish a system that supports a small scale, sustainable local model for a food "community."
5. Implement a program that protects traditional and sustainable foods, conserving methods of cultivation and processing, and promotes the biodiversity of cultivated and wild varieties.

Communities for a Lifetime - Lifelong Communities

Vision

The principles of a livable community include elements that help people of all ages to maintain independence. Lifelong Community principles facilitate personal health, independence and engagement in community life. Lifelong Communities include the fundamental principles of good urban design including connectivity, diversity of housing stock, range of transportation options, walkable environments and access to retail, social and health services that are essential for quality of life.

Guiding Principles

1. The CRC promotes the concept of Lifelong Communities – places where people of all ages and abilities have access to the public landscape and services which enable them to live healthy and independent lives.
2. For a Lifelong Community to be truly successful it must be a complete community. Complete communities include the direct characteristics that at a minimum meet the needs of the user population, but also provided for a greater civic good by including elements that are beneficial to the environment, sensitive to a broad population and embrace economic\financially feasible regimes.
3. The region will encourage and promote the underlying issues that must be included in a Lifelong Community. The seven (7) basic tenets of a Lifelong Community are:
    a. Connectivity – the physical connection of streets, pedestrian networks and public spaces that promote ease of access, a direct coexistence with the existing urban fabric and barrier free mobility for all.
    b. Pedestrian access and transit – focuses on the access to public or privately supported methods of mass transit-oriented forms of mobility and focuses on pedestrian forms of mobility as a primary or equal method of transportation when compared to conventional vehicular modes.
    c. Neighborhood retail and services – proximity to vital and relevant supporting uses and services are necessary for a successful Lifelong Community. Mixture of uses, walkable streets and services oriented to a range of population needs is the context of this issue.
    d. Social interaction – social interaction with the full range of the population is a proven requirement of lifelong communities. Pedestrian accessible streets and dwellings, a full stratum of dwelling types, community programming elements and careful placement of improvements are key components in creating a socially vibrant community.
    e. Dwelling types – a range of dwelling types within a walkable range is crucial to meet the social, economic and physical goals of a lifelong community. Creative architectural and planning solutions, a strong but flexible regulatory framework and policies that promote efficient and sustainable methods of construction are among the crucial requirements of this issue.

   f. Healthy living – accessibility to fitness, education, cultural and health maintenance programming elements are vital to a successful lifelong community and are the primary concerns of this issue.
   g. Environmental and Sustainable Solutions – the creation of a complete community includes provisions for the appropriate preservation of natural and cultural resources. Promotion of sustainable construction techniques, preservation of natural and cultural resources, innovative methods of power generation and integrated food production are among some of primary components related to successfully executing this issue.

4. The region will determine its "aging readiness" to provide programs, policies and services that address the needs of older adults.
5. The region will determine its "aging readiness" to ensure that communities are "livable" for persons of all ages.
6. The region will harness the talent and experience of older adults
7. To determine "age readiness," local comprehensive plans should review:
   a. Demographics;
   b. Quantity, quality, and type of existing housing stock;
   c. Land use patterns; and
   d. Quantity, quality, and type of recreational needs.
8. Comprehensive plans will promote development patterns and design features to meet the needs of seniors.
9. Comprehensive plans and ordinances will promote Universal Design/Accessible Building Standards for buildings as well as recreational areas.
10. Comprehensive plans will include goals and objectives that specifically address the aging population.
11. Consider seniors and the elderly when reviewing site plans for new construction and/or renovations.
12. The region will ensure comprehensive plans permit basic services within walking distance recognizing it is a great convenience for all residents but an absolute necessity for an aging population.

Performance Standards

To meet minimum ranking requirements for Communities for a Lifetime, one must obtain a total of five (5) points. To meet excellence ranking requirements one must obtain a total of twelve (12) points.

Performance Standard = 1 point

1. Develop a physical inventory of existing assets and elements that would support and impede the implementation of a Lifelong Community through a series of workshops and site analysis efforts using the guiding principles cited in this section as a gauge for applicability.
2. Based on the inventory of existing assets build an action plan that is specific to the locality. The action plan shall address and include at a minimum appropriate measures related to the seven (7) tenets of Lifelong Communities cited in the guiding principles.
3. Incorporate "livability principles" as part of local comprehensive plans, including affordable and appropriate housing options.
4. Incorporate "livability principles" as part of local comprehensive plans by including supportive community features and services.
5. Allow accessory dwelling units by right in appropriate zones.
6. Allow mixed-use buildings by right in appropriate zones.
7. Plan for a floating zone specific to the future housing needs of the elderly.
8. Create an overlay zone that specifies regulations and permitted uses that address senior population needs and are consistent with the guiding principles cited in this section.
9. Adopt incentive-based zoning provisions that require new housing developments to provide affordable housing units for seniors.
10. Provide for a senior center, recreation center, or similar facility that facilitates social interactions.

Performance Standard = 2 point

1. Adopt Universal Design/Accessible Building Standards.
2. Develop a comprehensive inventory of existing sidewalks within existing communities and develop a comprehensive program to address barrier free access, safe roadway crossings, and way finding and safety signage.
3. Develop a comprehensive study and inventory related to safe and aesthetic streets in the context of street lighting by striking the balance between safety, aesthetics and appropriate unobtrusive lighting levels.
4. Retrofit and rezone areas to provide commercial uses in existing neighborhoods.
5. Access and linkages play a major role in creating vibrant public spaces and promote social interaction. Implement a community garden, plaza or neighborhood park with amenities such as seating, lighting, shade and landscaping to make people feel safe and promote social interaction.
6. Provide for a community-based information program that educates and disseminates information related to healthy living.
7. Create and implement a program to provide incentives or to subsidize home modifications for the following:
   - lever door handles;
   - 32-inch minimum entry door, with 36 inches;
   - nonslip surfaces;
   - low thresholds;
   - stairs with handrails on both sides;
   - kitchen counters at varying work heights and with rounded corners;
   - single-lever faucets; and
   - grab bars.

Coastal Vulnerability and Resilience

Vision

Resilent communities minimize any disaster's disruption to everyday life and their local economies. Resilient communities are not only prepared to help prevent or minimize the loss or damage to life, property, and the environment, but they also have the ability to quickly return citizents to work, reopen businesses, and restore other essential services needed for a full and timely economic recovery.

Guiding Principles

1. The region believes that a community's resilience is measured b its sustained ability to repare for, respond to, and fully bounce back from crises.
2. The regions strengthen is in our communities resilience and in understanding the region's vulnerabilities, and in taking positive collective actions to limit the impact of a disruptive crisis, and recovering rapidly from disasters.
3. The region believes in collaborating with a wide rnage of community resilience experts, community leders and private sector partners to work together to increase collective capactites to respond to adversity with increased resources, competence, and connectdness to one another.

Performance Standards

To meet minimum ranking requirements for Communities for a Lifetime, one must obtain a total of four (4) points. To meet excellence ranking requirements one must obtain a total of four (4) points.

Performance Standard = 1 point

1. Include a section on coastal vulnerability and resilience in loval comprehensive plan update.
2. Incorporate Hazard Mitigation Plan into the comp planning process.
3. Develop a post-disaster redevelopment plan.
4. Complete a city-wide stormwater masterplan and flooding analysis.
5. Participate in the CRS.
6. Adopt a Flood Damage Control ordinance.
7. Develop landscaping standards for redevelopment areas within known hazard areas.
8. Complete an inventory of trees on city-owned properties and ROWs.
9. Adopt mitigation measures that will increase protection of the floodplain and decrease the potential for flood damage.

Performance Standard = 2 point

1. Adopt a Conservation Subdivision Ordinance to encourage more greenspace within hazard areas.
2. Modify the minimum and maximum density requirements to account for hazard areas.
3. Reduce the minimum street width requirements for residential developments within hazard areas.
4. Design the road and culvert level of service to the 100-year event along evacuation routes.

Strategies And Regional Work Program

	Brief description of the activity	Timeframe	Responsible Party	Estimated cost	Funding source(s)	Issues Addressed	Opportunities Addressed	Guiding Principle	Performance Standard Addressed
	INFRASTRUCTURE: WATER & WASTEWATER								
1	Coordinate among adjacent jurisdictions in provision of water and wastewater treatment services and facilities.	2016-2021	CRC, EPD, Regional Water Council	$80,000	TBD	GM-3	O-IWW-4	IWW-7	IWW-Exc-9
2	Draft water and wastewater master plan to coordinate service delivery on a regional scale.	2016-2021	CRC, EPD, Regional Water Council	TBD	TBD	-	O-IWW-1	IWW-7	IWW-Exc-9
3	Promote development practices that minimize the withdrawal of water from wells and maximize reuse of treated wastewater.	2016-2021	CRC, Stakeholders	TBD	TBD	IWW-3	-	IWW-3	IWW-Exc-4
4	Promote water conservation by through programs such as Water First, Water Smart and Water Sense	2016-2021	CRC, Stakeholders	TBD	TBD	IWW-2	-	IWW-4	IWW-Exc-10
5	Promote the use of the best available technology, dependent on soil type, for wastewater treatment.	2016-2021	CRC, Health District	TBD	TBD	IWW-5 NR-15	-	IWW-5	IWW-Min-4
6	Identify conventional septic on properties within 90' of marshes, rivers, and State water bodies.	2016-2021	Health District UGA MAREX	$10,000	EPA 319, NOAA	IWW-5 NR-15	-	IWW-6	IWW-Min-2
7	Overlay the future land use, soils classifications, proximity to surface waters and other applicable criteria to define areas that will support growth with septic tanks.	2016-2021	CRC, Health District, UGA MAREX	$2,000	TBD	IWW-7	-	IWW-5	IWW-Min-2
8	Develop a prioritized septic tank retrofit program to remove septic tanks in unsuitable areas.	2016-2021	CRC UGA MAREX Health District	$5,000	TBD	IWW-5 NR-15	-	IWW-5 IWW-6	IWW-Exc-1 IWW-Exc-7
9	Promote adoption of inspection and maintenance ordinance for septic systems.	2016-2021	CRC, Health District UGA MAREX	$2,500	TBD	IWW-5 NR-15	-	IWW-6	IWW-Min-4
	INFRASTRUCTURE: STORMWATER								
10	Promote adoption of Coastal Stormwater Supplement (CSS).	2016-2021	CRC, Stakeholders	$1,900	EPA 319	ISW-2	O-ISW-1	ISW-2	ISW-Min-1
11	Identify and work with counties/municipalities moving forward with project plans to implement LID/CSS management practices	2016-2021	CRC, DCA, Stakeholders	$10,000	DCA, EPD	IWW-2		ISW-5 GM-9	ISW-Min-3 GM-Exc-8
	INFRASTRUCTURE: TRANSPORTATION								
12	Enact transportation impact fee for new developments to mitigate effects of growth.	2016-2021	CRC, DCA, Consultant, Stakeholders	TBD	-	IT-9	O-IT-6	GM-21	IT-Min-2
13	Work to secure dedicated revenue sources for transportation improvements.	2016-2021	CRC, GDOT, Stakeholders	$10,000	DOT	IT-12	-	IT-7	IT-Exc-5
14	To promote street network connectivity, incorporate in all programming, maintenance, construction, operations and project development the needs of non-motorized travelers (including pedestrians, bicyclists and persons w/disabilities).	2016-2021	CRC, GDOT, Regional TCC	$10,000	DOT, Staff time	IT-4 IT-6 IT-7	O-IT-1 O-IT-2 O-IT-3 O-IT-4	IT-1 IT-3 IT-4	IT-Min-3 IT-Min-5
	INTRINSIC RESOURCES: CULTURAL & HISTORIC								
16	Promote the adoption of design guidelines that maintain viewsheds of significant cultural and historic assets.	2016-2021	CRC	TBD	TBD	CH-2	O-CH-1	CH-3	CH-Min-7
18	Coordinate and support the Gullah/Geechee Cultural Heritage Corridor plan by identifying sites and capturing traditions in the RIR.	2016-2021	CRC Cultural Heritage Corridor Commission	$1,000	NPS	CH-3 CH-6	O-CH-2 O-CH-5 O-CH-7	CH-7	CH-Min-8
19	Develop and coordinate plans for evacuation and post-disaster recovery of historic sites and tourist destinations.	2016-2021	CRC,GEMA,GDOT, DNR, Local, State, Federal, NGO	TBD	DNR	CH-6	O-CH-5 O-CH-9	CH-1	CH-Exc-9
20	Educate residents and visitors regarding the statewide importance of this region's cultural and historic resources.	2016-2021	CRC, CVBs, NGOs	TBD	TBD	-	O-CH-6	CH-6	CH-Min-9
	INTRINSIC RESOURCES: NATURAL								
21	Employ land use cover data to undertake a comprehensive assessment of significant natural resources and identify mitigation strategies.	2016-2021	CRC, GFC, USFS, UGA MAREX	$14,000	DCA, GFC, Sea Grant/NOAA GADNR/USEPA	NR-4	O-NR-9	NR-1	NR-Min-1
22	Develop a comprehensive inventory of resources, including rare species and habitat locations, to identify priority areas for acquisition and/or protection.	2016-2021	GA Sea Grant WRD	$500K	Sea Grant	NR-1	O-NR-9	NR-1	NR-Min-2
23	Encourage restoration of environmentally significant resources.	2016-2021	DNR, EPA, Stakeholders	TBD	EPA, NOAA, CZM	NR-1 NR-18	O-NR-6	NR-1	NR-Exc-10

25	Coordinate resource acquisition programs and conservation easements between various federal, State, and local governments and NGOs and private landholders.	2016-2021	CRC, Stakeholders	TBD	DCA, HPD, DNR, Federal, Local, CRC	NR-20	GM-3	NR-19	NR-Exc-1
27	Seek opportunities to enhance or acquire public access to natural resources for recreation, education, and tourist attractions as appropriate.	2016-2021	Stakeholders	TBD	HPD	NR-23	O-EDT-8	NR-8	NR-Exc-9
28	Encourage development practices and sitings that do not significantly impact environmentally sensitive areas.	2016-2021	UGA MAREX	$4,000	Sea Grant/NOAA GA DNR/US EPA	NR-3	O-1SW-1	NR-11	NR-Min-5
29	Identify innovative funding sources and development of ecosystem services markets (e.g. carbon, storm buffers, traditional land and water uses).	2016-2021	UGA MAREX	TBD	Sea Grant/NOAA	-	-	NR-17	-
30	Develop a method to place a value on ecosystem services.	2016-2021	UGA MAREX	TBD	Sea Grant/NOAA	NR-1	O-NR-12	NR-16	-
31	Incorporate climate change impacts, including sea level rise into local comprehensive plans, land management and protection plans.	2016-2021	CRC,Stakeholders, FEMA,Sea Grant,DNR	$10,500	SeaGrant, DCA, CRC	GM-9	-	NR-20	-
32	Continue public education programs that promote conservation of coastal resources and promote the Green Infrastructure Guidebook and develop website.	2016-2021	CRC, GA Forestry	$34,500	GA Forestry	-	O-NR-7 O-NR-8 O-NR-16	NR-9	NR-Min-1
33	Work to abate non-native, invasive species.	2016-2021	WRD UGA MAREX	TBD	Sea Grant/NOAA	IWW-8 NR-10	O-NR-1	-	NR-Exc-2
	REGIONAL GROWTH MANAGEMENT								
34	Complete a safe growth regional audit to analyze impacts of current policies, ordinances, and plans on community safety from hazard risks due to growth.	2016-2021	CRC, Stakeholders, UGA Environment & Design	$5,500	DCA	GM-9	O-GM-11	GM-9 GM-10 GM-13 GM-22 NR-20	GM-Min-6 GM-Min-8
35	Promote growth in those areas that can be efficiently served by infrastructure, such as water, wastewater and transportation.	2016-2021	CRC Stakeholders UGA MAREX	TBD	DCA, Sea Grant/NOAA GA DNR/ US EPA	GM-5	O-GM-9	GM-Min-1 GM-Min-3	GM-Min-1 GM-Min-3
36	Focus new development in compact nodes that can be served by public or community infrastructure.	2016-2021	CRC, Stakeholders	TBD	TBD	GM-5 GM-6	O-GM-3	GM-6	GM-Min-2 GM-Min-3 GM-Exc-2
37	Encourage clustered developments, particularly in areas that are suitable and proposed for development, that maximize open spaces, protect natural, cultural and historic resources.	2016-2021	UGA MAREX	$2,000	Sea Grant/NOAA GA DNR/ US EPA	GM-7	O-PAL-1	GM-9	GM-Min-4
38	Implement the development of a “transfer of development rights” (TDR) program, purchase development rights (PDR) and/or preservation agricultural district (PAD).	2016-2021	CRC, Stakeholders	TBD	Staff Time, Farm Bureau	PAL-4	O-GM-8 O-GM-9	GM-14	GM-Exc-9
39	Encourage development and compliance with minimum uniform land use and development standards for all local governments to adopt in the region.	2016-2021	CRC, Stakeholders	TBD	TBD	GM-2	-	GM-15	GM-Exc-11
40	Promote affordable housing options.	2016-2021	CRC, Stakeholders	$2,000	Staff Time	CL-2	O-GM-9	GM-17	GM-Min-5
41	Encourage the placement of new schools near existing infrastructure.	2016-2021	CRC, Stakeholders	$2,000	Staff Time	GM-6		GM-16 GM-18	GM-Exc-8
42	Draft a Disaster Resilient Communities Plan incorporating resilience planning into the Regional Plan.	2016-2021	CRC, Stakeholders, UGA Environment &	$33,400	CRC, DCA, UGA Stakeholders	GM-9	O-GM-11	GM-22	GM-Exc-9
	Collect and translate CAMA data, utilizing WinGAP for Bulloch, Effingham, Liberty, Long, McIntosh, Screven counties.	2016-2021	CRC, DNR, Stakeholders	$50,000	DCA	GM-9	O-GM-11	GM-22	GM-Exc-9
43	Draft a regional catastrophic preparedness plan through coordination with the All Hazards Council.	2016-2021	CRC, All Hazards Council, DNR	TBD	FEMA, GEMA	GM-9	O-GM-11	GM-22	GM-Exc-9
44	Develop urban design and landscape design for streetscapes, corridors, urban parks and plazas.	2016-2021	CRC, UGA	TBD	DCA, Stakeholders	GM-4	O-GM-9	GM-1	GM-Exc-1
	ECONOMIC DEVELOPMENT: BUSINESS & INDUSTRY								
45	Conduct an inventory of assets and needs across the region, understanding the variations of differences in communities.	2016-2021	CRC, LSEGA, Development Authorities, EDA, Consultant	$25,000	EDA	EDBI-4 EDBI-12	O-EDBI-4 O-EDBI-8 O-EDBI-14	EDBI-1 EDBI-6 EDBI-7 EDBI-8	EDBI-Min-1 EDBI-Min-2 EDBI-Min-5
46	Develop a regional economic development land use plan to identify appropriate sites for manufacturing, distribution, etc., while recognizing and respecting the differences between communities.	2016-2021	CRC, LSEGA, Development Authorities	$10,000	EDA	EDBI-15	O-EDBI-3 O-EDBI-14	EDBI-1 EDBI-3	EDBI-Exc-6
47	Create a distribution centers master plan to identify locations within the region best suited for distribution based on the existing or programmed transportation network.	2016-2021	CRC , LSEGA,GPA	$10,000	EDA	EDBI-12	O-EDBI-3 O-EDBI-13	EDBI-4	EDBI-Exc-7
48	Coordinate federal, State and local economic development funding programs and initiatives that affect the coast.	2016-2021	CRC, LSEGA,OGA,EDA, DNR, GDEcD, EB-5 , DCA	$150,000 per year	EDA	EDBI-8	O-EDBI-11 O-EDBI-20	EDBI-9	EDBI-Exc-4

49	Draft a workforce development strategy.	2016-2021	CRC, LSEGA,Tech Colleges, Universities, Development Authorities	Staff time	GDEcD, OGA	EDBI-1 EDBI-2 EDBI-3 EDBI-5 EDBI-6	O-EDBI-2 O-EDBI-6 O-EDBI-7 O-EDBI-9	EDBI-10	-
50	Coordinate business and industry needs with the educational entities, including K-12 and higher education, to provide the appropriate workforce skills.	2016-2021	CRC, LSEGA, Tech Colleges, Universities, Development Authorities	$10,000	GDEcD, OGA	EDBI-1 EDBI-2 EDBI-3 EDBI-5 EDBI-6	O-EDBI-2 O-EDBI-6 O-EDBI-7 O-EDBI-9	EDBI-10	-
51	Create an education task force to work with local school systems, universities and technical schools to identify mechanisms for increased student performance.	2016-2021	CRC, LSEGA,Universities, Tech Colleges, school superintendents	TBD	TBD	EDBI-6	O-EDBI-2 O-EDBI-6 O-EDBI-7 O-EDBI-9	EDBI-10	-
52	Protect and maintain the strong regional military presence to assure economic stability and to provide a high-quality workforce.	2016-2021	CRC, LSEGA, Military, FLETC, Development Authorities	$80,000	OEA	EDBI-3	O-EDBI-2 O-EDBI-5	EDBI-5	GM-9
53	Recognize and support traditional industries undergoing changes to serve emerging markets (i.e., maintain silvaculture to support biofuels production).	2016-2021	CRC, LSEGA, DNR, Existing Industry	$5,000	EDA	EDBI-14 EDBI-17 EDBI-18	O-EDBI-16 O-EDBI-17 O-EDBI-19	EDBI-1	
54	Support balanced recruitment of jobs while remaining aware of the need to recruit clean, high-tech growth industries (Knowledge Based Businesses).	2016-2021	CRC, LSEGA,GDEcD, Development Authorities	Staff time	EDA	EDBI-1 EDBI-18	O-EDBI-1 O-EDBI-2	EDBI-7	
55	Develop and maintain a regional database of existing buildings and available sites.	2016-2021	CRC, LSEGA, Development Authorities, utility providers	Staff time	EDA	EDBI-8 EDBI-10 EDBI-11 EDBI-15	O-EDBI-3 O-EDBI-18 O-EDBI-20	EDBI-2	EDBI-Min-4
56	Develop a regional strategy to address brownfields.	2016-2021	CRC, LSEGA,GDEcD, Development Authorities, DNR	Staff time	EPA	EDBI-22		EDBI-3	EDBI-Exc-8
57	Encourage international economic development.	2016-2021	CRC, LSEGA,GDEcD, EB-5	Staff time	EDA		O-EDBI-21		EDBI-Min-8
	ECONOMIC DEVELOPMENT: TOURISM								
58	Promote balanced, cooperative and coordinated cultural and resource-based tourism.	2016-2021	CRC, GDEcD, Development Authorities, Chambers	Staff time	DNR, OGA	EDT-8 EDT-9	O-EDT-1 O-EDT-2 O-EDT-3 O-EDT-8	EDT-1 EDT-2	EDT-Min-3
59	Coordinate federal, State and local tourism funding and initiatives.	2016-2021	CRC, GDEcD, Development Authorities, EDA, Chambers	Staff time	EDA, OGA	EDT-8	O-EDT-11	EDT-4 EDT-11	EDT-Min-2
60	Actively pursue elimination of litter, junkyards and other eyesores, especially along major thoroughfares and gateways.	2016-2021	KGB affiliates	TBD	TBD	EDT-2	O-EDT-12	EDT-3 EDT-9	EDT-Exc-4 EDT-Exc-5
	PRESERVATION OF AGRICULTURAL LANDS								
61	Provide education on farm transfer and tax reduction strategies.	2016-2021	Farm Bureau, American Farmland Trust	TBD	TBD	PAL-2	0-PAL-1 O-PAL-2	PAL-1	PAL-Exc-1
62	Provide education on purchasing the future development rights of farmland through private land trusts and conservation easements, or using tax-credit programs to encourage retention of farmland as open space.	2016-2021	CRC, Farm Bureau, Land Trusts	$1,500	DCA	PAL-3	O-PAL-1 O-EDT-11	PAL-1	PAL-Exc-1
	COMMUNITIES FOR A LIFETIME - LIFELONG COMMUNITIES								
63	Develop a inventory of existing assets and elements that would support or impede the implementation of a Lifelong Community.	2016-2021	CRC, Stakeholders	TBD	TBD	CL-1 CL-5	O-CL-3	CL-3 CL-4 CL-5 CL-7	CL-Min-1 CL-Min-2
64	Develop a comprehensive inventory of existing sidewalks within communities and develop a comprehensive program to address barrier free access, safe roadway crossings, and wayfinding and safety signage.	2016-2021	CRC Stakeholders	$10,000	GDOT	CL-4	O-CL-4	CL-3 CL-12	CL-Exc-2 CL-Exc-3
	PLANNING AND COORDINATION								
	INFRASTRUCTURE: WATER & WASTEWATER								
65	Develop a regional Water/Wastewater GIS Layer that includes, water lines, sewer lines, manhole covers, lift stations, and towers.	2016-2021	CRC, DCA, EPD	$10,000	DCA	-	O-IWW-1	IWW-7	-
66	Locate septic tanks and create an online mapping application whereby tanks may be monitored in a timely manner. Incorporate the WELSTROM Program into those counties that do not have septic tanks located.	2016-2021	CRC, DNR, UGA MAREX	TBD	DNR, EPA	IWW-5	-	IWW-6	IWW-Min-4
67	Host workshop to advance latest technique, policies, and best practices.	2016-2021	CRC	$1,900	DCA	IWW-2	O-IWW-3	GM-20	IWW-Min-8
68	Evaluate a water transmission system to transport potable water in a cost effective manner by utilizing a computer hydraulic model.	2016-2021	CRC Consultant	TBD	TBD	IWW-7	O-IWW-4	IWW-7	WW-Exc-9

69	Review the ISO ratings within the region to assess whether regionalization could potentially reduce scores.	2016-2021	CRC Consultant	TBD	TBD	IWW-8	-	IWW-2	-
	INFRASTRUCTURE: STORMWATER								
70	Create impervious surface layer for the region to delineate wetlands and natural resources from paved areas.	2016-2021	CRC	TBD	EPA			ISW-3	ISW-Exc-3
71	Promote adoption of stormwater utility program.	2016-2021	CRC, Consultant	TBD	EPA		O-ISW-2		ISW-Exc-4
	INFRASTRUCTURE: TRANSPORTATION								
72	Update bike and ped plans for the region	2016-2021	CRC	$20,000	DOT	IT-4 IT-6	-	IT-1	IT-Exc-4
73	Draft region-wide minimum Traffic Impact Analysis (TIA) standards.	2016-2021	CRC, Consultant	TBD	DCA, DOT	IT-11	-	IT-4	IT-Min-1
74	Assist with updates of local plans to provide for multi-use corridors and address multi-modal transportation needs.	2016-2021	CRC	$2,500	DOT	IT-8	O-IT-1	IT-2	IT-Min-3
75	Work with jurisdictions to set thresholds and guidelines for the appropriate pedestrian and bicycle facility requirements.	2016-2021	CRC, Consultant	TBD	DOT	IT-4 IT-6	O-IT-2		IT-Min-5
76	Develop regional context sensitive design practices to better integrate the road and its design.	2016-2021	CRC, Consultant	TBD	DOT	IT-2 IT-7	O-IT-4	IT-6	IT-Exc-1
77	Host workshops on transportation planning best management practices such as street connectivity and transit oriented developments.	2016-2021	CRC	$1,900	DCA	IT-9	O-IT-5	IT-1	IT-Exc-2 IT-Exc-3
78	Pursue public and private funding sources to implement the Coastal Georgia Greenway.	2016-2021	CRC	$2,000	Staff Time		-	IT-7	IT-Exc-8
79	Create a Transportation Coordinating Committee (TCC) to coordinate regional transportation planning activities for the coastal region.	2016-2021	CRC	$10,000	Staff Time, DOT	IT-1	O-IT-1	IT-3	IT-Min-6
80	Work with Transportation Coordinating Committee (TCC) to develop a Regional Transportation Plan that incorporates (1) land use-transportation integration, (2) explores alternative and more stable financing sources, and (3) promotes regional coordination.	2016-2021	CRC, MPO, Counties, GDOT	TBD	Staff Time	IT-1	O-IT-1	IT-3	IT-Min-6
81	Host practicum on best practice for transportation/mobility	2016-2021	CRC, GDOT	$1,900	DCA	IT-9	O-IT-5	IT-1	IT-Exc-2 IT-Exc-3
	INTRINSIC RESOURCES: CULTURAL & HISTORIC								
82	Provide outreach, training, and technical assistance through presentations at institutions, government meetings, and symposiums.	2016-2021	CRC	Staff time	TBD	-	O-CH-6	CH-7	CH-Min-9
83	Reconvene the HPAC to provide assistance to member governments and non-profit organizations in preservation planning, cultural resource management, and Main Street and Better Hometown initiatives.	2016-2021	CRC, HPD	$4,400	HPD	GM-3	O-ED-20	CH-11	CH-Min-10
84	Review and monitor plans for evacuation and post-disaster recovery of historic sites and tourist destinations.	2016-2021	CRC	Staff time	MCPPT NTHP	CH-6	O-CH-5 O-CH-9	CH-1	CH-Exc-9
85	Monitor and mitigate the demolition/loss of historic and cultural resources.	2016-2021	CRC	Staff time	TBD	CH-4 CH-6	-	CH-1	CH-Min-5
	INTRINSIC RESOURCES: NATURAL								
86	Provide assistance to implement water conservation programs through the promotion of DCA's Water First program, EPA's Water Sense program and UGA Cooperative Extension's Water Smart program.	2016-2021	CRC	Staff time	DCA	IWW-2	O-IWW-1	IWW-4	IWW-Min-3 IWW-Min-9
87	Assist local governments with updating land development codes	2016-2021	CRC	$45,000	DCA	NR-22	O-NR-7	NR-2	IWW-Exc-8 NR-Exc-10
	REGIONAL GROWTH MANAGEMENT								
88	Facilitate and administer a local government leadership development program.	2016-2021	CRC	$25,200	DCA	GM-1	O-GM-2	GM-16	GM-Exc-12
89	Promote the adoption of the Regional Design Guidelines to support and enhance the desired character of the region.	2016-2021	CRC	$22,000	TBD	GM-2	O-GM-3	GM-1	GM-Exc-1
90	Assist communities with updating Floodplain Management Plans to address Flood Insurance Rate Maps updated with LiDAR data.	2016-2021	CRC	Staff time	DCA EPA	NR-3	O-NR-6	ISW-4	GM-Min-7
91	Assist communities develop and implement a Community Rating System program to improve flood protection and decrease flood insurance rates.	2016-2021	CRC	$15,000	TBD	NR-3	O-NR-6	ISW-4	GM-Exc-10
92	Assist communities with updates to their Solid Waste Management Plans	2016-2021	CRC	Staff time	DCA		O-GM-10	GM-23	-
93	Provide LiDAR training to local governments to show benefit to them and allow them to take advantage of the revenue generating possibilities of this dataset.	2016-2021	CRC	Staff time	DNR, NOAA	NR-3	-	ISW-4	-
94	Host practicum on coastal community planning and discuss the importance of hazard resilience	2016-2021	CRC	$1,900	DCA	GM-9	O-GM-11	GM-8 GM-9 GM-10 GM-13 GM-22 NR-20	GM-Min-6 GM-Min-8

95	Host practicum/workshop best practices for growth management	2016-2021	CRC	$1,900	DCA	GM-2 GM-4 GM-7	O-GM-9 O-GM-7 O-GM-10	GM-1 GM-2 GM-6 GM-8 GM-9 GM-10 GM-11	GM-Min-1 GM-Min-4 GM-Exc-1 GM-Exc-5 GM-Exc-6 GM-Exc-7 GM-Exc-8 GM-Exc-11
96	Maintain GIS enterprise infrastructure to leverage licensing agreements, broaden the accessibility of a GIS repository, and provide disaster and security back up services. Create regional GIS model that includes developing a GIS library for expanded decision support information, coordination for multi-jurisdiction projects and shared tools.	2016-2021	CRC, Regional Stakeholders	$10,000	DCA, local dues	ARSA	ARSA	ARSA	ARSA
	ECONOMIC DEVELOPMENT: BUSINESS & INDUSTRY								
97	Maintain Economic Development website.	2016-2021	CRC	Staff time	Local dues, EDA	EDBI-12 EDBI-14 EDBI-15 EDT-9	O-EDBI-3 O-EDBI-13 O-EDBI-14 O-EDBI-15	EDBI-1 EDBI-7	-
98	Develop a plan for regional economic development.	2016-2021	CRC	Staff time	EDA	EDBI-8 EDBI-12 EDBI-14 EDBI-21	O-EDBI-1 O-EDBI-2 O-EDBI-3 O-EDBI-20	EDBI-1 EDBI-2 EDBI-3 EDBI-4	EDT-Exc-11
99	Develop education and/or expo to demonstrate economic benefits of energy efficiency programs to demonstrate efficiency investments quickly pay for themselves through increased economic activity and job creation.	2016-2021	CRC	TBD	TBD	GM-5 GM-8	O-GM-5	EDBI-2	EDT-Exc-6
100	Promote distribution of business and industry across the region consistent with the Regional Plan.	2016-2021	CRC	Staff time	TBD	EDBI-4 EDBI-8 EDBI-12	O-EDBI-2 O-EDBI-3	EDBI-1	EDBI-Min-7
101	Coordination with Federal, State and local tourism and economic development entities to promote and support initiatives and funding opportunities.	2016-2021	CRC	Staff time	TBD	EDBI-8	O-EDBI-20	EDBI-15	EDT-Min-2 EDBI-Min-6
	ECONOMIC DEVELOPMENT: TOURISM								
102	Develop a plan for regional tourism marketing.	2016-2021	CRC	Staff time	EDA	EDT-8 EDT-9	O-EDT-5 O-EDT-8 O-EDT-11	EDT-1 EDT-4	EDT-Min-1
103	Develop a regional Heritage Tourism and Eco-Tourism, Agri-Tourism plan.	2016-2021	CRC	Staff time	EDA, DNR	EDT-2 EDT-6	O-EDT-9 O-EDT-10	EDT-8	EDT-Exc-11 CH-Exc-3
104	Develop and promote incentives to enhance and grow regional cultural, eco- and agri-tourism.	2016-2021	CRC	Staff time	EDA, OGA	EDT-2 EDT-8 EDT-9	O-EDT-2 O-EDT-5 O-EDT-11	EDT-4	EDT-Exc-10
	PRESERVATION OF AGRICULTURAL LANDS								
105	Provide technical assistance in support of adoption of TDR, PDR or Planning Resource Districts for agricultural land.	2016-2021	CRC	Staff time	DCA	PAL-4	O-PAL-1 O-EDT-11		PAL-Exc-1
	COMMUNITIES FOR A LIFETIME - LIFELONG COMMUNITIES								
106	Build an action plan that is specific to the locality that addresses and includes at a minimum appropriate measures related to the seven (7) tenets of Lifelong Communities.	2016-2021	CRC	Staff time	DCA	CL-1 CL-3	O-CL-1 O-CL-3 O-CL-4	CL-7 CL-10	CL-Min-2 CL-Min-8
107	Assist local governments with incorporation of "livability principles" as part of local comprehensive plans, including affordable and appropriate housing options, community features and services.	2016-2021	CRC	Staff time	DCA	CL-2	O-CL-1 O-CL-3 O-CL-5	CL-3	CL-Min-3 CL-Min-7 CL-Min-9
108	Create web-based survey to gauge age readiness of communities and host Coastal Community for All Ages Charrette	2016-2021	CRC	TBD	DCA	CL-3	O-CL-1 O-CL-3 O-CL-6	CL-3	CL-Min-4 CL-Exc-10
109	Create an overlay zone that specifies regulations and permitted uses that address senior population needs and is consistent with the Livable Communities guiding principles.	2016-2021	CRC	Staff time	DCA	CL-5	O-CL-1 O-CL-3 O-CL-7	CL-3	CL-Exc-8
	REVIEW								
110	Evaluate and Monitor the effectiveness of Regional Plan and expand database to include GIS mapping capabilities and reporting forms	2016-2021	CRC	$47,300	DCA				
111	INFRASTRUCTURE: WATER & WASTEWATER								

112	Review and comment on water and wastewater facility expansions (public and private) not identified in the regional water and wastewater master plan in order to support the investment of public infrastructure expenditures.	2016-2021	CRC	Staff time	Local dues, DCA				
	INFRASTRUCTURE: STORMWATER								
113	Review and comment on stormwater management plans and ordinances.	2016-2021	CRC	Staff time	Local dues, DCA				
	INFRASTRUCTURE TRANSPORTATION								
114	Review and comment on long-range transportation plans for consistency with the Regional Plan	2016-2021	CRC	Staff time	Local dues, DCA				
	INTRINSIC RESOURCES: CULTURAL & HISTORIC								
115	Review and comment on all developments which contain a site identified in, or may have impact on resources identified in, the Regionally Important Resources Plan.	2016-2021	CRC	Staff time	Local dues, DCA				
116	Review historic preservation ordinances for consistency with the Georgia Historic Preservation Act.	2016-2021	CRC	Staff time	Local dues, DNR-HPD				
	INTRINSIC RESOURCES: NATURAL								
117	Review and comment on all developments which contain a site identified in, or may have impact on resources identified in, the Regionally Important Resources Plan.	2016-2021	CRC	$20,500	Local dues, DCA				
	REGIONAL GROWTH MANAGEMENT								
118	Review all Developments of Regional Impact (DRIs)	2016-2021	CRC	$22,700	Local dues, DCA				
119	Update Comp Plans, STWP, CIE and conduct plan reviews for local governments with DCA deadlines.	2016-2018	CRC, DCA	$51,000	DCA, local dues				
	ECONOMIC DEVELOPMENT: BUSINESS & INDUSTRY								
120	Review and comment on the location of facilities not identified in the target industry master plan	2016-2021	CRC	Staff time	Local dues, EDA				
	TECHNICAL ASSISTANCE- Holding Area for Future projects								
	INFRASTRUCTURE: WATER & WASTEWATER								
121									
	INFRASTRUCTURE: STORMWATER								
122									
	INFRASTRUCTURE TRANSPORTATION								
123									
	INTRINSIC RESOURCES: CULTURAL & HISTORIC								
124									
	INTRINSIC RESOURCES: NATURAL								
125									
	REGIONAL GROWTH MANAGEMENT								
126									
	ECONOMIC DEVELOPMENT: BUSINESS & INDUSTRY								
127									
	GIS MAPPING								
128	Tybee GIS Database	2016-2021	CRC	Staff	City of Tybee				
129	Camden County GIS Database	2016-2016	CRC	Staff	Camden County				
130	City of Hinesville GIS Database	2016-2021	CRC	Staff	City of Hinesville				
131	Next Gen 911	2016-2022	CRC	Staff	Region-wide				

Evaluation and Monitoring

Quality Growth Effectiveness - (http://www.crcga.org)

The CRC utilizes the Quality Growth Effectiveness (QGE) Assessment Survey as an Evaluation and Monitoring tool to measure performance standards as they relate to ongoing implementation of the Regional Plan. The QGE survey compiles A State of the Region through responses from local jurisdictions regarding consistency with the Regional Plan of Coastal Georgia. These answers determine the Plan's effectiveness, identifies implementation barriers, areas of best practices and most importantly areas of the Regional Plan that may require modification moving forward.

The results are a comprehensive collection of activities and processes that local governments undertake. The tool helps monitor the implementation and effectiveness of the Plan's strategies by uncovering the gap between actual and targeted performance; and systematically helps coordinate and align resources. The reporting mechanism helps to articulate where a local government is; identify actions needed to make progress and provides performance feedback to enable the Regional Plan to evolve and grow as requirements and circumstances dictate.

The web-based interface assists in tracking and analyzing relevant indicators related to Topics of Regional Importance which are evaluated based upon Performance Standards. Automation adds structure to implementing performance standards, transforms data into information and sound knowledge, to communicate performance information. A portion of the interface allows for input of successful achievement of standards, the incorporation of relevant notes and uploading of back-up information.

Quality Community Objectives Assessment

A Quality Community Objectives (QCO) Assessment of each local government within the region is required to determine if they are achieving prescribed performance standards. The QCO Assessment measures the Regional Plan's successes and shortcomings and provides recommendations for changes that result in the desired impact on regional development patterns. This includes reviewing the elements of the Plan, identifying whether the Plan is being effectively implemented, and assessing how the Regional Plan of Coastal Georgia is meeting the current and future needs of the jurisdiction and recommending changes.

The Quality Community Objectives (QCO) Assessment is made up of the following components.

1. Regional Assessment Database;
2. Plan Implementation Assessment Meetings
    a. Quality Community Objectives Assessment Tool
    b. Quality Growth Effectiveness Surveys

Annual Regional Work Program Updates

The Annual Regional Work Program Update serves as a milestone within the five- year planning period for Regional Plan Updates. It helps the Regional Commission evaluate and monitor communities on an approved schedule of PIAMs to best prepare for the required five-year Plan update.

Each Annual Regional Work Program Update is made up of the following components.

1. Report of Accomplishments
2. Evaluation and Monitoring Report
3. ARSA Update

Annual Report of Accomplishments

The Annual Report of Accomplishments is a management tool suitable for monitoring the implementation of the Regional Plan through a standardized format that tracks Regional Work Programs throughout the planning period. The Annual Report of Accomplishments provides a format to monitor progress towards achieving plan objectives through specific activities, work programs and technical assistance.

The Annual Report of Accomplishments serves the following functions:

- Reports the annual status of activities of the Regional Commission and municipalities;
- Communicates past year's activities to the implementation of the Regional Plan;
- Establishes a work program for the upcoming year and five-year planning period; and
- Communicates the proposed work program to implementation of issues, opportunities, guiding principles, and performance standards in the Regional Plan.

Evaluation and Monitoring Report

The Evaluation and Monitoring Report included in the Annual Regional Work Program Update reports outcomes of the previous year's Regional Work Program and Plan Implementation Assessment Meetings. It provides a schedule of the coming year's PIAMs. The Evaluation and Monitoring Report includes the past year's QCOAT and QGES results from the PIAM's and additional information from the past year's Evaluation and Monitoring activities related to the effectiveness of the Regional Plan and/or identification of plan modifications or amendments.

The Evaluation and Monitoring Report compliments the Report of Accomplishments. It provides an in depth overview of past activities and provides insight to potential technical assistance. Both documents serve as effective Quality Assurance/Quality Control tracking tools related to RADBMS inputs, annual amendments necessary and most importantly, the five-year update of the Regional Plan.

ARSA Update

The ARSA update portion of the Annual Regional Work Program Update requirements is also included in the Evaluation and Monitoring Report. Technical assistance and other activities provided in the past year's work program specifically related to an ARSA are included in the Evaluation and Monitoring Report as well as anticipated ARSA related activities or technical assistance in the upcoming year's Regional Work Program. Potential ARSA map updates will be documented in the report and catalogued in the RADBMS for inclusion in the five-year Regional Plan Update.

Appendix A: Background

Quality Growth Effectiveness - (http://www.crcga.org)

Coastal Georgia's natural beauty, its 100 miles of beaches and historic culture attract visitors and residents, alike. The resources enjoyed by residents of coastal Georgia are both abundant and varied in nature including rural and working landscapes, expanding ports, military installations, barrier islands and coastal wetlands. These characteristics create great opportunity for coastal Georgia.

When planning for growth, Coastal Georgia must consider health, infrastructure, and economies of scale, vehicle miles traveled, mobility options, and the natural environment. Coastal Georgia is faced with balancing the need for growth while maintaining the integrity of its natural resources.

Population and job growth and the corresponding changes to the built environment, make it important for regional leaders to implement a policy framework that: prepares for expected growth; maintains the region's economic progress; and protects the natural environment. It is an opportunity to shape the region—the land use patterns, transportation systems, aesthetic and other qualities that influence how we live.

The future of coastal Georgia's communities is determined by the ability to provide services and amenities that attract people to particular places: good roads; high quality schools and jobs; access to quality health care; a mix of housing; clean air and water; and a system of parks and recreational opportunities that support an active and healthy population.

The region while diverse, shares many of the same challenges, albeit on different scales—environmental concerns, transportation and infrastructure needs, and economic pressures.

Strategic, efficient growth is necessary to preserve the qualities that make coastal Georgia an attractive place to live and invest. Leadership in planning prepares the area for new residents and businesses yet to relocate here, offering a more sustainable approach to growth.

Measures of success, as well as the ability to adapt to changing needs and circumstances are hallmarks of an achievable plan. Technology, environmental issues, and economic conditions are always changing, necessitating the annual review of the *Regional Plan of Coastal Georgia*. Through this annual evaluation the CRC assesses the effects of the Plan to know if it is contributing to the desired vision and where needed, adjust to changing conditions.

Appendix B: Components of the Regional Plan

The Regional Assessments present a current picture of coastal Georgia. These two documents provide information and data necessary to substantiate important trends facing the region related to planning, land use, geography, demographics and the environment. The Coastal Six Assessment was completed in October 2007 by DCA, and the Coastal Regional Commission prepared the Regional Assessment for the Inland Four counties in April 2009.

The Regional Agenda is the heart of the Plan. It includes the region's vision for the future, key issues and opportunities to address and the implementation program for achieving the vision and addressing identified issues and opportunities. The Regional Agenda includes the following components:

1. Regional Vision. A Regional Vision for Coastal Georgia was developed by the Coastal Comprehensive Plan Advisory Committee (CCPAC) January 2006 and is carried forward to this Plan. It states:

   The vision of Coastal Georgia is to be a unique and cohesive region based upon innovation and excellence in all we do to preserve, nurture, enhance and develop our abundant human, natural, historic, cultural and economic resources.

2. Regional Development Map. The Regional Development Map illustrates the desired future land use patterns from the regions' Areas Requiring Special Attention and the regions' Projected Development Patterns using the following categories:

   a. Conservation: Areas to be preserved in order to protect important resources and environmentally sensitive areas of the region. Primary conservation areas include, but are not limited to, wetlands, flood plains, streams, endangered species and critical habitat and prime agricultural lands, federal or state listed species. Conservation areas include essential buffers along streams and wetlands, and water bodies that require riparian buffers.
   b. Rural: Areas not expected to urbanize or require urban services.
   c. Developed: Areas demonstrating urban development patterns and also illustrate the areas where water and sewer services are being provided.
   d. Developing: Areas likely to become urbanized and require urban services in the next 20 years.

3. Defining Narrative. This includes specific strategies for defining each Area Requiring Special Attention which includes the following information:
   a. Written description, and/or illustrations that make clear what type, form, style and pattern of development to be encouraged.
   b. Listing of specific types of land uses to be allowed in the area.
   c. Listing of Quality Community Objective to be pursued in the area.
   d. Identification of implementation measures to achieve the desired development pattern for the area including detailed sub-area planning, new or revised local development regulations, incentives, public investments and infrastructure improvements.

4. **Regional Issues and Opportunities.** Regional Issues and Opportunities identified serve as the framework for the Guiding Principles, Performance Standards and Implementation Strategies. Six primary issue categories are established for Coastal Georgia:

   a. **Infrastructure** includes Water and Wastewater, Stormwater, and Transportation. The availability and accessibility of public infrastructure is a pivotal factor affecting the location of new development. Extensions of and/or improvements to water, wastewater treatment facilities and transportation are used to guide and entice future development to locate in areas that both: (1) promote efficient delivery of public services, and (2) guide growth away from sensitive (e.g. valuable and vulnerable) natural, historic and cultural areas. Growth is to be directed primarily to those areas with adequate infrastructure to make use of the previous investment in infrastructure and to shape our development patterns in a rational manner. Transportation and land use coordination are also a priority.
   b. **Intrinsic Resources** includes Natural, Historic and Cultural Resources. Coastal Georgia contains some of the highest biodiversity and most significant heritage assets in the State, which are important elements of education, tourism development, economic development, health, and quality of life. Protecting, restoring, and managing natural, historic and cultural resources is a priority in coastal comprehensive planning. This includes placing a high priority on maintenance and enhancement of access to our public rivers, coastal waters, beaches, and the protection of historic areas and resources.
   c. **Regional Growth Management**. The character of our communities is enhanced and preserved through regional growth management strategies that encourage sustainable development and redevelopment and follow “quality growth” principles where our coastal environment is respected, protected and enhanced. Sustainable communities promote uniform application of growth management principles and standards whereby each local government adopts its own land use and development criteria that meet or exceed the regional minimum standards.
   d. **Economic Development** includes Business and Industry, and Tourism. The Plan seeks to build upon the region’s economic assets by increasing employment and educational opportunities, facilitating the growth and expansion of industry and business, and further promoting the region as a great place to live, work, and develop wealth. Economic development is successful through integrated land use, water resource management, transportation, and infrastructure decisions which protect and promote our coastal resources.
   e. **Preservation of Prime Agricultural Lands**. Prime agricultural farmland is an important part of this region’s natural area. Fifty-five percent of the existing land use in the region is in agricultural or forestry. Prime agricultural farmland has conservation value and agricultural as a traditional industry contributes to the region’s rich culture. Ample agricultural land and open space exists and great care should be taken to identify and ensure the preservation of these lands.
   f. **Communities for a Lifetime**. The Coastal population is projected to increase by 32 percent between 2000 and 2015; 51 percent by the year 2030, with the most significant growth among those aged 70 and over. Not only will this growth impact the region with respect to economic development, land use, and the associated effects on coastal habitats, it but also housing, transportation, and health needs of the community at large. The need for careful and strategic planning has never been more critical for local governments and their constituents. Communities for All Ages seek to promote livable communities through the development of accessible housing, effective transportation systems, and improved health for people of all ages and abilities.

5. **Implementation Program.** The Implementation Program is the overall strategy for achieving the Regional Vision, and for addressing Regional Issues and Opportunities. It identifies specific measures to implement the Plan and provides guidance to developers, local government and public agencies. The Implementation Program includes the following components:

   a. **Vision for the Issue Area** – the vision is a clear statement of why the issue is important to the region and what we as a region will strive to do over the next 20 years.
   b. **Guiding Principles** – these principles include policies specific for use by local, state, or federal agencies in making decisions and provide direction to all "players" regarding preferences for the future of the coast. Guiding Principles are provided for managing development in the region. These are necessary to evaluate local plans, make appropriate and feasible development decisions, and guide the issuance of State/federal permits consistent with the Plan.
   c. **Performance Standards** – these standards recognize the pivotal role local governments, the Coastal Regional Commission and others play in implementing the recommendations contained in the Plan. They establish applicable minimal and exceptional levels of performance. A point system where implementation of each best practice builds toward a threshold score has been established. It is anticipated values and thresholds will be evaluated annually and adjustments made accordingly.
      i. Minimum Standard. Items included in Minimum are essential activities for local governments to undertake for consistency with Regional Plan. Local governments are expected to attain Minimum Standard within three years of adoption of the Regional Plan.
      ii. Excellence Standard. Items included in the Excellence Standard are selected as desirable activities for local governments to undertake for consistency with Regional Plan. Each implemented recommended best practice counts toward achieving the Excellence Standard threshold.
6. **Strategies and Regional Work Program.** Strategies and the Regional Work Program include activities the Coastal Regional Commission and other actors within the region undertake to implement the Regional Plan over the next five years and include the following:
   a. Brief description of activity;
   b. Desired time-frame for undertaking activity;
   c. Responsible party for implementing activity;
   d. Estimated cost if any of implementing the activity;
   e. Funding source(s) if applicable;
   f. Corresponding issue or opportunity addressed; and
   g. Corresponding Performance Standard addressed.

The Regional Work Program identifies specific activities the Regional Commission undertakes to implement the Regional Plan during the upcoming five-year period which includes Planning and Coordination.

Planning and Coordination includes outreach, education and technical assistance.

Planning and Coordination activities conducted by the CRC are to assist local governments and other regional actors to act consistently with the regional plan and also serve as part of the Review and Comment which are advisory in nature.

7. **Evaluation and Monitoring.** The Evaluation and Monitoring includes a Quality Growth Effectiveness Assessment of each local government to determine if they are achieving prescribed performance standards. The Evaluation and Monitoring provides opportunity to assess the Plan's successes and shortcomings and provide recommendations for changes that result in the desired impact on development patterns. This includes reviewing the elements of the Plan, identifying whether the Plan is being effectively implemented, and assessing how the Plan is meeting current and future needs of the region and, finally recommending amendments or updates.

Appendix C: Regulatory Requirements

Strategies that are regulatory in nature and beyond the Regional Commission's purview to enforce or implement are is captured by topic below.

Ensure that wastewater discharge permitting considers impacts on natural resources.

Wastewater discharges are regulated under Georgia Department of Natural Resources regulations 391-3-6-.05 Waste Treatment and Permit Requirements where criteria are established for permitting and wastewater quality being released into the environment.

Septic systems are regulated under Georgia Department of Human Resources regulations 290-5-26.05 and 290-5-26.07 governing the location and maintenance of septic tanks and drainage fields including buffer requirements:

- 290-5-26-.05(2) no septic tank shall be installed less than twenty-five (25) feet from lakes, ponds, streams, water courses, or other impoundments; and
- 290-5-26-.07(3) no absorption field will be constructed less than fifty (50) feet from the normal water level of any impoundment, tributary, stream, or other water body, including wetlands.
- 290-5-26-.03(1) Connection shall be made to a public or community sewage treatment system when such system is available within two hundred feet (200') of the property line or available in a public right-of-way abutting the property.

DNR Docks and Marinas Committee.

Marinas, community docks and commercial docks are regulated under Georgia Department of Natural Resources regulations 391-2-3-.03.

- Section 12-5-286 requires any activity that shall remove, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands to have a revocable permit. Private docks are exempt from this act and regulated through the PGP83 and revocable license procedure. A state revocable license is permission for the state to use publicly owned lands lying below the ordinary high water mark.

Protection of Groundwater Recharge Areas

Protection of groundwater recharge areas are governed under Georgia Department of Natural Resources regulations 391-3-16-.02 Criteria for Protection of Groundwater Recharge Areas. Part (3) identifies the criteria that apply to significant recharge areas including:

- Requirements for synthetic liners and leachate collection systems for sanitary landfills;
- Restrictions on hazardous waste disposal and handling and storage of hazardous waste and materials;
- Liner requirements for agricultural waste impoundments;
- Requirements for new development with septic systems;
- Requirements for spray irrigation of wastewater sludges;
- Restrictions on storm water infiltration basins; and
- Liner requirement for new wastewater treatment basins.

These criteria are the minimum requirements that are to be applied. Local governments may adopt an ordinance that restricts some types of development in areas that may function as significant groundwater recharge areas. This includes restrictions on septic tanks, drain fields, minimum sizes for lots requiring septic systems, above-ground chemical or petroleum tanks, agricultural waste impoundment sites, and certain new facilities which handle hazardous materials.

Drinking Water Supply

Protection of public water supply wells are governed under Georgia Department of Natural Resources regulations 391-3-5-.40 Wellhead Protection. These regulations require inventorying wells and potential pollutant sources and place criteria and/or restrictions on types of potential pollution sources within the established protection zones for public water supply wells.

Part V Environmental Planning Criteria

Through the Georgia planning act of 1989 12-2-8 and Georgia Environmental Policy Act, 12-16-1, the Georgia Department of Natural Resources is directed to establish minimum protective standards for natural resources, environment and vital areas of the state including establishing criteria and standards for local governments to use for the protection of the following that area applicable to the coastal region:

- Criteria for Water Supply Watersheds, found in Georgia Department of Natural Resources regulations 391-3-16-.01;
- Criteria for the Protection of Groundwater Recharge Areas, found in Georgia Department of Natural Resources regulations 391-3-16-.02;
- Criteria for Wetlands Protection, found in Georgia Department of Natural Resources regulations 391-3-16-.03; and
- Criteria for River Corridor Protection, found in Georgia Department of Natural Resources regulations 391-3-16-.04.

Appendix D: Glossary

Access Management: Involves providing (or managing) access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed.

Activity Center: An area containing a planned or existing cluster of related land use activities, including but not limited to commercial, industrial, and tourist/recreational activities.

Affordable Housing: The U.S. Department of Housing & Urban Development defines "affordable" housing as housing that costs no more than 30% of the average local household income.

Aquifer: An underground formation, or group of formations, or part of a formation, that is permeable enough to transmit and store usable quantities of water, and is often used as a source for drinking water.

Barrier Islands: A long broad sandy island lying parallel to a shore that is built up by the action of waves, currents, and winds and that protects the shore from the effects of the ocean.

Bedroom Community: An urban community that is primarily residential, from which most of the workforce commute out of the community to earn their livelihood. Most commuter towns are suburbs of a nearby metropolis that workers travel to daily, and many suburbs are commuter towns.

Best Management Practices (BMP): Refers to the practice considered most effective to achieve a specific desired result for protection of water, air and land and to control the release of toxins.

Buffer: Any structure, earthen berm, or vegetated open space used to minimize the adverse impact of on-site activities and uses to surrounding less intense land uses.

Built Environment: The physical character of a community which forms the urban environment consisting of buildings, roads, fixtures, parks, and other improvements.

Certified Local Government (CLG): The CLG program extends the federal and State preservation partnership to the local level. Any local government that has enacted a historic preservation ordinance enforces that ordinance through a local preservation commission, and has met the appropriate requirements is eligible to become a CLG. The Georgia CLG program is housed at the Center for Community Design & Preservation at the University of Georgia, under a partnership with HPD.

Character Area: A planning sub-area within the community where more detailed, small-area planning and implementation of certain policies, investments, incentives, or regulations may be applied in order to preserve, improve, or otherwise influence its future development patterns in a manner consistent with the community vision. A specific geographic area within the community with:

- A unique or special characteristics to be preserved or enhanced (such as a downtown,
- A historic district, a neighborhood, or a transportation corridor);
- The potential to evolve into a unique area with more intentional guidance of future
- Development through adequate planning and implementation (such as strip commercial corridors that could be revitalized into a more attractive village development pattern); or
- Unique development issues (rapid change of development patterns, economic decline, etc) requiring special attention.

Cluster Development: A combining or arranging together in general groupings of attached or detached dwelling units and accessory structures in several clusters separated from each other by yards and common use spaces.

Coastal Marshlands: (Also 'marshlands') Any marshland intertidal area, mud flat, tidal water bottom, or salt marsh in the State of Georgia within the estuarine area of the State, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses. 'Vegetated marshlands' shall include those areas upon which grow one, but not necessarily all, of the following: salt marsh grass (Spartina alterniflora), black needlerush (Juncus roemerianus), saltmeadow cordgrass (Spartina patens), big cordgrass (Spartina cynosuroides), saltgrass (Distichlis spicata), coast dropseed (Sporobolus virginicus), bigelow glasswort (Salicornia bigelovii), woody glasswort (Salicornia virginica), saltwort (Batis maritima), sea lavender (Limonium nashii), sea oxeye (Borrichia frutescens), silverling (Baccharis halimifolia), false willow (Baccharis angustifolia), and high-tide bush (Iva frutescens). The occurrence and extent of salt marsh peat at the undisturbed surface shall be deemed to be conclusive evidence of the extent of a salt marsh or a part thereof (See Coastal Marshland Protection Act, OCGA §12-5-282(3), Definitions).

Coastal Zone Management Act (CZMA): National Oceanographic and Atmospheric Administration (NOAA) provides funding for implementation and sets standards (including prevention of non-point source pollution) for states to comply with when they develop a plan to protect their coastal areas.

Conservation Easement: Conservation easements are voluntary, legally binding agreements for landowners that limit parcels of land or pieces of property to certain uses. Land under conservation easements remains privately owned and most easements are permanent.
Conservation Subdivision: Residential areas where at least half of the area is designated as open or green space.

Context Sensitive Design: A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist.

Cultural Resources or Heritage Assets: Archaeological sites, historic buildings and structures, landscapes, and objects are the fabric of our national heritage. Collectively known as cultural resources (or sometimes heritage assets), they are our tangible links with the past.

Density: An objective measurement of the number of people or residential units allowed per unit of land, such as dwelling units per acre.

Density Bonus: Allows developers to build in specified areas densities that are higher than normally allowed.

Development Impact Fees: In 1990, the Georgia Development Impact Fee Act (DIFA) was enacted into law. Impact fees are one-time fees charged to land developers to help defray the costs of expanding capital facilities to serve new growth. DIFA enables local governments to charge new development for a proportionate share of infrastructure capacity it requires. However, the Act places restrictions on the categories of capital facilities for which new development can be charged. It also establishes rules under which impact fees must be calculated, collected, expended, accounted for and administered.

Developments of Regional Impact (DRI): Developments of Regional Impact (DRIs) are large scale developments that are likely to have regional effects beyond the local government jurisdiction in which they are located.

EarthCraft Communities: A green building program created in 1999 that serves as a blueprint for healthy, comfortable homes that reduce utility bills and protect the environment. EarthCraft House is a partnership between the Greater Atlanta Home Builders Association, Southface, government and industry partners.
(http://www.southface.org/web/resources&services/publications/journal/sfjv106/sfjv106_echcommunities.htm)

Easements: Interest in land owned by another that entitles its holder to a specific limited use or enjoyment of said land.

Ecosystem: The species and natural communities of a specific location interacting with one another and with the physical environment.

Energy Star products: The ENERGY STAR® Label is the national symbol for energy efficiency, developed by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). The ENERGY STAR label assists consumers with identifying major household appliances as well as many other consumer products that are more energy efficient than comparable products in the market place.

Environmental Impact Assessment (EIA): An assessment of the likely positive and/or negative influence a project may have on the environment. It is the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. The purpose of the assessment is to ensure that decision-makers consider environmental impacts before deciding whether to proceed with new projects.

Environmental Impact Statement (EIS): A document that must be filed when the federal government takes a “major Federal action significantly affecting the quality of the human environment.” The law requiring this is the National Environmental Policy Act.

Environmentally Sensitive Areas: Environmentally sensitive areas include habitats with endangered species, wetlands, floodplains, stream corridors, undeveloped barrier islands, steep slopes and wildlife habitat larger than ten acres. (O.C.G.A 48-5-7.4).

Estuaries: A water body where salt and fresh water meet resulting in brackish water. These areas usually have associated marshlands and are critical nursery and feeding habitat for a variety of marine species.

Fauna: Animal life that is occurring or living naturally in a particular area of environment; native.
Flora: Plant life that is occurring or living naturally in a particular area of environment; native.

Flora: Plant life that is occurring or living naturally in a particular area of environment; native.

Floridan Aquifer: The Floridan aquifer system is one of the most productive aquifers in the world. This aquifer system underlies an area of about 100,000 square miles in southern Alabama, southeastern Georgia, southern South Carolina, and all of Florida. The Floridan aquifer system provides water for several large cities, including Savannah and Brunswick in Georgia; and Jacksonville, Tallahassee, Orlando, and St. Petersburg in Florida. In addition, the aquifer system provides water for hundreds of thousands of people in smaller communities and rural areas. Locally, the Floridan is intensively pumped for industrial and irrigation supplies.

Form-based codes: A form-based code is a land development regulatory tool that places primary emphasis on the physical form of the built environment with the end goal of producing a specific type of "place" rather than "use." Form-based codes place a primary emphasis on building type, dimensions, parking location and façade features, and less emphasis on uses. They stress the appearance of the streetscape, or public realm, over long lists of different use types.

Future Development Map: A map showing major character areas, prepared during the Comprehensive Planning process. Includes Character Areas identified in the Community Assessment, and adjusted to reflect stakeholder perspectives about desired future development patterns.

Gateway: Something that serves as an entrance or means of access.

Georgia Ports Authority (GPA): Operates terminals in Savannah and Brunswick, and facilitates global trade through strategic U.S. East Coast gateways.

Green Building: Environmentally-sensitive design and construction practices which conserve natural resources such as energy, building materials, water, soil and air quality, producing broad economic, community and environmental benefits.

Green Growth Guidelines: Green Growth Guidelines were developed for the Coastal Management Program of DNR-CRD. The document outlines the environmental, social, and economic benefits from use of low impact development strategies when compared to today's conventional development approach.

Green Infrastructure: A strategically planned and managed network of parks, greenways, conservation easements, and working lands with conservation value that supports native species, maintains natural ecological processes, sustains air and water resources, and contributes to the health and quality of life for communities and people.

Greenfield: A project planned for an undeveloped area outside the existing urban fabric. See Infill Development.

Green space: Areas left relatively natural and undeveloped in urban and suburban settings.

Greenway: A linear open space; a corridor composed of natural or native vegetation. Greenways can be used to create connected networks of open or green space that include traditional parks and natural areas.

Greywater: Non-industrial wastewater generated from domestic processes such as mechanically washing dishes, laundry and bathing.

Greyfields: Abandoned, obsolete, or underutilized and previously-developed properties, such as regional shopping malls and strip retail developments.

Growth Management: A term that encompasses a whole range of policies designed to control, guide, or mitigate the effects of growth.

Groundwater: Water beneath the surface of the ground, whether or not flowing through known and definite channels.

Groundwater Recharge Areas: Any portion of the earth's surface, where water infiltrates into the ground to replenish an aquifer.

Habitat: The living environment of a species, that provides whatever that species needs for its survival, such as nutrients, water and living space.

Hammocks: A hammock is a back-barrier island, which is an island (tract of land) located between the landward boundary of the barrier island complexes and the mainland, of elevation higher than the surrounding marshlands, and generally vegetated with trees and shrub-scrub habitat. Hammocks are sensitive environmental communities.

Heritage Asset: Heritage assets are plant, property, and equipment (PP&E) that are unique because of their historic or natural significance, cultural, educational or artistic importance, or significant architectural-characteristics. Heritage assets are expected to be preserved indefinitely.

Historic Area: An area or building in which historic events occurred, or one which has special value due to architectural or cultural features relating to the heritage of the community. Elements in historic areas have significance that necessitates preservation or conservation.

Historic Districts: A historic district in the United States is a group of buildings, properties or sites that have been designated by one of several entities on different levels as historically or architecturally significant. Buildings, structures, objects and sites within a historic district are normally divided into two categories, contributing and non-contributing. Districts greatly vary in size, some having hundreds of structures while others have just a few.

Historic Preservation: Includes identification, evaluation, recordation, documentation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, and education and training regarding the foregoing activities, or any combination of the foregoing activities.

Historic Preservation Division (HPD): The Historic Preservation Division works in partnership with federal and State agencies, local governments, preservation organizations, community groups and individuals to achieve a greater appreciation and use of historic resources in the context of everyday life. Working at the State level, the Historic Preservation Division helps bring together national, regional and local interests to support community and economic development throughout Georgia. Georgia's preservation program encourages regional and local planning, neighborhood conservation, downtown revitalization, economic development, heritage tourism and archaeological site protection.
http://www.gashpo.org

Hydrology: Is the study of the movement, distribution, and quality of water throughout the Earth, and thus addresses both the hydrologic cycle and water resources. A practitioner of hydrology is a hydrologist, working within the fields of earth or environmental science, physical geography or civil and environmental engineering.

Impervious Surface: Any surface through which rainfall cannot pass or be effectively absorbed. (Roads, buildings, paved parking lots, sidewalks and other areas of concrete, asphalt, compacted clay or other similar surfaces.)

Infill Development: Development of vacant, "skipped-over" parcels of land in otherwise built areas.
Infrastructure: Those man-made structures which serve the common needs of the population, such as: sewage disposal systems; potable water systems; potable water wells serving a system; solid waste disposal sites or retention areas; stormwater systems; utilities; piers; docks; wharves; breakwaters; bulkheads; seawalls; bulwarks; revetments; causeways; marinas; navigation channels; bridges; bikeways; sidewalks; mass transit lines and roadways.

Infrastructure Development District: An area designated for new development wherein the developer agrees to provide all infrastructures needed to support the development. The cost of providing this infrastructure is paid with bonds, repayable through special levy on each property owner who eventually resides in the district.

Low Impact Development (LID): Is an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as stormwater disposal. Instead of conveying and managing / treating stormwater in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level. These landscape features, known as Integrated Management Practices (IMPs), are the building blocks of LID. Almost all components of the urban environment have the potential to serve as an IMP.
This includes not only open space, but also rooftops, streetscapes, parking lots, sidewalks, and medians. LID is a versatile approach that can be applied equally well to new development, urban retrofits, and redevelopment / revitalization projects.

Manufactured Home: A dwelling unit constructed on or after June 15, 1976, in an off-site manufacturing facility for installation or assembly at the building site, with each section bearing a seal certifying that it is built in compliance with the Federal Manufactured Housing Construction and Safety Standard Act.

Metropolitan Planning Organization: A transportation policy-making organization made up of representatives from local government and transportation authorities. In 1962, the United States Congress passed legislation that required the formation of an MPO for any Urbanized Area (UZA) with a population greater than 50,000. Congress created MPOs in order to ensure that existing and future expenditures for transportation projects and programs are based on a continuing, cooperative and comprehensive ("3-C") planning process. Federal funding for transportation projects and programs are channeled through this planning process. Statewide and metropolitan transportation planning processes are governed by Federal law (23 USC 134 and 135). As of 2005, there are 385 MPOs in the U.S.

Mixed-Use Development: Projects that integrate different land uses such as retail stores, restaurants, residences, civic buildings, offices and parks within a defined area. Mixed use developments by definition have a minimum of 3 separate types of uses included in the development.

Multi-Modal Transportation: A transportation system that includes a number of different modes, or means, of transportation. These modes of transportation may be either motorized, (e.g., automobiles, buses, or airplanes) or non-motorized, (e.g., bicycles or walking.)

Natural Environment: The natural environment, commonly referred to simply as the environment, is a term that comprises all living and non-living things that occur naturally on Earth or some part of it.
Non-Governmental Organizations (NGO): A legally constituted organization created by private persons or organizations with no participation or representation of any government.

Open Space: Used to describe undeveloped land or land that is used for recreation. Farmland as well as all natural habitats (forests, fields, wetlands etc.) is lumped in this category. Typically, native vegetation has been altered for recreational or agricultural uses.

Part V Environmental Planning Criteria: 'Rules for Environmental Planning Criteria' means those standards and procedures with respect to natural resources, the environment, and vital areas of the State established and administered by the Department of Natural Resources pursuant to O.C.G.A. 12-2-8, including, but not limited to, criteria for the protection of water supply watersheds, groundwater recharge areas, wetlands, protected mountains and protected river corridors.

Performance Zoning: Establishes minimum criteria to be used when assessing whether a particular project is appropriate for a certain area; ensures that the end result adheres to an acceptable level of performance or compatibility. This type of zoning provides flexibility with the well-defined goals and rules found in conventional zoning.

Permeable paving: Also called pervious paving or porous pavement, is a term used to describe paving methods for roads, parking lots and walkways that allow the movement of water and air through the paving material. Although some porous paving materials appear nearly indistinguishable from nonporous materials, their environmental effects are qualitatively different. Their effects are important because pavements are two-thirds of the potentially impervious surface cover in urban areas (**see http://water.wikia.com/wiki/Permeable_paving**).

Public Facilities: Included but not limited to; facilities for transportation, wastewater treatment, solid waste, drainage, potable water, educational, parks and recreational, and health buildings or systems.

Public transit: Public transport, public transportation, public transit or mass transit comprises all transport systems in which the passengers do not travel in their own vehicles. While it is generally taken to include rail and bus services, wider definitions would include scheduled airline services, ferries, taxicab services etc. — any system that transports members of the general public. A further restriction that is sometimes applied is that it should take place in shared vehicles, which would exclude taxis that are not shared-ride taxis.

Purple Pipe: Reclaimed water is often distributed with a dual piping network that keeps reclaimed water pipes completely separate from potable water pipes. In the United States, reclaimed water is always distributed in lavender (light purple) pipes to distinguish it from potable water. In a basic sense, reclaimed water is treated effluent that is treated to a higher degree (depending on the location), instead of being discharged into a natural body of water, and is used for a broad range of practical purposes such as irrigation.

Qualified Local Government: A county or municipality that:

- Adopts and maintains a comprehensive plan in conformity with the local planning requirements;
- Establishes regulations consistent with its comprehensive plan and with the local planning requirements; and
- Does not fail to participate in the DCA's mediation or other means of resolving conflicts in a manner in which, in the judgment of the Department, reflects a good faith effort to resolve any conflict.

Quality Growth: Quality growth is an approach to growth management that promotes quality urban development and respects the freedom of Americans to choose where they live, their preferred style of housing and how they travel. Quality Growth favors improving the entire transportation network, rather than focusing resources primarily on a single component. Quality Growth measures include additional road capacity, better traffic signalization and more efficient transit.

Quality Community Objectives: Fifteen objectives that are recommended by DCA for adoption as guiding principles by communities who wish to return to a more traditional pattern of community growth and development. These are:

1. Traditional Neighborhoods: Traditional neighborhood development patterns should be encouraged, including use of more human scale development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.
2. Infill Development: Communities should maximize the use of existing infrastructure and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.
3. Sense of Place: Traditional downtown areas should be maintained as the focal point of the community or, for newer areas where this is not possible, the development of activity centers that serve as community focal points should be encouraged. These community focal points should be attractive, mixed-use, pedestrian-friendly places where people choose to gather for shopping, dining, socializing, and entertainment.
4. Transportation Alternatives: Alternatives to transportation by automobile, including mass transit, bicycle routes and pedestrian facilities, should be made available in each community. Greater use of alternate transportation should be encouraged.
5. Regional Identity: Regions should promote and preserve an "identity," defined in terms of traditional regional architecture, common economic linkages that bind the region together, or other shared characteristics.
6. Growth Preparedness: Each community should identify and put in place the prerequisites for the type of growth it seeks to achieve. These may include housing and infrastructure (roads, water, wastewater treatment and telecommunications) to support new growth, appropriate training of the workforce, ordinances to direct growth as desired, or leadership capable of responding to growth opportunities.
7. Appropriate Businesses: The businesses and industries encouraged to develop or expand in a community should be suitable for the community in terms of job skills required, linkages to other

economic activities in the region, impact on the resources of the area, and future prospects for expansion and creation of higher-skill job opportunities.

8. Educational Opportunities: Educational and training opportunities should be readily available in each community – to permit community residents to improve their job skills, adapt to technological advances, or to pursue entrepreneurial ambitions.
9. Employment Options: A range of job types should be provided in each community to meet the diverse needs of the local workforce.
10. Regional Cooperation: Regional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to success of a venture, such as protection of shared natural resources.
11. Regional Solutions: Regional solutions to needs shared by more than one local jurisdiction are preferable to separate local approaches, particularly where this will result in greater efficiency and less cost to the taxpayer.
12. Housing Opportunities: Quality housing and a range of housing size, cost, and density should be provided in each community, to make it possible for all who work in the community to also live in the community.
13. Heritage Preservation: The traditional character of the community should be maintained through preserving and revitalizing historic areas of the community, encouraging new development that is compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining the community's character.
14. Open Space Preservation: New development should be designed to minimize the amount of land consumed, and open space should be set aside from development for use as public parks or as greenbelts/wildlife corridors.
15. Environmental Protection: Air quality and environmentally sensitive areas should be protected from negative impacts of development. Environmentally sensitive areas deserve special protection, particularly when they are important for maintaining traditional character or quality of life of the community or region. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.

Regionally Important Resources (RIR): A natural or historic resource, designated by DCA, that has boundaries extending beyond a single local government's jurisdiction, has value to a broader public constituency and which is vulnerable to the actions and activities of mankind.

Scenic Byway: Any designated highway, street, road or route which features certain resources (cultural, natural, archaeological, historical, and recreational) that should be protected or enhanced.

Septic or Onsite Management Systems: A sewage management system other than a public or community sewage treatment system serving one or more buildings, mobile homes, recreational vehicles, residences, or other facilities designed or used for human occupancy or congregation. Such term shall include, without limitation, conventional and chamber septic tank systems, privies, and experimental and alternative on-site management systems which are designed to be physically incapable of a surface discharge of effluent (per OCGA §290-5-26- .02 (gg), as administered by the DHR-Coastal Health District).

Septic Tank: A septic tank, the key component of a septic system, is a small scale sewage treatment system common in areas with no connection to main wastewater treatment pipes provided by either the public or private sector.

Service Delivery Strategy (SDS): The intent is to provide a flexible framework for local governments and authorities to agree on service delivery arrangements; minimize any duplication or competition among local governments and authorities providing local services; and provide a method of resolving disputes among service providers regarding service delivery, funding equity and land use.

Service Sector: The service sector consists of the "soft" parts of the economy such as insurance, government, tourism, banking, retail, education, and social services.

Silviculture: The branch of forestry dealing with the development and care of forests and forest products.

Southern Passages: A collaborative effort among South Carolina, Georgia and northern Florida regional planning agencies to beckon interstate travelers to the cultural pleasures, historic treasures and natural beauty along Highway 17 and A1A, and their intersecting roads **(See http://www.southernpassages.com/)**.

Special Districts: Geographic areas in which fees or taxes are collected to fund investments or services benefiting properties within the district.

State Planning Recommendations: The supplemental guidance provided by DCA to assist communities in preparing plans and addressing the local planning requirements. Plan preparers and the community must review these recommendations where referenced in the planning requirements, in order to determine their applicability or helpfulness to the community's plan.

Stormwater Runoff: The flow of water which results from, and which occurs immediately following, a rainfall event, which is often the carrier of pollutants into local waterways.

Stormwater Management System: The engineered features of the property which collect, convey, channel, hold, inhibit, or divert the movement of storm water.

Stormwater Utility: A stormwater utility is essentially a special assessment district set up to generate funding specifically for stormwater management. Users within the district pay a stormwater fee, and the revenue thus generated directly supports maintenance and upgrade of existing storm drain systems; development of drainage plans, flood control measures, and water-quality programs; administrative costs; and sometimes construction of major capital improvements.

Sustainable Design: The art of designing physical objects to comply with the principles of economic, social, and ecological sustainability.

Sustainable Development: Development with the goal of preserving environmental quality, natural resources and livability for present and future generations. Sustainable initiatives work to ensure efficient use of resources.

Sustainability: Sustainability is an attempt to provide the best outcomes for the human and natural environments both now and into the indefinite future. It relates to the continuity of economic, social, institutional and environmental aspects of human society, as well as the non-human environment.

Thoroughfare: A vehicular way incorporating moving lanes and parking lanes within a right-of-way.

Traditional Neighborhood Design: A development pattern that reflects the characteristics of small, older communities of the late 19th and early 20th centuries. The focus of the community shifts from the automobile to the pedestrian. Traditional communities are characterized by mixed land uses, grid street patterns, pedestrian circulation, intensively-used open spaces, architectural character, and a sense of community.

Transfer of Development Rights: A system that assigns development rights to parcels of land and gives landowners the option of using those rights to develop or to sell their land. TDRs are used to promote conservation and protection of land by giving landowners the right to transfer the development rights of one parcel to another parcel. By selling development rights, a landowner gives up the right to develop his/her property, but the buyer could use the rights to develop another piece of land at a greater intensity than would otherwise be permitted.

Transit Facilities: Transportation uses by a government or a governmental entity or franchise, which provides facilities such as bus terminals or other related facilities and primarily involve collective or mass transportation of people. Typically, this transportation of persons involves routes from higher density residential areas to the higher density employment or business centers.

Transportation Network: A network of roads, streets, pipes, aqueducts, power lines, or nearly any structure which permits either vehicular movement or flow of some commodity.

Urban Growth Boundary: A boundary designating specific areas for development over a given period of time (e.g., as protected green space; it ensures that new development makes the most efficient use of available land and encourages more livable urban spaces.)

Viewshed: The total area visible from a point or series of points, e.g., along a linear transportation facility. Typically this visible area has scenic or historic value and therefore warrants special protection measures to preserve the viewshed.

Walkability or Walkable Community: Areas that are walkable and are safe, comfortable, interesting and accessible. They offer amenities such as wide sidewalks, attractive storefronts that face the sidewalk, shade, shelter and a sense of spatial enclosure provided through landscaping and streetscape elements. These areas are inviting to pedestrians for shopping, recreation and relaxation.

Wastewater Treatment Facilities: means structures or systems designed for the treatment of wastewater. This definition does not include septic tanks.

Watershed: Watersheds are natural boundaries based on the hydrology of a particular area. They are the land areas that drain to surface water bodies such as lakes and streams. Watershed management seeks to prevent flooding and water pollution, to conserve or restore natural systems and to protect human health through integrated land and water management practices.

Wayfinding System: A Wayfinding System incorporates branding, signs, maps and directional devices that tell us where we are, where we want to go, and how to get there.

Wetlands: Area having specific hydric soil and water table characteristics supporting or capable of supporting wetlands vegetation.

Wildlife Corridors: A wildlife corridor is a strip of habitat connecting wildlife populations separated by human activities (such as roads, development, or logging). This allows an exchange of individuals between populations, lowering inbreeding within populations and facilitating re-establishment of populations that have been decimated or eliminated due to random events.