



Community Assessment

Glynn County Comprehensive Plan Update

APRIL 2007

Glynn County, Georgia

Table of Contents

Executive Summary

E.1	Introduction	iv
E.2	Potential Issues and Opportunities	iv
E.3	Existing Development Patterns	vi
E.4	Areas Requiring Special Concern	ix
E.5	Proposed Character Areas	xi
E.6	Quality Community Objectives	xiv
E.7	State Environmental Planning Criteria	xvii

Population

1.0	Population Trends	1
1.1	Population Overview	1
1.2	Glynn County Population Growth	1
1.3	Population Composition	4
1.4	Income and Educational Attainment	10
1.5	Demographics Needs Assessment	13

Housing

2.0	Housing	14
2.1	Housing Overview	14
2.2	Current Housing Stock	14
2.3	Housing Trends	15
2.4	Housing Cost	16
2.5	Special Housing Needs	18
2.6	Jobs-Housing Balance	18
2.7	Housing Needs Assessment	18

Economic Development

3.0	Economic Development	20
3.1	Economic Overview	20
3.2	Economic Base	20
3.3	Economic Trends	22
3.4	Employment Forecast	23
3.5	Labor Force	25
3.6	Economic Resources and Incentives	27
3.7	Economic Development Needs Assessment	29

Glynn County, Georgia

Cultural Resources

4.0	Cultural Resources	.....	31
4.1	Cultural Resource Overview	.....	31
4.2	Cultural Resource Survey	.....	31
4.3	Cultural Resource Needs Assessment	.....	36

Natural Resources

5.0	Natural Resources	.....	37
5.1	Natural Resource Overview	.....	37
5.2	Climate	.....	37
5.3	Geology and Topography	.....	37
5.4	Environmentally Sensitive Areas	.....	38
5.5	Significant Natural Resources	.....	45
5.6	Natural Resource Needs Assessment	.....	48

Community Facilities

6.0	Community Facilities	.....	50
6.1	Community Facilities Overview	.....	50
6.2	General Government Facilities	.....	50
6.3	Public Safety	.....	52
6.4	Water and Wastewater	.....	55
6.5	Stormwater Management	.....	62
6.6	Parks	.....	62
6.7	Solid Waste Facilities	.....	65
6.8	Community Facilities Needs Assessment	.....	66

Transportation

7.0	Transportation	.....	67
7.1	Transportation Plan Summary	.....	67
7.2	Agencies and Roles	.....	67
7.3	Plan Recommendations	.....	68
7.4	Financial Feasibility	.....	69
7.5	Transportation Plan Needs Assessment	.....	70

Intergovernmental Coordination

8.0	Intergovernmental Coordination	.....	71
8.1	Glynn County Schools	.....	71
8.2	City of Brunswick	.....	72
8.3	Jekyll Island	.....	72
8.4	Major Federal, State, and Other Governmental	.....	73
8.5	Intergovernmental Needs Assessment	.....	74

Glynn County, Georgia

Coastal Issues

9.0	Coastal Resources	.....	75
9.1	Barrier Islands	.....	76
9.2	Beaches, Dunes, and Sand Sharing System	.....	76
9.3	Wetlands and Marshes	.....	77
9.4	Marsh Hammocks	.....	77
9.5	Rare Communities	.....	77
9.6	Public Access and Open Space	.....	78
9.7	Hurricane Mitigation Planning	.....	79
9.8	Coastal Development Pressures	.....	81
9.9	State Coastal Planning Effort	.....	81

List of Maps

Existing Land Use	.....	viii
Proposed Character Areas	.....	xiii
Population Growth Trends	.....	3
Historic Landmarks	.....	32
Wetlands and Floodplains	.....	41
Soils	.....	43
Groundwater Recharge Areas	.....	46
Community Facilities	.....	51
Public Safety Facilities	.....	54
Water and Sewer Facilities	.....	61
Hurricane Surge	.....	80

Glynn County, Georgia



Executive Summary

E.1 Introduction

The Community Assessment is a snapshot of the current state of Glynn County, with an eye towards issues related to growth and development. This Executive Summary focuses on an analysis of issues and opportunities facing the county and related land use issues. Detailed reports on population, housing, economic development, cultural resources, natural resources, community facilities, land use, transportation, intergovernmental coordination, and coastal resources can be found in the following sections of this Community Assessment.

E.2 Potential Issues and Opportunities Facing Glynn County

The preliminary examination of Glynn County provided insight into some of the potential issues and opportunities that the county will likely face in the coming years. The issues and opportunities identified will serve as the starting point for developing a shared vision for what Glynn County can become over the next 20 years. Through public input and guidance from the steering committee (which consists of the Mainland Planning Commission and the Islands Planning Commission combined), specific goals, objectives and policies will be explored that will ensure that the Comprehensive Plan Update reflects the community's vision and provides realistic strategies that translate that vision to reality.

The following tables present a summary of the preliminary issues and opportunities as identified through the initial review of Glynn County and input obtained from the steering committee and stakeholder interviews.

Glynn County, Georgia

Preliminary Issue Identification		Category	Preliminary Opportunity Identification	Category
1.	Increased development presents potential land use conflicts between rail corridors, environmentally sensitive areas, and residential land uses.	Land Use	1. New Water and Sewer Commission presents the opportunity to address water issues more comprehensively.	Intergovernmental/Community Facilities
2.	Strip commercial development increasing throughout the county.	Land Use	2. Cooperate with Brunswick on redevelopment initiatives including land bank.	Intergovernmental
3.	Increasing traffic congestion and limited access in the county.	Transportation	3. Recently adopted Stormwater tools – water protection ordinance to encourage low impact development.	Community Facilities
4.	No regular transportation system.	Transportation	4. Protect state's investment in Port facilities and rail and truck access by limiting land use conflicts.	Land Use/Economic Development
5.	Limited paths and sidewalks. Need a network of paths and sidewalks.	Transportation	5. Technical charter school will present expanded training opportunities for Glynn County students	Intergovernmental/Community Facilities
6.	Affordable housing needed on St. Simons Island.	Housing	6. Coordinate school facility siting with population growth and proposed development.	Intergovernmental Coordination
7.	Increased drainage and flooding problems throughout the county.	Land Use/Community Facilities	7. Increase in tourism and retirement market present opportunities for job creation and recruitment of new businesses.	Economic Development
8.	Limited plans for open space or parks on the western part of the county. Need for additional open space acquisition planning.	Community Facilities	8. Leverage the Interstate location of western area industrial park and proximity to the Port to recruit new light industry	Economic Development
9.	Need to ensure adequate community facilities of all types to meet population growth on western part of the county.	Community Facilities	9. Abundant historic resources are assets to the county.	Cultural Resources/Economic Development
10.	Decreasing level of public access to natural resources, especially boating and fishing.	Community Facilities	10. Coastal environment is a major component to the quality of life and the economy in the county.	Natural Resources/Economic Development
11.	Impacts of growth on water quality are a growing concern. <ul style="list-style-type: none"> • Septic tank capacity and continued use. Adequate maintenance needed. • New development on increasingly poor soils/locations. • Bacteria levels on beaches. 	Community Facilities/Natural Resources		
12.	Limited Tree Management program. No tree replacement program.	Community Facilities		
13.	Unique ecosystems on barrier islands need to be protected, and public access needs to be preserved on beaches and other natural areas of significance.	Natural Resources		
14.	Need to increase non-service sector job opportunities/ more trained workforce needed.	Economic Development		
15.	Historic preservation efforts need to be elevated; buildings and districts documented. Prioritize protection of key properties.	Cultural Resources		

Glynn County, Georgia

E.3 Existing Development Pattern Analysis

Land Use Summary

Most of the urbanized area¹ within Glynn County is either on the Brunswick peninsula or on St. Simons Island, however other areas of Glynn County are rapidly urbanizing. Between the islands and the mainland are large areas of marshland in their natural state. The western half of the county is predominantly rural and undeveloped. Scattered, predominantly residential development is apparent in the western area along major corridors such as SR 341 and SR 82.

The Brunswick peninsula is fairly well-defined by Turtle River to the southwest, the Brunswick/Golden Isles County Airport to the north, and I-95 to the northwest. The historic area of Brunswick displays a fine-grained pattern of mixed land uses, with significant concentrations of government/institutional land use. Major areas of industrial land use are also apparent on the edges of this historic area with access to railways and port facilities. The northern part of the peninsula has a coarser mix of land uses, including substantial commercial land uses.

Some pockets of multifamily use near commercial areas are also apparent. Commercial uses dominate much of the corridors along Spur 25, Community Road, and US 27. Large parcels for FLETC and the Airport define the northern boundary of this area.

Most of St. Simons Island is developed, although there are some vacant lands on the northern side. The dominant land use on the island is single family residential, although pockets of multifamily development are apparent throughout the island, especially near Demere Road and St. Simons Village. Commercial areas exist in well-defined pockets, including the intersection of Demere and Frederick Roads, St. Simons Village, and Sea Island Road and Frederica. Marshes in conservation use form a ring around most of the island.

Nearby St. Simons Island are the smaller islands of Sea Island and Little St. Simons Island. Sea Island has a number of single family homes. These single family homes plus a few resort hotels comprise the primary land uses on the island. There is a golf course located amongst wetlands on the northern end of the island. Little St. Simons Island is

predominantly undeveloped and in a natural state. Little St. Simons has some small lodging facilities for tourists, but development impact has been limited by the inaccessibility of Little St. Simons via automobile.

Glynn County does not maintain land use data on Jekyll Island, as the island is managed by the Jekyll Island State Park Authority. Much of Jekyll Island is preserved in its natural state. In addition, a number of lodging and resort activities are located on the island, along with an historic retail district.

North Glynn County has large pieces of undeveloped and forestry lands, but also significant amounts of residential development. Most of the residential development is west of I-95 and south of SR 99. Much of the residential land is developed as mobile home residential, but there is also a lot of single family residential. Commercial land uses are scattered and display little pattern, although the largest areas of commercial development occur near interstate exits.

South Glynn County is predominantly undeveloped or in forestry use. However, it is the most rapidly developing area in the county and as a result, land use is undergoing a fast-paced transformation. Scattered residential and mobile home development is apparent along corridors such as South Georgia Parkway and Buckswamp Road. There is some commercial development at the I-95 Interstate Exit 29 and one large commercial parcel off of SR 82. There are some large parcels of multifamily development with no apparent pattern or organization. East of I-95, the dominant land uses are the port related facilities of Colonel Island.

West Glynn County is predominantly undeveloped, or displays forestry uses. Scattered single family residential and mobile home residential uses are apparent.

Conservation Land Uses

The largest area of conservation land uses are the marshlands between the mainland and the islands, and also around the edges of the islands. There are also some scattered parks for conservation use.

¹ "Urbanized Area" is defined by the US Census as a population density of at least 1,000 persons per square mile

Glynn County, Georgia



Industrial and Employment Land Uses

Most major industrial land uses are concentrated around major transportation facilities, including ports, railroads, and airports. Many of the major industrial land uses are classified as Public/Institutional because they are owned by public institutions such as the Georgia Ports Authority. Large industrial land uses include the ports along the Turtle River, as well as industrial land uses near the airport. There are scattered, smaller-site industrial uses in the Brunswick peninsula.

Other major employment land uses on the Brunswick peninsula include FLETC, Southeast Georgia Health Systems, and Coastal Georgia Community College.

Commercial Land Uses

Commercial land uses are concentrated on the Brunswick peninsula. The largest commercial uses are in the vicinity of GA 27, Spur 25 and I-95. One major concentration of commercial activity is at Colonial Mall Glen Place and its surrounding area. Other commercial concentrations are in the vicinity around interstate exits.

Residential Land Uses

Residential land uses are widely scattered throughout the county. Mobile home residential is found mostly in the western, more rural areas of the county. Multifamily residential is well-located in the older, eastern parts of the county, but has a more haphazard location in the western parts of the county.

GLYNN COUNTY LAND USE

Legend

Land Use

Category

- Agriculture/Forestry
- General Commercial
- General Industrial/Light Industrial
- Mobile Home Residential
- MultiFamily Residential
- Office Commercial
- Park/Recreation/Conservation
- Public/Institutional
- Single Family Residential
- Transportation/Communication/Utility
- Undeveloped/Vacant

Major Roads

- Interstate
- Highways
- Arterial

Railroads

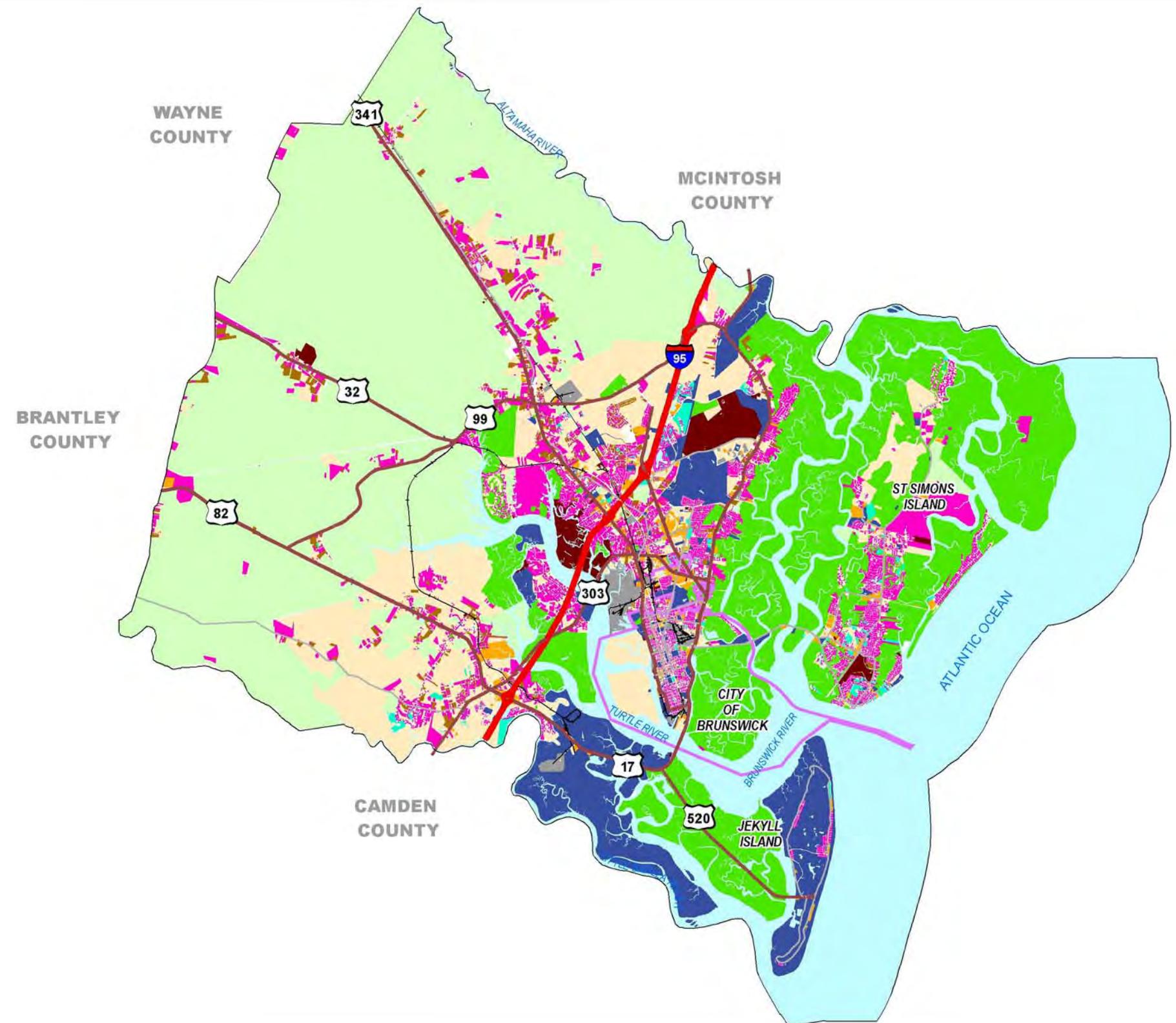
- Glynn County
- Brunswick Boundary

Hydrography

- Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

E.4 Areas Requiring Special Concern

Open Space

Glynn County needs a plan for the designation and utilization of future open space and for the identification of lands where development is discouraged. Considering its large amount of environmentally sensitive land and floodplain land, there are large areas within the County where development should not be encouraged. However, these areas have their own inherent potential to serve important environmental and recreational functions.

Wetlands and Floodplains

Overall, Glynn County's many environmentally sensitive areas create a major constraint on development patterns. Much of Glynn County's land is in environmentally sensitive land such as wetlands, floodplains, and land consisting of poorly drained soils. As a result, development patterns must largely conform to these environmental constraints. Also, quality land for development is relatively scarce. This search for quality developable land promotes the spread of development outwards to more rural areas.

South and West Glynn County

Considering the lack of commercial development in southern and western Glynn County, these areas may need a better distribution of land uses to complement their growing residential populations. Currently all of the major commercial development is concentrated in the Brunswick area. This concentration of commercial development will result in an increasing strain on the transportation infrastructure and inconvenient commercial access for people living in more outlying areas. There are only four routes connecting the south part of the county with the north part of the county due to the separation created by the Turtle River. This limited number of routes creates the potential for transportation bottlenecks that may be expensive to address. Newly developing residential areas in south and west Glynn County need commercial and institutional land uses mixed in to create conveniently accessible public and private services.

Commercial Corridors

Much of Glynn County's development has occurred along commercial corridors. Such commercial corridors are often unsightly and suffer from poor traffic flow. Over time, these areas can have the additional disadvantage of suffering from disinvestment. Glynn County needs a long term

strategy for maintaining and upgrading its key commercial corridors. This strategy can be coordinated with a strategy for preventing strip commercial development in new corridors.

Multifamily Development

Some new multifamily development is occurring in outlying areas. Glynn County needs good guidelines for the appropriate places for multifamily development. Poorly placed multifamily development in particular can place a strain on community facilities such as roads and schools. Multifamily development is important to ensure an adequate mix of housing types and prices, but multifamily development should occur in those places where the mix of land uses best supports it, where adequate infrastructure is in place, and where environmental sensitivity is minimal.

Manufactured Housing

Manufactured housing development may be appropriate in certain areas, but these homes should be up to the latest HUD standards of wind resistance to prevent substantial damage during tropical storm events. Currently Glynn County has over 4,000 units of housing classified as "Mobile Home or Trailers." Manufactured housing can be an important part of Glynn County's affordable housing stock, but needs to be managed in such a way as to be compatible with surrounding land uses.

Brownfields and Superfund Sites

The Georgia Department of Natural Resources Environmental Protection Division produces a hazardous site inventory (HSI) which identifies sites where there has been a known or suspected release of a regulated substance above a reportable quantity and which have yet to show they meet state clean up standards. The current edition of the HSI lists fifteen (15) hazardous sites in Glynn County which include six (6) sites within the City of Brunswick. The majority of the sites are currently undergoing clean-up. The County should continue to monitor the progress of these sites.

Glynn County, Georgia

Glynn County Hazardous Site Inventory			
Site Number	Site Name	Location	Status
10006	Hercules 009 Landfill – NPL Site	Benedict Road	Clean-up underway
10028	Escambia Treating Company	Perry Land Road	Clean-up underway
10058	Hercules	2801 Cook Street	Clean-up underway
10069	Atlanta Gas Light Co. MGP Site	2128 New Castle Street	Clean-up standards met for source materials and soil. Clean-up underway for groundwater
10144	LCP Chemicals	Ross Road	Clean up underway
10156	Federal Law Enforcement Training Center	Georgia State Road 303	Investigation underway to determine clean-up process
10242	Terry Creek Dredge Spoil Area	Terry & Dupree Creek	EDP has not yet directed parties to begin investigation or clean up
10251	Chemresol	Crispen Boulevard	Clean-up standards met for source materials and soil. Clean up underway for groundwater
10282	4 th Street Landfill	4 th St. & Old Brunswick Airport	Investigation underway to determine clean-up process
10317	T Street Dump	West end of T Street	Investigation underway to determine clean-up process
10587	STSE, Inc.	1900 Second Street	Clean-up underway
10619	Georgia Pacific	1400 West Ninth Street	Clean-up underway
10665	Glynn County - C&D MSWLF	Cate Road	Clean-up underway
10769	Lanier Shopping Plaza	1919-1945 Glynn Avenue	Investigation underway to determine clean-up process
10804	Cork's Fabricare	6201 Altama Avenue	EDP has not yet directed parties to begin investigation or clean up

Source: Georgia Environmental Protection Division,
Hazardous Site Inventory, July 2006

Glynn County, Georgia

E.5 Proposed Character Areas

Character Areas

Character Areas are parts of the county with a unique identity or uniquely defining characteristics. If someone asked you what part of Glynn County you live in, how would you tell them where you live? What makes it different? All of the county must be divided into distinct Character Areas for the Comprehensive Plan. Since we are creating a plan for how we want Glynn County to be in the future, we can create proposed Character Areas for areas that do not yet have a distinct identity.

How Character Areas are used in the Comprehensive Plan

The idea behind Character Areas is that every area needs to be treated differently to respond to its unique character and individual objectives need to be developed that support that character. Different policies are needed for a downtown than for a residential area or for a rural area.

Each Character Area will be assigned recommended land uses and development types. Also, each Character Area will be given policy priorities for protecting and promoting that area's character in the Community Agenda.

Islands

This includes the three islands of St. Simons Island, Sea Island, and Little St. Simons Island. Sea Island and Little St. Simons Islands are privately owned, resort-type developments and independently managed. St. Simons Island consists mostly of higher-end single family homes and a few small commercial centers along Frederica Road, with resort and hotel uses concentrated near St. Simons Island Village. The Islands generally have their own public infrastructure and community facilities. Access to the Islands is limited to the Torras Causeway, a four-lane causeway over the marsh.

Jekyll Island

Jekyll Island is managed by the Jekyll Island Authority, a state-level authority. Few private residences exist on the island and it is primarily used for tourism, recreation, and as a nature preserve. Two thirds of

Jekyll Island remains undeveloped. Development on Jekyll Island consists mostly of hotels and condominiums.

Old Towne Brunswick

This character area is coincident with the Brunswick Old Town Historic District as listed by the National Historic Register. This part of Brunswick was designed by Oglethorpe in his master plan for the city, along similar lines as the plan for the City of Savannah. Currently Old Town Brunswick is centered on a small commercial area and a variety of governmental uses, including both city and county offices. Old Town Brunswick also includes industrial uses along the harbor and residential uses along a grid of inland streets.

Central Glynn

Central Glynn is defined by Old Town Brunswick to the south, the wetlands to the east, the Altamaha River to the north, and Perry Lane Road to the northwest. This includes most of Glynn County's urbanized area outside of Old Town Brunswick and St. Simons Island. Many mid-century residential areas are in this Character Area and generally are found among connected but irregular road patterns. Major commercial corridors are found in this district including Glynn Avenue (US 17), Golden Isles Parkway (US 25), and Golden Isles Veteran Memorial Parkway (GA 25). Significant areas of multifamily residential are also found in this area. Central Glynn is defined by its central location in the county and by I-95, which has two interstate exits and accompanying commercial activity in this character area.

Airport & Industry

This area is predominantly used for larger-scale, industrial uses, including the Brunswick Golden Isles Airport. Several industrial parks also exist in the area, though most are only partially developed. This character area is bounded approximately by Chapel Crossing Road on the south, Ocean Highway on the east, Altamaha Blvd on the north, and Shell Road on the west. The Federal Law Enforcement Training Center is also in this area. There is little residential development in this area. At a central location in the county, this character area has good access to I-95 and is proximate to most of the developed parts of the County.

Glynn County, Georgia



Blythe Island

Blythe Island is an island in the middle of the Turtle River. The southern part of Blythe Island is dominated by Blythe Island State Park, while the northern part of Blythe Island is single family residential. Blythe Island is only accessible by the Blythe Island Highway, GA 303.

Colonel's Island

Colonel's Island is located along the South Georgia Parkway (US 17) south of the Turtle River. Colonel Island is entirely owned by the Georgia Ports Authority, which plans to develop it for industrial and port-related uses. Currently only the northern part of Colonel Island is developed. Altogether Colonel Island has 2,000 acres.

Brookman

The Brookman Character Area is defined by the Little Satilla River to the south, Colonel Island to the east, Blythe Island to the northeast, and Myers Hills Road to the west-northwest. The dominant type of development is single family residential, which is occurring at predominantly suburban densities. Much single family development is occurring in a strip fashion along arterials, while some single family development is occurring on cul-de-sacs or dead-end subdivisions. Commercial development is sparse and centered around I-95 exit 26. The Brookman Character Area is named for a small park near the intersection of South Georgia Parkway and Myers Hill.

Sterling/Everett

Part of western Glynn County, Sterling/Everett is currently mostly in forestry uses with some scattered rural residential uses. Its defining features include the intersection of US 341 and US 99, which is a current center of activity, and the US 341 corridor, which runs through the center of Sterling Everett. There is a cluster of industrial activities at the 341/99 intersection which is experiencing residential encroachment. Sterling/Everett's southern boundary is defined by a linear feature of wetlands.

Thalman

Part of western Glynn County, Thalman is currently mostly in forestry uses with some scattered rural residential uses. Thalman is the least developed and least accessible part of Glynn County. One defining feature of Thalman is the intersection of US 32 with US 99. Thalman's northern, southern, eastern boundaries are defined by tributaries of the Turtle River and associated wetlands.

Buck Swamp

Part of western Glynn County, Buck Swamp is currently mostly in forestry uses with some scattered rural residential uses. Buck Swamp is defined by US 82, which is a four-lane divided road running through the center of the Buck Swamp Character Area, and Buck Swamp Road, which parallel's US 82 about three miles to its south. Buck Swamp is bounded to the east by Brookman, to the south by the Little Satilla River, and to the north by a tributary of the Turtle River and associated wetlands.

GLYNN COUNTY PROPOSED CHARACTER AREAS

Legend

ROADS

- Interstate/U.S. Highways
- State Highways
- Arterial
- Collector
- Light Duty
- Private
- Private/Easements
- Logging

CITY BOUNDARY

COUNTY BOUNDARY

PARCELS

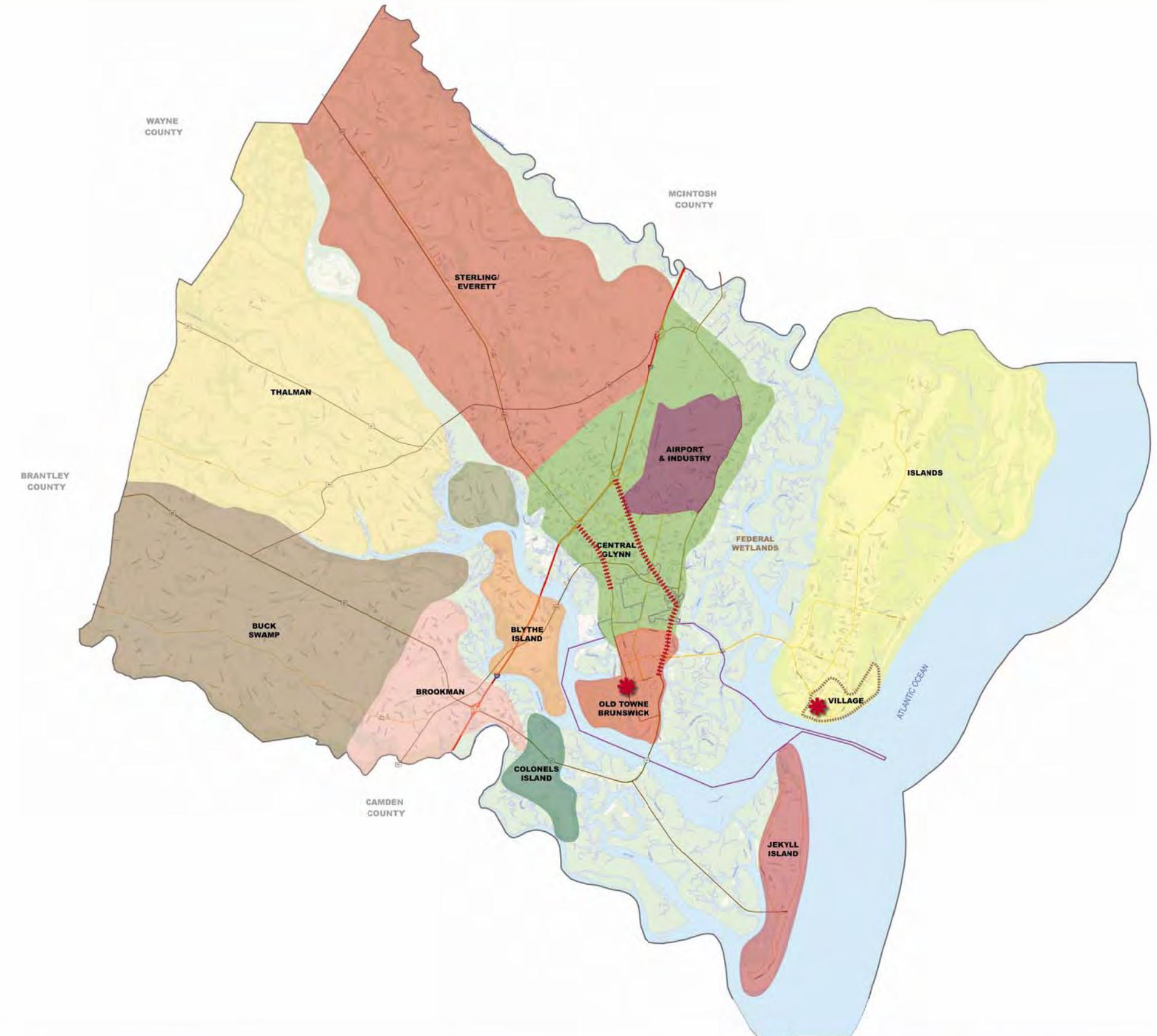
HYDROGRAPHY

- UPLAND
- MARSH
- WATER



0 0.5 1 2 3 4 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

E.6 Analysis of Consistency with Quality Community Objectives

The State of Georgia requires communities to assess their current policies to determine how well they are aligned with overall State Planning Objectives. This review includes how the community is performing as a whole, even though many of these issues may be beyond the scope of county government operations. These state objectives are known as “Quality Community Objectives” and are intended to apply to every community as it develops its comprehensive plan. However, in the case of Glynn County several objectives may have limited application given the unique coastal character and the influence coastal conditions have upon the development pattern within the County. Upon completion of the Community Agenda, the status of these objectives relative to Glynn County will be updated accordingly.

(a) Regional Identity Objective

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.

Preliminary Assessment: Good

Glynn County displays a strong architectural history, with many unique and historic buildings. However, county efforts to preserve historic resources are almost wholly reliant on non-profit efforts and are far short of the resources needed to preserve all high value historic sites. Glynn County’s economy is tied to its regional heritage through the Port of Brunswick, the fishing industry, and through the wood products industry. Each of these industries has a long history in Glynn County. The Golden Isles Convention and Visitors Bureau has strong outreach and coordination with the Georgia Department of Economic Development to promote regional tourism. Glynn County has maintained a vibrant cultural center in Brunswick through a concentration of civic facilities and activities in the downtown area. Glynn County’s Live Oaks, found in abundance in Brunswick and on the islands, create a distinct atmosphere that defines its location as a coastal area of substantial natural beauty.

(b) Growth Preparedness Objective

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, sewer 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.

Preliminary Assessment: Fair

Glynn County is grappling with its growth and putting plans in place to meet its future infrastructure needs. The recently completed Long Range Transportation Plan addresses expected transportation demand for the next 25 years. Alongside the Transportation Plan, population projections have been developed. Glynn County’s SPLOST funds provide a source of funding to meet certain capital and community facilities needs. On the other hand, the increased need for sewer capacity and water sources are potential constraints on new residential, commercial, and industrial growth. County-wide drainage is also an issue where the county is currently struggling to stay ahead of development as part of its strategy. The SPLOST seems to be an inadequate substitute for a formal capital improvement plan to schedule and prioritize the county’s capital needs county-wide.

(c) Appropriate Businesses Objective

The businesses and industries encouraged to develop or expand in a community should be suitable and complimentary for the community in terms of job skills required, linkages to other economic activities in the region, impact on the resources of the area, future prospects for expansion, and creation of higher-skill job opportunities.

Preliminary Assessment: Good

Glynn County has several strong economic development entities working on economic growth for the county. This includes the Brunswick-Glynn County Development Authority and the Brunswick-Golden Isles Chamber of Commerce. These entities have clear plans for the industries they are seeking to recruit and understand that industrial recruitment must be based on their regional strengths. The businesses identified in their economic development planning efforts are suitable for the environment and labor force of the Glynn County community. On the other hand, coordination and communication between these entities and the county government could be improved.

Glynn County has a diverse jobs base that is not dependent on any single employer or single economic or industry sector, with strengths in tourism and

Glynn County, Georgia

government, as well as significant manufacturing-based employment.

(d) Educational Opportunities Objective

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.

Preliminary Assessment: Good

The Coastal Georgia Community College (CGCC) coordinates with local employers to provide training programs that meet their existing employment needs. The CGCC also offers higher education opportunities including Bachelor's Degrees and Master's Degrees. A new technical and vocational high school is proposed to help Glynn County high school students find career paths with the potential for long-term success.

(e) Employment Options Objective

A range of job types should be provided in each community to meet the diverse needs of the local workforce.

Preliminary Assessment: Good

Employment data suggest that there are a range of jobs for professionals, skilled laborers, and unskilled laborers. Because of the large low-income population, there may be a need for even more low-skill job opportunities and commensurate training opportunities to help these workers improve their skills and earning potential.

(f) Heritage Preservation Objective

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.

Preliminary Assessment: Fair

The county's 1996 historic resources survey identified priority historic resources for preservation, but little action has been taken since the report was issued to secure the nomination or protection of these resources. Glynn County does not have dedicated staff to work on its historic preservation initiatives and policy. The

Coastal Georgia Historical Society has made significant efforts to preserve and interpret historic resources in Glynn County, especially on St. Simons Island. Unfortunately, some of the new development that has occurred on St. Simons Island is substantially out of character with historic development patterns.

(g) Open Space Preservation Objective

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.

Preliminary Assessment: Poor

Glynn County has a greenspace plan developed under the state's old greenspace program, but little progress has occurred on implementing the plan. The most active efforts for the acquisition of additional greenspace are being made by the St. Simon Land Trust. Of positive impact is the county's existing zoning category, Conservation Preservation that is appropriate for the protection of conservation lands. This zoning category is applied to much of the wetlands in the county. However, Glynn County has not adopted a conservation subdivision ordinance which could serve to encourage the clustering of development onto the least sensitive lands while protecting the most sensitive lands from development.

(h) Environmental Protection Objective

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.

Preliminary Assessment: Fair

Glynn County recently adopted a Water Resources Protection Ordinance that will help to improve water quality and reduce flooding. However, Glynn County does not have a comprehensive natural resources inventory, nor does it have any plans of note to protect any of its unique environmental resources, such as its wetlands, its river corridors, or its forestlands. Glynn County has not adopted any of the Georgia Department of Natural Resource's recommended ordinances for natural resource protection, including the recommended wetlands ordinance and the recommended groundwater

Glynn County, Georgia

recharge area ordinance. Despite the high value placed on its Live Oak tree cover, Glynn County lacks both policies and staff for maintaining trees on county property. Additionally, the use of septic tanks for wastewater disposal even where they are legally permissible can have a cumulative negative impact on sensitive environments such as wetlands and water bodies.

(i) Regional Cooperation Objective

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.

Preliminary Assessment: Good

Many of the key organizations in the county work for both Glynn County and the City of Brunswick. Glynn County and the City of Brunswick have a common Chamber of Commerce, Visitor's Bureau, and Development Authority. Recently the city and the county have been working together to coordinate on water and sewer issues with the potential of forming a joint water-sewer commission. On other issues, such as promoting redevelopment within the City of Brunswick, there has been less coordination.

Cooperation with other entities could be improved. Glynn County and Glynn County Schools could better coordinate on community facilities and forecasts on needs for future school locations. Glynn County and Jekyll Island could better coordinate on development review.

(j) Transportation Alternatives Objective

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.

Preliminary Assessment: Fair

Recently a public transportation study was completed and plans put in place for a potential public transportation system. However, no regularly scheduled public transportation service exists in the urbanized area of Glynn County. There are good networks of sidewalks and bike paths in Brunswick and on the islands, but there are few pedestrian and bike facilities on the other parts of the county. Glynn County has benefited from a series of local and regional

pedestrian and bikeway planning efforts, but the county does not have a guiding document to prioritize its expansion plans for bicycle and pedestrian infrastructure.

(k) Regional Solutions Objective

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.

Preliminary Assessment: Good

Overall the county has a good record of working with other local governments. The City of Brunswick and Glynn County are cooperating within a joint water-sewer commission. The county and the city also work together on services such as fire protection and emergency medical services.

(l) Housing Opportunities Objective

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.

Preliminary Assessment: Good

Compared with many regions in the country, overall housing prices are moderate and affordable in Glynn County. However, housing prices on St. Simons Island are very high and few workers in the county can afford to live on St. Simons Island. Glynn County offers a variety of housing options, from single family homes to manufactured housing to large multifamily housing complexes. Housing quality is a major problem in Glynn County, especially amongst lower income populations, due to its large and aging housing stock. Glynn County's Community Development Department promotes affordable and higher quality housing among those of limited incomes. All of the public housing in Glynn County is maintained and run by the City of Brunswick. Glynn County collaborates with Southeast Georgia Community Development Corporation to increase the supply of affordable housing in the county.

Glynn County, Georgia

(m) Traditional Neighborhood Objective

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.

Preliminary Assessment: Fair

Glynn County has many neighborhoods that model Traditional Neighborhood Development. However, the county is just beginning to explore regulations that promote new development in this pattern. Most of the existing zoning categories promote separate, single use districts. Glynn County does not have explicit policies promoting community facilities within walking distance of neighborhoods.

(n) Infill Development Objective

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.

Preliminary Assessment: Poor

Glynn County does not have adequate policies in place to promote redevelopment of older corridors and residential areas where redevelopment could be beneficial. In the case of St. Simons Island, infill regulation is being addressed as new residential development is occurring that is of different scale and character of the area.

(o) Sense of Place Objective

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.

Preliminary Assessment: Good

The Glynn County community is distinguished by its marshes, trees, and rivers. Downtown Brunswick still serves as an important center for the community, as does the St. Simons Island Village. St. Simons Island has a number of aesthetic protections. Glynn County

has a sign ordinance to prevent the over-proliferation of signs. In further flung areas of the county, a new focal point for the community might be helpful – most of the development in these areas occurs along sprawling corridors. Further refinement of potential activity centers, types of land uses, along with other planning features that reinforce the concept of ‘sense of place’ will be explored as part of the Community Agenda phase of the Comprehensive Plan Update.

E.7 Environmental Planning Criteria

The Georgia Department of Natural Resources Environmental Protection Division requires that the Comprehensive Plan address adequacy of current Glynn County regulations on the following topics:

- **Water Supply Watersheds**
- **Groundwater Recharge Areas**
- **Wetlands Protection**
- **River Corridor Protection**
- **Mountain Protection**

The Department of Natural Resources has model ordinances that it prefers counties adopt for Water Supply Watersheds, Groundwater Recharge areas, River Corridors, and Mountains. Some of these topics do not apply to Glynn County. Glynn County does not have mountains, and currently Glynn County does not have any water supply watersheds, though future watersheds may be worth protecting. To date, Glynn County has not adopted any of the model ordinances recommended by the Department of Natural Resources. A more in-depth discussion of these resources and the status of Glynn County protections of these resources are provided in the Natural Resources Section of this report, Chapter 5.0.

Glynn County, Georgia

1.0 Population Trends

1.1 Population Overview

Glynn County's population is growing and becoming more diverse. Some of the population growth is due to natural increases – new children being born into existing families – while some of the population growth is due to people being attracted to Glynn County's quality of life and coastal living amenities. As coastal areas to the south become more crowded and more expensive, Glynn County may see increasing net migration into the county. Over the next 25 years, Glynn County's growth will be significant and county services and infrastructure will have to expand accordingly to serve this growing population. Glynn County will also see growing Hispanic, Asian, and senior populations.

1.2 Glynn County Population Growth

In 2004, Glynn County's population was estimated by the Census Bureau to be 71,357. Of that total population, approximately 16,000 or 22% lived in the City of Brunswick.

Outside of Brunswick, the major concentrations of population are on St. Simons Island, Sea Island, and Jekyll Island. The western areas of Glynn County are sparsely populated and predominantly rural in character.

From 1980 to 1990, Glynn County gained about 7,500 residents total. From 1990 to 2000, Glynn County gained about 5,000 residents, or about 500 annually. During this period Glynn County grew at about a 1.0% annual rate of growth. While this was a significant growth rate, it was slower than the overall growth rate for the state of Georgia, which grew at 2.3% annually from 1990-2000.

Glynn County: Population History			
Year	1980	1990	2000
Total population	54,981	62,496	67,568
Male population	NA	29,678	32,322
Female population	NA	32,818	35,246

Source: Georgia DCA Dataviews, 2006

Glynn County: Population Growth		
Year	1980-1990	1990-2000
Numeric Growth	7,515	5,072
Annual Percent Growth	1.3%	0.8%

Source: Georgia DCA Dataviews, 2006

Georgia: Population			
Year	1980	1990	2000
Total population	5,457,566	6,478,216	8,186,453

Source: Georgia DCA Dataviews, 2006

Georgia Population Growth		
Year	1980-1990	1990-2000
Total population	1,020,650	1,708,237
Total population	1.7%	2.3%

Source: Georgia DCA Dataviews, 2006

Since 2000, Glynn County has been growing at a more rapid rate, closer to 1,000 people annually. The current annual growth rate is approximately 1.4%.

Glynn County: Population Growth, Recent				
Year	2001	2002	2003	2004
Absolute Population Growth	843	903	941	1,001
Annual Percent Growth	1.2%	1.3%	1.4%	1.4%

Source: Census Annual Population Estimate, US Census

Population growth in the county may come from three major sources. Firstly, there is an increasing number of retirees and second home residents who are seeking out coastal locations are coming to the area. As Florida locations become more expensive and crowded, larger numbers of retirees and second home purchasers are seeking out the Georgia coast. Secondly, Glynn County has historically had a low rate of unemployment and a high rate of employment growth, which may be attracting new residents who wish to work in the county. Thirdly, natural population increase occurs from births to current residents of the county.

Glynn County, Georgia

Glynn County's population is forecast to grow at 1.5% annually for the next 25 years. This forecast for population growth is based on:

- Estimates for population and employment growth from the recently developed Brunswick Area Transportation Study 2030 Transportation Plan
- Recent trends in population growth for the county, which has shown a growth rate of 1.3% since 2000, and
- The expectation that coastal areas will continue to experience strong population growth in coming years.

It should be noted that this population forecast is slightly higher than what past trends indicate, including the Long Range Transportation Plan which estimated an annual population growth rate of 1.0%.

GLYNN COUNTY POPULATION GROWTH TRENDS

Legend

Preliminary/Proposed Subdivisions

Lots Per Subdivision

- 1 - 9
- 10 - 99
- 100 - 490
- 1001 - 1900
- 8600

■ Growth Area greater than 100 lots

Major Roads

- Interstate
- Highways
- Arterial

Railroads

■ Glynn County

■ Brunswick Boundary

Hydrography

■ Upland

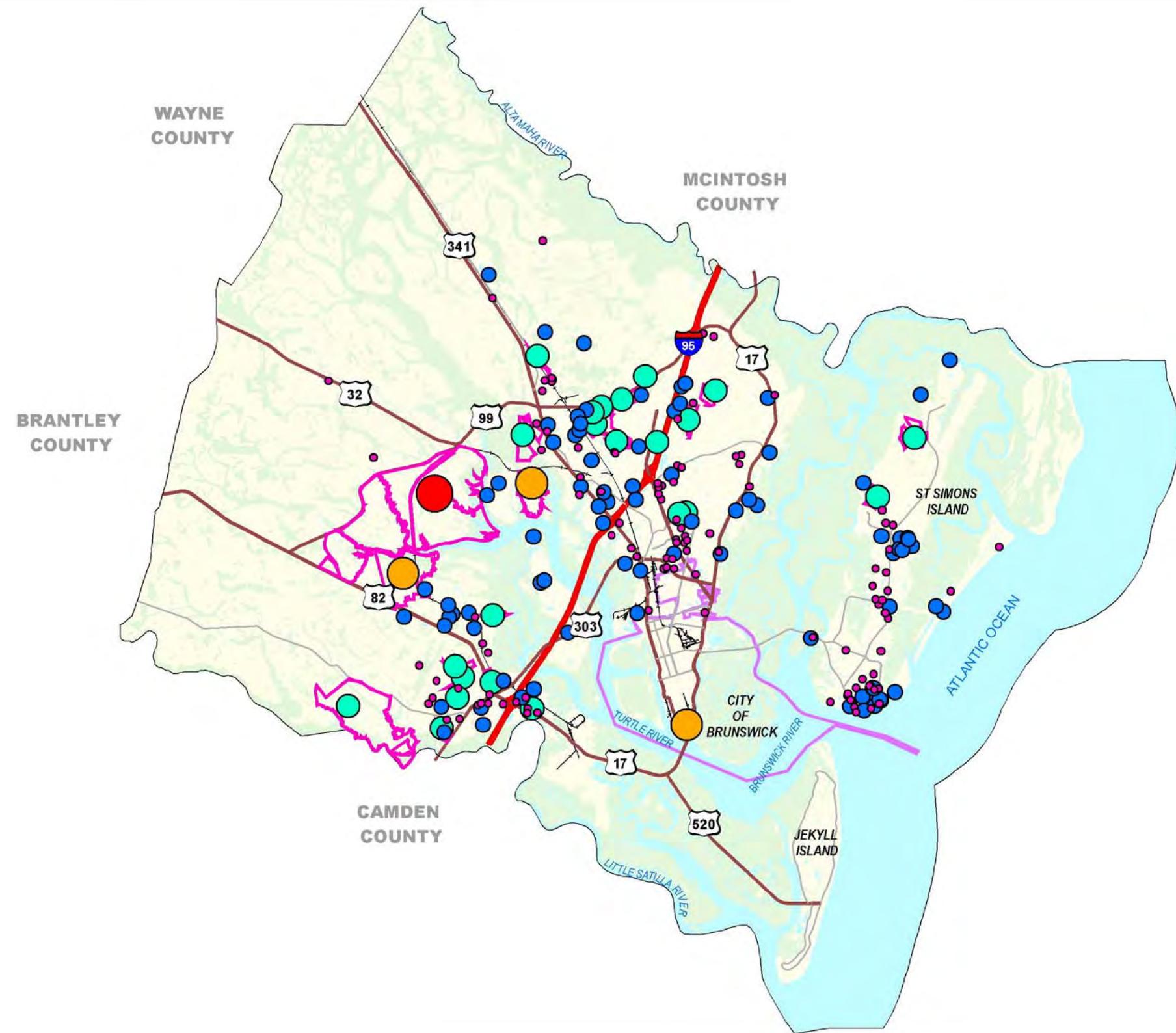
■ Marsh

■ Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

According to this population forecast, Glynn County will add 32,000 citizens in the next twenty-five years for a total population increase of almost 50% over the current population. In comparison to the State of Georgia population forecast, which shows a 38% increase in population, Glynn County is projected to grow at a faster rate than the state over the next 25 years. By 2030, Glynn County's population will be over 100,000 people. One of the central purposes of the Comprehensive Plan is to anticipate, plan for, and accommodate this expected population growth in a way that promotes quality of life for all in Glynn County.

Population Forecast						
Year	2005 (Estimate)	2010	2015	2020	2025	2030
Glynn County	72,427	78,025	84,055	90,551	97,549	105,088
Georgia	8,868,675	9,550,897	10,233,118	10,915,340	11,597,562	12,279,784

Source: EDAW, 2006, US Census

The following table presents a range of population forecasts based on different assumptions for the rate of annual population growth. What the table demonstrates is that small changes in the population growth rate could result in a wide range of populations by 2030. Given Glynn County's current population estimate of approximately 71,000 people, Glynn County could have anywhere between 92,000 to 154,000 people by the year 2030.

Glynn County: Range of Population Forecasts					
Year	2010	2015	2020	2025	2030
1.0% Growth	75,747	79,611	83,672	87,940	92,426
1.5% Growth	78,025	84,055	90,551	97,549	105,088
2.0% Growth	80,360	88,723	97,958	108,153	119,410
2.5% Growth	82,752	93,627	105,930	119,850	135,599
3.0% Growth	85,204	98,775	114,507	132,745	153,888

Source: EDAW, 2006

1.3 Population Composition

Age Distribution

Glynn County has a fairly even distribution of population. The largest population cohorts are children, and the smallest are young adults and seniors.

Overall, the age distribution of Glynn County has been fairly stable over the decades. However there is a general trend towards a relatively larger older adult population (35-54 yrs) and smaller teen (14-20 yrs) and young adult populations (21-34 yrs).

Glynn County has a smaller young adult population and a larger older adult population than the State of Georgia as a whole. This may reflect Glynn's attractiveness as a retirement or pre-retirement community.

Glynn County: Population by Age				
Year	1980	1990	2000	People per Annual Cohort
0 – 4 Years Old	4,021	4,579	4,398	1,100
5 – 13 Years Old	7,937	9,012	9,623	1,069
14 – 17 Years Old	4,280	2,652	3,087	772
18 – 20 Years Old	2,884	2,798	2,591	648
21 – 24 Years Old	3,686	3,164	2,919	730
25 – 34 Years Old	8,694	9,950	8,317	832
35 – 44 Years Old	6,407	9,077	10,348	1,035
45 – 54 Years Old	5,562	6,807	9,726	973
55 – 64 Years Old	5,382	5,750	6,798	680
65 and over	6,128	8,707	9,761	n/a
Total	54,981	62,496	67,568	

Source: Georgia DCA Dataviews, 2006

Glynn County: Population by Age – Percent			
Year	1980	1990	2000
0 – 4 Years Old	7.3%	7.3%	6.5%
5 – 13 Years Old	14.4%	14.4%	14.2%
14 – 17 Years Old	7.8%	4.2%	4.6%
18 – 20 Years Old	5.2%	4.5%	3.8%
21 – 24 Years Old	6.7%	5.1%	4.3%
25 – 34 Years Old	15.8%	15.9%	12.3%
35 – 44 Years Old	11.7%	14.5%	15.3%
45 – 54 Years Old	10.1%	10.9%	14.4%
55 – 64 Years Old	9.8%	9.2%	10.1%
65 and over	11.1%	13.9%	14.4%

Source: Georgia DCA Dataviews, 2006

Glynn County, Georgia

Georgia: Population by Age			
Year	1990	2000	People per Annual Cohort
0 – 4 Years Old	495,535	595,150	148,788
5 – 13 Years Old	863,314	615,584	68,398
14 – 17 Years Old	368,454	607,759	151,940
18 – 20 Years Old	325,159	596,277	149,069
21 – 24 Years Old	522,634	592,196	148,049
25 – 34 Years Old	1,174,896	1,299,256	129,926
35 – 44 Years Old	1,015,698	1,353,508	135,351
45 – 54 Years Old	668,951	1,079,992	107,999
55 – 64 Years Old	498,514	375,651	37,565
65 and over	654,270	785,275	

Source: US Census American Factfinder, 1990, 2000

Georgia: Population by Age		
Year	1990	2000
0 – 4 Years Old	7.5%	7.5%
5 – 13 Years Old	13.1%	7.8%
14 – 17 Years Old	5.6%	7.7%
18 – 20 Years Old	4.9%	7.5%
21 – 24 Years Old	7.9%	7.5%
25 – 34 Years Old	17.8%	16.4%
35 – 44 Years Old	15.4%	17.1%
45 – 54 Years Old	10.2%	13.7%
55 – 64 Years Old	7.6%	4.8%
65 and over	9.9%	9.9%

Source: US Census American Factfinder, 1990, 2000

Glynn County, Georgia

Glynn County: Population by Age, Forecast						
Year	2005	2010	2015	2020	2025	2030
0 – 4 Years Old	4,873	5,239	5,628	6,012	6,393	6,756
5 – 9 Years Old	4,711	5,152	5,534	5,973	6,404	6,826
10 – 14 Years Old	4,916	5,000	5,460	5,880	6,372	6,838
5 – 19 Years Old	5,275	5,241	5,362	5,859	6,339	6,856
20 – 24 Years Old	4,758	4,955	4,962	5,106	5,594	6,056
25 – 29 Years Old	4,291	5,087	5,263	5,285	5,447	6,006
30 – 34 Years Old	4,397	4,670	5,456	5,646	5,693	5,915
35 – 39 Years Old	4,550	4,697	4,991	5,798	6,008	6,086
40 – 44 Years Old	5,274	4,817	4,987	5,315	6,153	6,375
45 – 49 Years Old	5,420	5,554	5,079	5,274	5,635	6,496
50 – 54 Years Old	5,102	5,735	5,858	5,368	5,611	5,978
55 – 59 Years Old	4,705	5,217	5,852	5,990	5,527	5,795
60 – 64 Years Old	3,681	4,713	5,211	5,855	6,013	5,586
65 – 69 Years Old	2,929	3,702	4,716	5,232	5,896	6,024
70 – 74 Years Old	2,392	2,675	3,375	4,330	4,796	5,425
75 – 79 Years Old	2,000	1,963	2,180	2,760	3,544	3,933
80 – 84 Years Old	1,576	1,498	1,461	1,629	2,075	2,656
85+ Years Old	1,574	2,111	2,682	3,239	4,049	5,480
Total	72,427	78,025	84,055	90,551	97,549	105,088

Source: Woods & Poole Economics, Inc. Washington, D.C.

Copyright 2005

Source of Population Forecast, EDAW 2006

Glynn County, Georgia

Forecasts of age distribution indicate that age distribution will change significantly over the next 25 years. As a whole, the population will continue to age; the median age will continue to rise. All segments of the population will grow as the population as a whole grows. However, in a relative sense there will be some large shifts among the population distribution. The part of the age spectrum that will grow the most proportionately are adults over age 65. This part of the population will increase from 14.5% of the population in 2005 to 22.4% of the population in 2030. The populations that will increase the least quickly are those that comprise the bulk of the mature workforce - adult populations 40-59. This population will decrease as a percent of the population from, 28.3% to 23.5%.

Glynn County: Age Distribution Forecast			
Age Cohort	2005	2030	Change
0 – 4 Years Old	6.7%	6.4%	-0.3%
5 – 9 Years Old	6.5%	6.5%	0.0%
10 – 14 Years Old	6.8%	6.5%	-0.3%
15 – 19 Years Old	7.3%	6.5%	-0.8%
20 – 24 Years Old	6.6%	5.8%	-0.8%
25 – 29 Years Old	5.9%	5.7%	-0.2%
30 – 34 Years Old	6.1%	5.6%	-0.4%
35 – 39 Years Old	6.3%	5.8%	-0.5%
40 – 44 Years Old	7.3%	6.1%	-1.2%
45 – 49 Years Old	7.5%	6.2%	-1.3%
50 – 54 Years Old	7.0%	5.7%	-1.4%
55 – 59 Years Old	6.5%	5.5%	-1.0%
60 – 64 Years Old	5.1%	5.3%	0.2%
65 – 69 Years Old	4.0%	5.7%	1.7%
70 – 74 Years Old	3.3%	5.2%	1.9%
75 – 79 Years Old	2.8%	3.7%	1.0%
80 – 84 Years Old	2.2%	2.5%	0.4%
85+ Years Old	2.2%	5.2%	3.0%

Source: Woods & Poole Economics, Inc. Washington, D.C.
Copyright 2005

Racial Distribution

Glynn County's population is approximately 71% Caucasian, 26% African-American, and 3% Hispanic. Glynn County has displayed a consistent racial distribution between whites and blacks since 1980. However in recent years the Hispanic population has grown rapidly and other races such as Asian-Americans are increasingly present in the community.

Growing Hispanic populations are a trend that has been seen across Georgia, and statewide local governments have addressed this growing demographic differently. Glynn County may wish to consider new policies or outreach strategies to address the growing Hispanic population.

The racial distribution of Glynn County's population will change gradually over time. Over the next 25 years, the Caucasian population is projected to decrease as a proportion from 69% to 62% of the county's population. The Hispanic population (technically Hispanic is considered an origin, not a race) is expected to grow rapidly, up from 4% of the population to 7%. The Asian population will also grow rapidly, but will still be quite small in 2030 at just 2% of the population. The African-American portion of the population is expected to grow from 26% to 29%. In short, though Glynn County will remain majority Caucasian, it will become increasingly diverse over the next 25 years. These trends are similar to the trends being seen across Georgia, where races other than black and white are growing rapidly as are Hispanic populations.

Glynn County, Georgia

Glynn County: Racial Composition						
Year	1980		1990		2000	
	Population	Percent	Population	Percent	Population	Percent
White alone	40,118	73%	45,989	74%	47,746	71%
Black or African American alone	14,500	26%	15,941	26%	17,874	26%
American Indian and Alaska Native alone	64	0%	120	0%	177	0%
Asian or Pacific Islander	184	0%	301	0%	440	1%
Other race	115	0%	145	0%	1,331	2%

Source: Georgia DCA Dataviews, 2006

Georgia Racial Composition				
Category	1990		2000	
White alone	4,600,148	71%	5,327,281	65%
Black or African American alone	1,746,565	27%	2,349,542	29%
American Indian and Alaska Native alone	13,348	0%	21,737	0%
Asian or Pacific Islander	75,781	1%	173,170	2%
other race	42,374	1%	310,477	4%

Source: US Census American Factfinder, 1990, 2000

Glynn County: Hispanic Ethnic Composition			
Category	1980	1990	2000
Persons of Hispanic origin	0.9%	0.9%	3.0%

Source: Georgia DCA Dataviews, 2006

Georgia: Hispanic Ethnic Composition				
Year	1990	1990	2000	2000
Persons of Hispanic Origin	108,922	1.7%	435,227	5.3%

Source: US Census American Factfinder, 1990, 2000

Glynn County, Georgia

Glynn County: Racial Composition Forecast							
Year	2005	2010	2015	2020	2025	2030	Percent Increase, 2005-2030
White alone	50,169	52,987	56,011	59,137	62,372	65,641	31%
Black or African American alone							
	18,910	20,811	22,892	25,178	27,697	30,510	61%
American Indian and Alaska Native alone							
	207	221	237	244	254	254	23%
Asian or Pacific Islander							
	547	722	889	1,087	1,308	1,579	189%
Hispanic Origin (any race)							
	2,594	3,284	4,027	4,904	5,918	7,103	174%

c

Source: Woods & Poole Economics, Inc. Washington, D.C. Copyright 2005,
(Source of Population Forecast, EDAW 2006)

Glynn County, Georgia

1.4 Income and Educational Attainment

Median household income for Glynn County was \$27,887 in 1990 and \$38,765 in 2000. Taking into account the rise in cost of living, the median household income increased by 5% over this decade. However, Glynn County's household income lagged behind the State of Georgia's. In 1990, Glynn's median household income was 96% of Georgia's; in 2000, it was just 91% of Georgia's. Taking into account the lower cost of living in Glynn County, the average Glynn County household has a standard of living that is approximately equal to that of the average Georgia household.

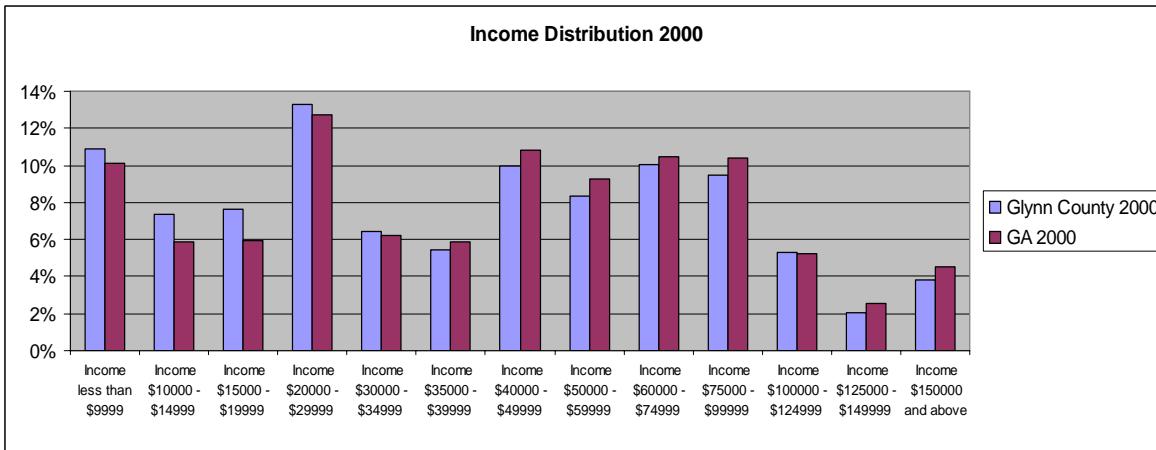
Glynn County: Household Income Distribution		
Year	1990	2000
Total	23,980	27,248
Income less than \$9999	3,996	2,964
Income \$10000 - \$14999	2,276	2,000
Income \$15000 - \$19999	2,282	2,090
Income \$20000 - \$29999	4,151	3,628
Income \$30000 - \$34999	1,821	1,754
Income \$35000 - \$39999	1,752	1,481
Income \$40000 - \$49999	2,320	2,711
Income \$50000 - \$59999	1,818	2,272
Income \$60000 - \$74999	1,646	2,730
Income \$75000 - \$99999	1,138	2,590
Income \$100000 - \$124999	339	1,441
Income \$125000 - \$149999	84	556
Income \$150000 and above	357	1,031
Median	27,887	38,765
1990 Dollars	27,887	29,367
% of Georgia	96%	91%

Source: US Census 2000 SF3

Georgia: Household Income Distribution		
Year	1990	2000
Total	2,366,575	3,007,678
Income less than \$9999	398,078	304,816
Income \$10000 - \$14999	204,142	176,059
Income \$15000 - \$19999	210,123	177,676
Income \$20000 - \$29999	405,424	383,222
Income \$30000 - \$34999	186,754	187,070
Income \$35000 - \$39999	160,205	176,616
Income \$40000 - \$49999	260,712	326,345
Income \$50000 - \$59999	179,962	278,017
Income \$60000 - \$74999	161,705	315,186
Income \$75000 - \$99999	109,354	311,651
Income \$100000 - \$124999	40,880	157,818
Income \$125000 - \$149999	16,094	76,275
Income \$150000 and above	33,142	136,927
Median	29,021	42,433

Source: US Census 2000 SF3

Looking at the distribution of household incomes, we see a dramatic rise in household incomes at the higher end of the spectrum, but not as great a decrease at the lower end of the spectrum. Nearly 40% of Glynn County households earned less than \$30K annually in the year 2000. Meanwhile, the number of households earning over \$100K annually grew from 780 households to 3,028 households from 1990 to 2000.



Glynn County, Georgia

So Glynn County has seen rapid growth of high-income households in recent years. This pattern of rapid growth in high-income households has generally been found in the State of Georgia as well, which has seen the number of households with incomes over \$100,000 quadruple from 1990 to 2000.

Also, in comparison with the State of Georgia, Glynn County has a higher percentage of low-income households.

Per capita income has grown quite rapidly in Glynn County since 1980. Taking into account the Consumer Price Index, per capita income has grown by over 50% between 1980 and 2000. Similar rates of growth for per capita income occurred statewide in Georgia.

Glynn County: Per Capita Income (in dollars)			
Category	1980	1990	2000
Per Capita Income	6,809	14,055	21,707
Consumer Price Index	6,809	10,929	14,399
Percent Growth		29%	17%

Source: Georgia DCA Dataviews, 2006

Georgia: Per Capita Income (in dollars)			
Category	1990	2000	
Per Capita Income	13,631	21,154	
Consumer Price Index	13,631	17,959	
Percent Growth			18%

Source: Georgia DCA Dataviews, 2006

Over the past 20 years, the level of educational attainment in Glynn County has increased. The percentage of adults with some college has increased from 15% to 23%, and the percentage of college graduates has nearly doubled from 8% to 15%. The number of adults with a less than high school education has decreased from 38% to just 18%. In comparison with the State of Georgia, Glynn County has about the equivalent level of educational attainment in its adult population. Slightly more Glynn County residents have some college experience, which is likely attributable to the location of Coastal Georgia Community College in the county.

Glynn County, Georgia

Georgia: Educational Attainment				
Category	1990		2000	
Less than 9th Grade	483,755	12%	386,391	8%
9th to 12th Grade (No Diploma)	686,060	17%	710,394	14%
High School Graduate (Includes Equivalency)	1,192,935	30%	1,471,905	29%
Some College (No Degree)	684,109	17%	1,045,663	20%
Associate Degree	199,403	5%	265,941	5%
Bachelor's Degree	519,613	13%	820,702	16%
Graduate or Professional Degree	257,545	6%	425,546	8%

Glynn County: Educational Attainment						
	1980		1990		2000	
Less than 9th Grade	6,376	20%	3,732	9%	2,617	6%
9th to 12th Grade (No Diploma)	5,898	18%	6,662	16%	5,306	12%
High School Graduate (Includes Equivalency)	10,262	32%	12,680	31%	13,001	29%
Some College (No Degree)	4,867	15%	7,381	18%	10,052	23%
Associate Degree	0	0%	1,950	5%	2,870	6%
Bachelor's Degree	2,686	8%	5,386	13%	6,726	15%
Graduate or Professional Degree	2,099	7%	2,641	7%	3,852	9%
Total	32,188	100%	40,432	100%	44,424	100%

Educational Attainment, Glynn County and Georgia, 2000		
	Glynn County	Georgia
Less than 9th Grade	6%	8%
9th to 12th Grade (No Diploma)	12%	14%
High School Graduate (Includes Equivalency)	29%	29%
Some College (No Degree)	23%	20%
Associate Degree	6%	5%
Bachelor's Degree	15%	16%
Graduate or Professional Degree	9%	8%
Total	100%	100%

Source (all tables this page): Georgia DCA Dataviews, 2006

Glynn County, Georgia



1.5 Demographics Needs Assessment

Strong population growth over the next 25 years will present major challenges and opportunities for Glynn County. The county must consider what locations are best for incorporating an increase in population of nearly 50%. The engine of population growth and development can be used to help catalyze goals such as revitalization of urban areas and mixed income communities. Economic opportunities will also expand with increased population, but challenges will come with population growth as well. The increase in development can threaten valued natural and cultural resources in the county if they are not well protected. Community facilities, such as roads, parks, and schools, may come under strain as the county strives to maintain and expand its capital facilities. The one certainty of population growth is that things cannot remain the same as they have always been.

The greatest demographic challenge for Glynn County may be the rapidly growing senior population. The over 65 population will grow from about 10,000 people currently to over 23,000 in 2030. Large new amounts of senior housing, senior services, and medical care facilities will be needed, along with an adequate workforce to staff healthcare and other senior care related positions. All aspects of public services should be planned in consideration of the growing size and needs of Glynn County's senior population.

A second and related challenge is the slow rate of growth for adult populations between 40-60 years old. This part of the population is often the most productive part of the workforce, especially for the professions and positions of management. As the relative size of this population shrinks, there may be a lack of workforce to fill important management and professional positions. The county may wish to explore long term ways to address this workforce supply issue.

As the racial make-up of Glynn County changes, the county may consider reaching out to these new communities and making sure that they are adequately represented in community activities and decision-making. The county may want to consider policies or initiatives that help to integrate the growing Hispanic population into the larger community.

Considering the large number of households with low incomes, Glynn County needs to continue prioritizing education and training and expanding employment opportunities, especially for those populations with less education and skills.

Glynn County, Georgia

2.0 Housing

2.1 Housing Overview

Glynn County has a mix of relatively older housing stock, concentrated in the City of Brunswick, and newer housing stock, whose growth is primarily seen in western and southern Glynn County. New housing production in the county is strong and in recent years is outpacing population growth. The housing stock is diverse both in terms of types of units and in terms of housing tenure. Glynn County has a large number of home owners, while still having sufficient rental units to house those populations that cannot afford to or do not desire to buy a home. Housing prices have risen significantly in recent years, but Glynn County still has a large supply of affordable housing for both buyers and renters.

Like any county, Glynn has its share of housing challenges. Some of the older housing stock is deteriorating and is in need of renovation. This can be a particular challenge for seniors who live on a fixed income but own their home.

2.2 Current Housing Stock

Glynn County has a fairly diverse housing stock. According to the table below, almost 40% of the housing stock is types other than single family housing. Single family, duplexes, multifamily, and mobile home types are all in evidence in the county.

Glynn County: Types of Housing			
Category	1980	1990	2000
TOTAL Housing Units	21,935	27,724	32,636
Single Units (detached)	15,376	17,119	20,046
Single Units (attached)	828	1,039	987
Double Units	931	1,161	1,161
3 to 9 Units	1,570	2,980	3,178
10 to 19 Units	611	883	896
20 to 49 Units	118	393	604
50 or more Units	676	332	1,406
Mobile Home or Trailer	1,825	3,572	4,273
All Other	0	245	85

Source: Georgia DCA Dataviews, 2006

Glynn County: Types of Housing, Percent			
Category	1980	1990	2000
TOTAL Housing Units			
Single Units (detached)	70%	62%	61%
Single Units (attached)	4%	4%	3%
Double Units	4%	4%	4%
3 to 9 Units	7%	11%	10%
10 to 19 Units	3%	3%	3%
20 to 49 Units	1%	1%	2%
50 or more Units	3%	1%	4%
Mobile Home or Trailer	8%	13%	13%
All Other	0%	1%	0%

Source: Georgia DCA Dataviews, 2006

Glynn County's housing stock is slightly older than average for Georgia counties. About 56% of the housing stock is over 25 years old. This compares with about 50% of the housing stock in Georgia overall being more than 25 years old. The average age of the housing stock appears to be gradually rising.

Glynn County: Age of Housing		
Category	1990	2000
Built 1970 - 1979	6,369	5,756
Built 1960 - 1969	5,242	4,787
Built 1950 - 1959	4,079	3,872
Built 1940 - 1949	2,395	2,080
Built 1939 or earlier	1,956	1,863
Total (Including homes built after 1979)	27,724	32,636

Source: Georgia DCA Dataviews, 2006

Glynn County, Georgia

Glynn County: Age of Housing, Percent		
Category	1990	2000
Built 1970 - 1979	23%	18%
Built 1960 - 1969	19%	15%
Built 1950 - 1959	15%	12%
Built 1940 - 1949	9%	6%
Built 1939 or earlier	7%	6%

Source: Georgia DCA Dataviews, 2006

Nearly all housing units have completed plumbing and kitchen facilities. However the number that does not have complete facilities rose from 1990 to 2000, perhaps reflecting a broader trend of inadequate maintenance and housing quality.

Glynn County: Condition of Housing		
Category	1990	2000
Total housing units		
Complete Plumbing Facilities	99.6%	99.3%
Lacking Plumbing Facilities	0.4%	0.7%
Complete kitchen facilities	99.5%	99.0%
Lacking complete kitchen facilities	0.5%	1.0%

Source: Georgia DCA Dataviews, 2006

Note: This table excludes housing units from the City of Brunswick.

Glynn County displays a fairly typical balance between home owners and renters, with approximately 65% owners and 35% renters in 2000. Housing vacancy rates are on the high side, reflecting the presence of homes used for seasonal, recreational, or occasional use – about 40% of the County’s vacant housing in 2000.

Glynn County: Occupancy Characteristics		
Category	1990	2000
TOTAL Housing Units Built	27,724	32,636
Housing Units Vacant	3,777	5,428
Housing Units Owner Occupied	15,591	17,818
Housing Units Renter Occupied	8,356	9,390

Source: Georgia DCA Dataviews, 2006

Glynn County, Georgia: Vacant Homes 2000	
Total:	5,428
For rent	1,675
For sale only	392
Rented or sold, not occupied	248
For seasonal, recreational, or occasional use	2,245
For migrant workers	4
Other vacant	864

U.S. Census Bureau Census 2000

Glynn County: Occupancy Characteristics, Percent		
Category	1990	2000
TOTAL Housing Units Built		
Housing Units Vacant	14%	17%
Housing Units Owner Occupied	56%	54%
Housing Units Renter Occupied	30%	29%

Source: Georgia DCA Dataviews, 2006

2.3 Housing Trends

Since 2004, several very large housing developments with hundreds and even thousands of units have been proposed or are under construction. This is a relatively recent development and its impact on the county’s housing supply and market are currently not well known.

Looking at the decade of 1990-2000, about 500 homes a year were added to the county’s housing stock. The largest increases were among single family homes and large multifamily structures of over 50 units, followed by the increase in mobile homes. There was no increase in townhome type units or duplexes during this same decade.

Glynn County, Georgia

Glynn County: New Housing Construction		
Category	1980-1990	1990-2000
TOTAL Housing Units	5,789	4,912
Single Units (detached)	1,743	2,927
Single Units (attached)	211	-52
Double Units	230	0
3 to 9 Units	1,410	198
10 to 19 Units	272	13
20 to 49 Units	275	211
50 or more Units	-344	1,074
Mobile Home or Trailer	1,747	701
All Other	245	-160

Source: Georgia DCA Dataviews, 2006

In more recent years, the county has seen about 600-750 housing units produced per year according to Census estimates. This indicates that housing production is outpacing population growth, which could bring housing prices down in the long run.

Glynn County: New Housing Construction, Recent				
Category	2000	2001	2002	2003
TOTAL Housing Units	32,794	33,447	34,061	34,837
Growth in Units		653	614	776
% Growth		2.0%	1.8%	2.3%
				1.8%

US Census, Annual Estimates of Housing Units, 2000

2.4 Housing Cost

Housing costs rose significantly between 1990 and 2000, and have continued to rise rapidly since 2000. The following table illustrates how the cost of home ownership has risen more rapidly than household income. The “Ownership Multiplier” is how many years’ median household income is equal to the median cost of a home. This multiplier – a measure of the expense of housing – rose from 2.36 to 2.95 from 1990 to 2000. At the same time, the “Renter Multiplier” decreased, indicating that renting a residence in Glynn County has become more affordable.

It should be noted that much of Glynn County’s affordable housing stock is located within the City of Brunswick. The City of Brunswick contained 21% of Glynn County’s housing stock in 2000. Whereas the median property value for Glynn

County as a whole was \$114,500, the median property value for the City of Brunswick was almost half that value at \$61,200. Therefore the median property value for homes located in Glynn County but outside the City of Brunswick is significantly higher than indicated by the table below.

Glynn County: Housing Cost (in dollars)		
	1990	2000
Median property value	65,800	114,500
Median rent	407	533
Median HH Income	27,887	38,765
Ownership Multiplier	2.36	2.95
Rental Multiplier	0.62	0.47

Source: Georgia DCA Dataviews, 2006

City of Brunswick: Housing cost (in dollars)		
	1990	2000
Median property value	41,800	61,200
Median rent	315	434

Source: Georgia DCA Dataviews, 2006

The Georgia Department of Community Affairs defines a household as “cost-burdened” if it spends more than 30% of its household income on housing. The number of cost-burdened households in Glynn County is high, at 24% of all households. However, this percentage has held steady over the decade from 1990-2000.

Glynn County: Cost Burdened		
Percent of Household Income Spent on Housing	1990	2000
30% - 49%	5,506	3,819
50% and greater	NA	2,624
Not computed	564	1,031
Total Households	23,980	27,248

Source: Georgia DCA Dataviews, 2006

Glynn County: Cost Burdened, Percent		
Category	1990	2000
30% - 49%	23%	14%
50% and greater		10%
Not computed	2%	4%

Source: Georgia DCA Dataviews, 2006

Glynn County, Georgia

HUD, or the US Department of Housing and Urban Development, conducted a Comprehensive Affordability Housing Strategy in Georgia in 2000. Data from this study is provided below.

The following table is a count of households with housing problems in Glynn County. This chart depicts that housing problems apply to many types of households, large and small, those headed by younger adults and those headed by seniors, and that housing problems apply to a range of incomes. MFI is a measure of income relative to the Median Family Income. MFI 30 indicates an income under 30% of Median Family Income, MFI 50 indicates an income between 30-50%, and so on.

What this chart shows is that most low income households are cost-burdened when it comes to housing. Large family households in particular are cost-burdened, presumably because they need larger housing accommodations.

Surprisingly, many cost-burdened households are home owners.

The housing study also addressed the supply of affordable housing. Glynn County has a fairly large supply of affordable housing, with 11,000 affordable rental units and 18,000 affordable ownership units. These numbers indicate that, in fact, most of the housing stock in Glynn County was considered affordable as of 2000.

Total Households with Housing Problems for Glynn County									
-	Renter Households				-	Owner Households			
-	Total	Elderly	Sm Family	Lg Family	-	Total	Elderly	Sm Family	Lg Family
MFI 30	1,621	340	687	151	-	948	442	224	63
MFI 50	1,138	194	503	126	-	749	261	289	46
MFI 80	534	49	275	71	-	1,124	265	526	149
MFI 100	446	70	96	118	-	1,517	279	910	120
Total	3,740	654	1,561	466	-	4,344	1,248	1,949	378

Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy 2000.

Affordable Housing Units for Glynn County									
-	Renter Units				-	Owner Units			
-	Total	0-1 BR	2 BR	3+ BR	-	Total	0-1 BR	2 BR	3+ BR
MFI 30	2,360	581	894	885	-	N/A	N/A	N/A	N/A
MFI 50	3,563	690	1,648	1,225	-	5,999	317	1,316	4,366
MFI 80	3,735	857	1,551	1,327	-	4,843	95	861	3,887
MFI 100	1,366	331	532	503	-	7,594	86	975	6,533

Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy 2000.

Glynn County, Georgia

2.5 Special Housing Needs

As the housing stock has aged, and as the population has aged, the quality of some of the housing stock in Glynn County has declined. Currently, there exists a significant pool of sub-standard housing. This is evidenced by an increasing percent of homes without adequate kitchen and/or plumbing facilities. The county does not have a precise count of the amount of substandard housing, but three of the county's twelve census tracts qualify for HUD grants based on household income levels (Census Tracts 7, 8, and 9). Census Tracts 8 and 9 lie entirely within the City of Brunswick, and Census Tract 7 is almost entirely within the city. Often those who live in substandard housing are older or retired and live on fixed incomes.

Glynn County conducts a Community Housing Improvement Program to help rehabilitate substandard housing owned by lower income residents. State and federal monies are used to upgrade the quality of housing. Glynn County cooperates with the Southeast Georgia Community Development Corporation to oversee the housing improvement program. The goal of the program is to bring substandard housing up to compliance with the housing code. Home owners must match the rehabilitation grants with a 40% payment, which is often provided for with favorable terms from local banks. The program is small, and the amount of homes that can be served has been diminished by the need for lead abatement in many of the substandard homes. Due to the limited amount of funding, the Housing Improvement Program has only been able to serve a few dozen residents.

Georgia DCA has compiled statistics on special housing needs including AIDS cases, domestic violence cases, seniors, and those in need of drug treatment. The purpose of the counts on the following page is to help the county gage its needs for special housing types and consider if there is an adequate supply of these special housing types.

2.6 Jobs-Housing Balance

Glynn County as a whole has an appropriate jobs-housing balance. The slightly higher ratio of housing in Glynn County is likely due to the number of vacation/seasonal homes in the county. It should also be noted that many people who work in Glynn County reside in surrounding rural counties like Wayne County or McIntosh County.

Jobs-Housing Balance, 2000		
Category	Glynn County	Georgia
Jobs	31,858	3,839,756
Housing	32,636	3,281,737
Jobs/Housing Ratio	0.98	1.17

Source: Georgia DCA Dataviews, 2006, EDAW calculations

Parts of Glynn County do have a jobs-housing balance issue. In particular, the island areas of the county – St. Simons Island and Sea Island – have a number of low-paying jobs that do not compensate adequately for the affordability of a residence in these areas. As islands, these areas also have limited access to transportation corridors, which can lead to peak-hour congestion for commuters on the few points of access to the islands. Sea Island has established a fringe parking lot with support services on St. Simons Island, which limits the amount of commuter traffic to Sea Island. However, employment movement from mainland Glynn County to St. Simons Island is still a problem.

2.7 Housing Needs Assessment

With its large supply of affordable housing, Glynn County's largest housing problem appears to be maintaining housing quality as the housing stock ages, particularly for low-income homes. These housing quality problems tend to be concentrated in the City of Brunswick and older sections of the mainland. Lower income households and rental properties may under-invest in maintenance which can result in a long term deterioration of the quality of the housing stock. Glynn County and the City of Brunswick may need to initiate or expand community housing programs to improve or upgrade the quality of its housing stock.

There is some requisite for increased special needs housing in the county. Housing to meet the needs of persons with HIV/AIDS and victims of domestic abuse may need to be expanded or made more easily available to these special needs populations. Coordination between the county and existing non-profit organizations on these issues is important for the efficient use of public resources and effective service delivery.

Glynn County, Georgia

Special Housing Needs for Glynn County						
AIDS Cases 1981-2000	Family Violence, # of Police Actions Taken, 2000	Total, # Age 62+, 2000	Total, % Age 62+, 2000	Disability (Any) % Age 16+, 1990	Adult Substance Abuse Treatment Need, 2001	Adult Substance Abuse Treatment Need, % of Total Population, 2001
181	412	11,547	17%	30%	3,766	5.6%

Source: Georgia DCA Dataviews, 2006

Large-scale housing developments present a planning challenge to the county. Large numbers of homes may be developed in areas far from existing retail areas and existing community facilities. If this happens, residents can be isolated from important services and place a strain on the transportation infrastructure. New, large-scale housing developments need to be guided in a way that ensures the long term quality of life of both new and existing residents of the county.

Jobs-housing balance will continue to present a challenge to the county, especially on the islands. The county needs a long-term strategy for addressing the demand for labor on the islands in an environment where affordable housing is scarce. This strategy could be comprised of affordable housing, transportation, and economic development components – both the jobs and the housing sides of the equation need to be addressed.

Glynn County, Georgia

3.0 Economic Development

3.1 Economic Overview

Glynn County's economy is in transition, with a growing diversity of economic activity. Traditional economic activities related to forestry and manufacturing have been in decline, while tourism and port-related industries have been growing rapidly. Other major economic activities include federal employment and shrimping.

Quality of life, infrastructure, and a well-trained workforce are some of Glynn County's main attractions. Located halfway between Savannah and Jacksonville, Glynn County offers a variety of quality of life amenities – mild climate, ocean, beaches, and ample recreation opportunities such as golfing and fishing. More detail about Glynn County's economic resources will be provided in the following sections.

Georgia Power recently sponsored an economic development assessment for Glynn County, which was authored by CH2MHill/Lockwood Greene. This economic development assessment reviewed the current state of the county, including transportation, workforce, public services, industrial development, business costs, government and leadership, and quality of life. The assessment identified both areas where Glynn County is strong as well as areas of weakness for the county. The tension between preserving scenic beauty and quality of life with the existing heavy industrial base was highlighted. Also, the need for balanced development in the county and a broad economic base was emphasized. Recommendations from the Georgia Power economic development assessment are discussed in section 3.7, Economic Development Needs Assessment.

3.2 Economic Base

Below are tables showing percent of employment by major industries and location quotients in major industries. Rows in orange show areas of employment concentration for Glynn County; rows in blue show areas of relatively low employment for Glynn County. Glynn County's major economic base appears to be in arts, entertainment, and recreation – in short, tourism-related industries. A second economic base lies in public administration, which can include federal, state, and local government employment. Relatively low levels of employment are found for information, agriculture, and manufacturing. Overall, Glynn County can be said to have a diverse economic base, with many sources of employment and potential for

employment growth. This bodes well for the long-term health of the economy in Glynn County.

In comparison with the State of Georgia, Glynn County has relative concentrations of employment in arts, entertainment, and recreation, as well as public administration. Glynn County has lower rates of employment than the State in the industries of information, manufacturing, and transportation, warehousing and utilities.

It should be noted that although the amount of manufacturing employment in Glynn County is less than average, manufacturing employment is still a large percentage of Glynn County's total employment at 10% and an important part of Glynn County's economic base. Manufacturing employment is an export function in Glynn County's economy and so stimulates economic growth for the county as a whole. Some of the major manufacturers in the county include Gulfstream, an aeronautics company; Hercules, which makes resin products out of pine scraps; and the Georgia Pacific Cellulose Mill.

Glynn County: Location Quotients	
Category	2000
Agriculture, forestry, fishing, hunting & mining	0.57
Construction	1.19
Manufacturing	0.70
Wholesale Trade	0.95
Retail Trade	1.05
Transportation, warehousing, and utilities	0.74
Information	0.48
Finance, insurance, & real estate	0.89
Professional, scientific, management, administrative, and waste management services	0.85
Educational, health and social services	0.95
Arts, entertainment, recreation, accommodation and food services	1.77
Other Services	1.15
Public Administration	1.55

Source: Georgia DCA Dataviews, 2006

Note: Location Quotients compare employment patterns in Glynn County with employment patterns in the US as a whole.

Glynn County, Georgia

Georgia: Location Quotients	
Category	Yr. 2000
Agriculture, Forestry, Fishing, hunting & mining	0.74
Construction	1.17
Manufacturing	1.05
Wholesale Trade	1.07
Retail Trade	1.02
Transportation, warehousing, and utilities	1.16
Information	1.15
Finance, Insurance, & Real Estate	0.95
Professional, scientific, management, administrative, and waste management services	1.02
Educational, health and social services	0.88
Arts, entertainment, recreation, accommodation and food services	0.91
Other Services	0.97
Public Administration	1.05

Source: Georgia DCA Dataviews, 2006

Hospitality and tourism is a growing industry for Glynn County and has continued to see strong investment in recent years. Many new hotel complexes are being developed and old ones are being remodeled. The world-famous Cloister Hotel has been completely rebuilt over the past 2 years. Sea Island and St. Simons Island continue to be known for world class hospitality facilities, and there has been strong investment in redevelopment of resort properties on the islands. Downtown Brunswick has started to revitalize over the past 10 years, starting with the beautification of Newcastle Street. A recent and growing trend is increasing investment in Brunswick including the development of loft apartments in the downtown area.

Although the forestry industry is not a major employer, it is a traditional industry in Glynn County with links to the paper and pulp industry. The size and impacts of the forestry industry are discussed in greater detail in section 5.5.4, Agricultural and Forestry Lands.

Glynn County: Employment by Industry, Percent	
Category	Yr. 2000
Agriculture, forestry, fishing, hunting & mining	1%
Construction	8%
Manufacturing	10%
Wholesale Trade	3%
Retail Trade	12%
Transportation, warehousing, and utilities	4%
Information	1%
Finance, insurance, & real estate	6%
Professional, scientific, management, administrative, and waste management services	8%
Educational, health and social services	19%
Arts, entertainment, recreation, accommodation and food services	14%
Other Services	6%
Public Administration	7%

Source: Georgia DCA Dataviews, 2006

Georgia: Employment by Industry	
Category	Yr. 2000
Agriculture, Forestry, Fishing, hunting & mining	1%
Construction	8%
Manufacturing	15%
Wholesale Trade	4%
Retail Trade	12%
Transportation, warehousing, and utilities	6%
Information	4%
Finance, Insurance, & Real Estate	7%
Professional, scientific, management, administrative, and waste management services	9%
Educational, health and social services	18%
Arts, entertainment, recreation, accommodation and food services	7%
Other Services	5%
Public Administration	5%

Source: Georgia DCA Dataviews, 2006

Glynn County is also the center for the best health care facilities between Jacksonville and Savannah. Southeast Georgia Health Systems has been expanding their technology and medical services to meet the needs of the regional population. Southeast Georgia Health Systems recently completed a \$40 million Outpatient Care Center on its Brunswick campus.

Glynn County, Georgia

According to the Georgia Department of Labor, the top five private sector employers are:

1. Brunswick Pulp & Paper
2. King & Prince Seafood Corp
3. Sea Island Company
4. Teamwork Services Inc
5. Wal-Mart Associates

Other major employers not on this list include the Federal Law Enforcement Training Center and Southeast Georgia Regional Medical.

These top private sector employers reflect some of the major industries of Glynn County – wood and paper products, tourism, and seafood.

3.3 Economic Trends

The following table shows employment trends from 1980-2000. The largest employment gains have been in education, health, and social services, and in arts, entertainment, and recreation. Tourism has taken on a growing importance, and is generating up to \$1.7 billion annually for the 10-county coastal region in 2004.

Economic growth in warehousing and distribution is expected, in part because of the growth of activity in the Port of Brunswick. Some assembly manufacturing growth is anticipated as well.

Residential construction has grown rapidly in recent years, which has led to rapid growth in the construction industry and the real estate industry. There is a booming second home market, and demand for residential properties with marsh views is strong. The demographics of baby boomers seeking retirement locations or second home locations have driven much of the new residential demand.

The largest employment losses have been in manufacturing. Part of the reason for the loss of manufacturing jobs has been the increasing expense of water supply in the county.

In recent years the Brunswick-Glynn County Development Authority has been successful in recruiting a number of small manufacturers, including Holland Pump, Jered Industries and Gulfstream Industries. The Development Authority hopes to expand its recruitment of aeronautical industries to industrial parks near the Brunswick-Golden Isle Airport. This recruitment should be abetted by the recent development of a new \$10 million terminal for the Glynn County Airport. Recently, the Development

Authority assembled a proposal for hosting the European Aeronautic Defense Space plant as well.

Glynn County, Georgia

Glynn County: Employment by Industry			
Category	1980	1990	2000
Total Employed Civilian Population	24,619	29,437	31,858
Agriculture, forestry, fishing, hunting & mining	482	593	338
Construction	1,670	2,222	2,578
Manufacturing	4,964	4,155	3,138
Wholesale Trade	963	747	1,094
Retail Trade	4,799	6,017	3,916
Transportation, warehousing, and utilities	1,219	1,553	1,233
Information	NA	NA	471
Finance, Insurance, & real estate	1,254	1,483	1,942
Professional, scientific, management, administrative, Waste management services	696	1,180	2,520
Educational, health and social services	3,522	4,471	6,032
Arts, entertainment, recreation, accommodation and food services	2,450	467	4,450
Other Services	993	4,269	1,786
Public Administration	1,607	2,280	2,360

Source: Georgia DCA Dataviews, 2006

Georgia: Employment by Industry		
Category	1990	2000
Total Employed Civilian Population	3,090,276	3,839,756
Agriculture, Forestry, Fishing, hunting & mining	82,537	53,201
Construction	214,359	304,710
Manufacturing	585,423	568,830
Wholesale Trade	156,838	148,026
Retail Trade	508,861	459,548
Transportation, warehousing, and utilities	263,419	231,304
Information	NA	135,496
Finance, Insurance, & Real Estate	201,422	251,240
Professional, scientific, management, administrative, and waste management services	151,096	362,414
Educational, health and social services	461,307	675,593
Arts, entertainment, recreation, accommodation and food services	31,911	274,437
Other Services	266,053	181,829
Public Administration	167,050	193,128

Source: Georgia DCA Dataviews, 2006

3.4 Employment Forecast

Glynn County's employment is forecast to grow by 45%, with over 15,000 new jobs over the next 25 years. Employment growth will be led by services of all kinds, including tourist-oriented services, professional services, and education and health services. Other industries forecast for significant employment growth include retail, construction, and transportation and warehousing.

Manufacturing employment is not forecast for employment growth, but as an employment loss.

It should be noted that employment forecasts such as this one are based on current national and local trends. A forecast is a probable prediction of what could occur, not a definitive statement of fact.

One of the primary uses of the employment forecast in the Comprehensive Plan is to plan for future land uses. Future predictions of job growth require land to be set aside for corresponding commercial development. For example, growth in retail trade suggests the need for future shopping areas, while growth in finance and insurance suggests the need for future office space. The future land use plan will respond not just to this employment forecast, but also to the goals of Glynn County stakeholders.

Glynn County, Georgia

Glynn County: Employment by Industry, Forecast						
Category	2005	2010	2015	2020	2025	2030
Total Employed Civilian Population	33,693	36,734	39,772	42,808	45,842	48,877
Agriculture, forestry, fishing, hunting & mining	292	334	376	417	458	499
Construction	2,443	2,726	3,012	3,299	3,589	3,880
Manufacturing	2,707	2,561	2,416	2,271	2,126	1,983
Wholesale Trade	1,965	1,919	1,873	1,825	1,778	1,730
Retail Trade	3,753	4,078	4,403	4,728	5,051	5,374
Transportation, warehousing, and utilities	1,236	1,430	1,624	1,816	2,008	2,199
Information	529	612	695	777	860	942
Finance, insurance, & real estate	2,211	2,244	2,276	2,309	2,340	2,372
Professional, scientific, management, administrative, and waste management services	2,831	3,274	3,716	4,159	4,601	5,043
Educational, health and social services	6,321	6,947	7,573	8,199	8,824	9,448
Arts, entertainment, recreation, accommodation and food services	4,999	5,781	6,563	7,344	8,125	8,904
Other Services	2,006	2,320	2,634	2,948	3,261	3,574
Public Administration	2,401	2,507	2,612	2,718	2,823	2,927

Source: Woods & Poole Economics, Inc. Washington, D.C.
Copyright 2005

Industry	2005-2030 Change
Arts, entertainment, recreation, accommodation and food services	3,906
Educational, health and social services	3,128
Professional, scientific, management, administrative, and waste management services	2,212
Retail Trade	1,621
Other Services	1,568
Construction	1,437
Transportation, warehousing, and utilities	962
Public Administration	526
Information	413
Agriculture, forestry, fishing, hunting & mining	207
Finance, insurance, & real estate	162
Wholesale Trade	-235
Manufacturing	-724

Source: Woods & Poole Economics, Inc. Washington, D.C.
Copyright 2005

Glynn County, Georgia

3.5 Labor Force

Glynn County draws on its employment from a multi-county workforce. Glynn County is the employment center for many of the surrounding inland and coastal counties.

From 1990-2000, Glynn County residents displayed a typical labor force participation rate at 64.5% and a typical unemployment rate of about 5.6%. In recent years, however, Glynn County has shown a rapid growth in employment and a low level of unemployment. The most recent unemployment numbers from the Bureau of Labor Statistics show unemployment at 3.8% for 2004.

Glynn County: Employment Growth					
Category	2000	2001	2002	2003	2004
Labor Force	34,847	34,803	36,208	36,969	37,737
Employment	33,640	33,538	34,835	35,544	36,285
Unemployment	3.5%	3.6%	3.8%	3.9%	3.8%
Increase in Employment		-102	1,297	709	741
Annual Percent Growth Employment		-0.3%	3.9%	2.0%	2.1%

Source: US Department of Labor, Bureau of Labor Statistics

Glynn County: Labor Force Participation		
Category	1990	2000
In labor force:	64.5%	64.5%
Civilian Labor force	64.2%	64.2%
Civilian Employed	95.6%	94.4%
Civilian unemployed	4.4%	5.6%
In Armed Forces	1%	0%
Not in labor force	35.5%	35.5%

Source: US Census, Census 2000

Glynn County workers have an occupational distribution typical of the State of Georgia. The largest group of occupations overall is management, professional, and related. Relative to the State of Georgia, Glynn County has a higher percentage of people employed in service occupations.

Occupations	Georgia	Glynn County
Total:	3,839,756	31,858
Male:	2,051,523	16,734
Management, professional, and related occupations	612,570	4,650
Service occupations:	221,017	2,916
Sales and office occupations:	369,188	2,518
Farming, fishing, and forestry occupations	19,806	120
Construction, extraction, and maintenance occupations:	397,438	3,233
Production, transportation, and material moving occupations:	431,504	3,297
Female:	1,788,233	15,124
Management, professional, and related occupations:	643,389	5,329
Service occupations:	293,224	3,121
Sales and office occupations:	659,052	5,503
Farming, fishing, and forestry occupations	4,683	43
Construction, extraction, and maintenance occupations:	18,411	172
Production, transportation, and material moving occupations:	169,474	956
Both Male and Female	3,839,756	31,858
Management, professional, and related occupations:	1,255,959	9,979
Service occupations:	514,241	6,037
Sales and office occupations:	1,028,240	8,021
Farming, fishing, and forestry occupations	24,489	163
Construction, extraction, and maintenance occupations:	415,849	3,405
Production, transportation, and material moving occupations:	600,978	4,253

Source: Georgia DCA Dataviews, 2006

Glynn County, Georgia

The primary source of personal income for residents of Glynn County is wages and salary incomes, at 67% of all income. Interest, dividend, and rental income is second at about 11% of all income. Self-employment, social security, and other retirement income are next, each at about 6 percent. Also see the Per Capita income analysis in the Population Section of this report. Per Capita income has been growing rapidly in Glynn County from 1980-2000.

Glynn County: Personal Income by Type (in dollars), including wage income		
Category	1990	2000
Total income	871,540,580	1,451,538,800
Aggregate wage or salary income for households	584,135,246	977,073,000
Aggregate other types of income for households	11,304,861	33,839,900
Aggregate self employment income for households	65,531,528	87,623,600
Aggregate interest, dividends, or net rental income	96,284,647	156,482,300
Aggregate social security income for households	55,579,560	91,323,100
Aggregate public assistance income for households	6,307,791	9,524,100
Aggregate retirement income for households	52,396,947	95,672,800

Source: Georgia DCA Dataviews, 2006

Glynn County: Personal Income by Type, including wage income, Percent		
Category	1990	2000
Total income		
Aggregate wage or salary income for households	67.0%	67.3%
Aggregate other types of income for households	1.3%	2.3%
Aggregate self employment income for households	7.5%	6.0%
Aggregate interest, dividends, or net rental income	11.0%	10.8%
Aggregate social security income for households	6.4%	6.3%
Aggregate public assistance income for households	0.7%	0.7%
Aggregate retirement income for households	6.0%	6.6%

Source: Georgia DCA Dataviews, 2006

By far, most people who live in Glynn County also work in Glynn County. There are no major directions of commuting out of Glynn County; the largest group of commuters goes to Camden County, and is just 1.2% of the workforce.

On the other hand, there are a number of commuters into Glynn County for employment. The top counties whose residents commute into Glynn are Brantley, McIntosh, Camden, and Wayne. This shows that Glynn is the economic center of the region and crucial for regional economic growth. Nevertheless, nearly 80% of those who work in Glynn County also live in Glynn County, so inter-county commuting is still a relatively small occurrence.

Glynn County, Georgia

Glynn Residents, Location of Employment		
County of Employment	Number	Percent
Glynn	29,424	93.7%
Camden	365	1.2%
McIntosh	303	1.0%
Wayne	247	0.8%
Duval, FL	145	0.5%
Chatham	140	0.4%
Liberty	78	0.2%
Brantley	77	0.2%
Other	628	2.0%
Total	31,407	100.0%

Glynn Workers, Location of Residence		
County of Residence	Number	Percent
Glynn	29,424	93.7%
Brantley	2,129	6.8%
McIntosh	1,660	5.3%
Camden	1,343	4.3%
Wayne	811	2.6%
Pierce	145	0.5%
Ware	144	0.5%
Liberty	140	0.4%
Other	1,362	4.3%
Total	37,158	118.3%

Source: Georgia Department of Labor Glynn County Profile, 2005

3.6 Economic Resources and Incentives

Glynn County has an extensive and excellent transportation infrastructure for the support of manufacturing and logistics industries. I-95, a major north-south interstate, runs through the middle of the county. Other major roads include US highways 17, 25, 82, and 341.

The Port of Brunswick is one of two major ports operated by the Georgia Port Authority. Glynn County is served by three local airports and two international airports. Glynn County's international airports are each an hour away – the Jacksonville International Airport and the Savannah International Airport. The three local airports are the McKinnon St. Simons Island Airport, the Brunswick Golden Isles Airport, and the Jekyll Island Airport. The local Glynn County Airport has a brand new terminal and an 8,000 foot runway that can carry commercial traffic. Both CSX and Norfolk Southern provide freight rail to the county and directly to the Port of Brunswick in particular.

Glynn County's Long Range Transportation Plan proposed a number of road projects to help Glynn County meet its growing transportation infrastructure needs. Recently US 341 has been widened to 4-lanes throughout, and GDOT is continuing its work on widening I-95 to six lanes, a project that should be completed within the next 2 years.

The Port of Brunswick has three deepwater terminals and a strong reputation for productivity and efficiency. The Port handles bulk goods and has seen a growth in the amount of machinery and automobiles shipped through the port in recent years. From 1994 to 2003 the Port saw an increase in the number of vehicles shipped through the port from about 100,000 to over 300,000 units. Twelve different auto manufacturers use the Colonel's Island Terminal to ship their products. The Mayor's Point Terminal primarily handles forest products, while the Marine Port Terminal primarily handles break bulk and bulk commodities. The US Army Corps of Engineers is continuing to work on a harbor deepening project first begun in 2002. The total \$70 million harbor widening project requires \$16 million in additional funds before it can be completed. The project will result in deeper channels, wider turning basins, as well as the restoration of some marshlands.

A number of other major improvements are coming to the Port of Brunswick. The north side of the Colonel's Island terminal is mostly developed, but the south side has over a thousand acres of developable land with port access. A new overpass will cross over US 17 and the railroad which will allow a free flow of traffic from the south side of Colonel's Island, increasing its access and development potential. At the same time, a cooperative project with Norfolk Southern is improving the rail access to Colonel Island. This new direct rail connection will help shipments from the Port avoid time-consuming switch yards and shave several days off of the transshipment process.

Three industrial parks are operated by the Glynn County Development Authority. The Brunswick Foreign Trade Zone and Industrial Park is 60 acres near I-95 and on US 17, with barge access to the Brunswick River and on-site rail access. This industrial park has foreign trade zone/tax free status. The second industrial park is the Brunswick

Glynn County, Georgia

McBride Industrial Park, the location of Fort Dearborn manufacturing. Adjacent to the Brunswick-Golden Isles Airport, it has 200 acres and available speculative building space. The Brunswick-McBride Industrial park is open to heavy and light manufacturing, aeronautical, distribution, and warehousing activities. The third and largest industrial park is the Colonel's Island Industrial Park with 2,000 acres of flat land ready for industrial development. Just 2 miles from I-95, Colonel's Island Industrial Park is the primary industrial and transportation center for the region, with the best access to the Port of Brunswick facilities. Railroad connections at Colonel's Island include CSX and Norfolk Southern. Other areas for future industrial development include two new proposed business parks near the airport and other commercial properties near the airport.

Two development authorities are active in the area. The Brunswick and Glynn County Development Authority runs the three industrial parks mentioned above. The Brunswick and Glynn County Development Authority markets the area for industrial development by providing information, sites, and facilitating incentives for target industries. Currently the Development Authority is working to refine its marketing strategy and to identify target industries.

The Brunswick and Glynn County Development Authority works to package appropriate incentives to recruit new industry. Among the tools it employs is the authority to issue bonds to finance loans for industrial development. Parts of Glynn County are also able to offer tax exemptions for unfinished goods that move through the Port of Brunswick. Also, the Development Authority works with the State Department of Economic Development to package local and state incentives together – with the state providing tax incentives for new or existing industries that generate job growth.

The Southeast Georgia Joint Development Authority was formed in 2004 in order to pool resources among the five counties of McIntosh, Glynn, Camden, Brantley, and Charlton to increase industrial recruitment potential for the region. The Joint Development Authority's Board is newly formed and just beginning to meet and define a strategy. The Southeast Georgia Joint Development Authority has achieved some recent success in helping to finance the improved Norfolk Southern connection with the Port of Brunswick. Glynn County is currently represented on the Board through the Executive Director of the Brunswick and Glynn County Development Authority, Nathan Sparks.

A number of unique economic activities exist or are proposed for the county. One of the largest economic

activities in the county is created by the Federal Law Enforcement Training Center, or FLETC. FLETC trains federal law enforcement officials from multiple branches of the federal government. FLETC serves 81 federal agencies and trains up to 30,000 students a year. FLETC has an 1,500 acre campus that includes meeting facilities, classrooms, dormitories, and specialized training facilities such as driver training facilities, firing ranges, explosives ranges, physical fitness gymnasiums, and forensic laboratories. As a result of 9/11 and the formation of the Department of Homeland Security, FLETC's mission is expected to grow in coming years. Recently a new \$60 million dormitory on the FLETC campus has been proposed, as well as a potential \$45 million new counterterrorism training facility.

The Liberty Harbor development, proposed for the waterfront of Brunswick, is a major redevelopment project planned in the City of Brunswick. This mixed-use development project will include residential, retail, and hotels, as well as a 1,300 foot marina. The estimated economic impacts include \$5 million in additional property taxes and many new jobs associated with the construction of the project and the operation of the hotel and related services. Although the primary economic impact from Liberty Harbor will occur within the City of Brunswick, the project is large enough to have impacts on Glynn County as well.

The Coastal Georgia Community College is a major training resource that provides two year Associates degrees as well as one and two year career programs which prepare students for immediate employment. The college has a dual mission, both to advance education and to assist local industries with training employees. The College offers degree programs in Arts and Sciences, while career programs are offered in health, business, technology, and other technical and vocational fields. The College is also the primary training facility for the implementation of the Georgia Department of Economic Development's Quickstart program. Other training resources in the county include a Jobs Corp Center near the airport.

Glynn County has taken the initiative on working toward opening a new career training and technical school within the next two years. Proposed as a charter school and modeled on a similar school in

Glynn County, Georgia

Coweta County, the proposed technical school is expected to help reduce the high school drop out rate, and to help high school students gain certification in vocational fields as they work towards graduation. Part of the funding for this new school will come from the Special Local Option Sales Tax.

3.7 Economic Development Needs Assessment

Several recommendations made in the Georgia Power economic development assessment have been validated by this report. These recommendations should serve as the centerpiece of the economic development recommendations of the comprehensive plan. Recommendations fall within three broad categories, Strategy, Marketing, and Leadership.

Strategy

The Georgia Power assessment recommends that industrial recruitment be focused on targeted areas. Specific industry clusters are identified in that report, but can generally be identified as small to medium manufacturing firms in communications, transportation, and general machinery sectors. Other target industries for Glynn County should include Port-related employment, homeland security industries, clean energy industries, and call centers.

The assessment calls for an Action Plan to capitalize on the Port of Brunswick as an economic asset. The assessment recommends that Glynn County work with adjoining counties to come up with a joint strategy for promoting the Port and sharing its benefits. Benchmarking against similar ports nation-wide is recommended as a strategy for port improvements and related economic development.

Marketing

The Georgia Power economic development assessment recommends a comprehensive and unified marketing strategy for all industrial parks. Marketing the industrial parks as a portfolio of options is better than marketing each park separately. Clean ups or aesthetic improvements to aging industrial park facilities and speculative building for target industries may also increase the marketability of the Development Authority's industrial parks.

The assessment further recommends hiring a dedicated marketing resource for the Development Authority. The assessment finds that there is adequate marketing need and opportunity for such a dedicated resource.

Leadership

The Georgia Power assessment recommends that the Brunswick Glynn County Development Authority maintain its lead role in economic development for the county. The centralization of this responsibility has proven effective as an economic development model.

The assessment recommends a focus on education issues, with the establishment of a Workforce Commission to address high drop-out rates in the public education system. The proposed Workforce Commission would bring together various public and private stakeholders, including employers of skilled labor, to formulate strategies for improving public education and reducing the drop-out rate. The commission would also look at programs to help the transition from school to work.

The assessment also recommends consolidating city and county services where possible to increase government efficiency.

Summary

Glynn County is experiencing a period of strong economic growth based upon its unique economic resources – such as the Port of Brunswick, and the Federal Law Enforcement Training Center, among others. Also, Glynn County is host to world-class tourist destinations on the Golden Isles, and due to its attractive natural surroundings and cultural offerings, its tourism industry is growing. The main issues the county needs to confront are ensuring that expanding economic opportunity is available to the full range of its citizens, including those who have less training and economic access. Increasing training options for the less skilled, increasing the level of education for those from less advantaged backgrounds, and facilitating the growth of small business are all potential avenues for increasing economic opportunity for the less advantaged. The Comprehensive Plan should address policies and programs to expand access to the economic opportunity that the county is experiencing.

Likewise, for the county to continue to experience positive economic growth, Glynn County needs to ensure it has adequate infrastructure to allow its economic resources to continue to grow and function efficiently. Transportation access to

Glynn County, Georgia



industrial parks and port land must be efficient and effective. Industrial lands need to be adequate to meet expanding demand. The FLETC needs to have adequate room to expand to meet its growing needs, while minimizing impact on surrounding neighborhoods. Glynn County needs to protect its natural surroundings that have driven the demand for growing tourism-related development in the county. Protecting and expanding its valuable economic resources is the way for Glynn County to continue to benefit from its current economic growth.

Glynn County, Georgia

4.0 Cultural Resources

4.1 Cultural Resource Overview

Glynn County is unusually rich in cultural resources. The county has a long and storied history and an impressive catalog of historic buildings and sites that tell its story. Protection and promotion of Glynn County's cultural resources will be an important feature of the Comprehensive Plan.

The cultural resources of Glynn County play multiple roles in the overall planning effort. These resources help to define an identity for Glynn County, and contribute to defining Glynn County's particular sense of place. Building upon awareness of Glynn County's history – as a colonial fort, as a lighthouse location, as a former location where plantation owners and enslaved peoples lived through the evolving history of the South, and as a place of retreat and entrepreneurship – will help define the path to Glynn County's future.

A Historic Resource Survey report for Glynn County was completed in May 1996 by Quatrefoil Consulting. The survey was both broad and detailed and covered the large majority of resources in Glynn County that may be eligible for listing with the National Register. Properties in the City of Brunswick were not included in the Survey. The Survey contains a historic overview of the county, an architectural analysis of potentially eligible historic buildings including architecture style, type, and historic integrity, and a listing of properties that may be eligible for historic nomination. Selected historic resources are described and their locations indicated. The Survey also recommends certain historic resources for nomination to the National Register, focusing on those properties with the most historic significance and the greatest degree of historic integrity. The recommendations for individual properties and districts are the following:

- ARCO Historic District
- Elizafield Plantation Ruins
- Brunswick-Altamaha Canal
- South End Historic District
- Harrington Historic District
- St. Simons Village Historic District
- Cannon's Point/Couper Plantation Ruins
- Sea Island Historic District

4.2 Cultural Resource Survey

Cultural Resources

Mainland

Brunswick Altamaha Canal

The extension of canals and railroads by private investors with state sanction was a common practice in the early 19th century. A canal connecting the Altamaha River to the Brunswick harbor was first proposed in the 1820's, and support for canal ventures grew with the successful completion of the Erie Canal in 1825. Starting in 1826, the first of several ventures was begun to build this canal with grants of incorporation from the State of Georgia to various private organizers. There were at least four different attempts to form a corporation and construct the canal, none of which met with great success. Attempts to build the canal were undermined by corruption, labor disputes, and engineering and environmental challenges. The greatest progress on building the canal was probably made by Thomas Butler King, who took over promotion of the canal in 1834. He interested a series of Boston investors and delegated the construction of the canal to Edward Hammond, who began construction in 1836. With substantial construction of the canal complete, the plans were abandoned during a financial crisis in 1839. On a second attempt, the investors David & Brooks succeeded in completing the canal on June 1, 1854, but the canal soon needed repairs and never became a commercial success. Later attempts were made to re-establish the canal in 1866 and in 1891, but neither were successful.

GLYNN COUNTY HISTORIC LANDMARKS

Legend

Historic Landmarks

- Bloody Marsh
- Christ Church
- City Hall
- Coast Guard Station
- Epworth By The Sea
- Fort Frederica
- Glynn Academy
- Historic City Hall
- Historic Glynn County Court House
- Howfyl Plantation
- Jekyll Island Historic District
- Old Harrington School
- St Simons Light House

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

- Glynn County
- Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



0.0 0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

Hofwyl-Broadfield Plantation Historic Site

This was the site of a major rice plantation, owned by William Brailsford, along the marshes adjacent to the Altamaha River. Brailsford came down from Charleston in 1807 and carved out a rice plantation from the cypress swamps. Brailsford and his son-in-law, James M. Troup, expanded their landholdings until they reached a peak of 7,300 acres before the Civil War. After the Civil War, several factors contributed to the decline of rice farming including the loss of access to slave labor. With determined efforts, the family continued to grow rice at this plantation until 1913. Afterwards, this site changed into a dairy.

The plantation preserves the physical character of the rice plantation that was once there and enlists the use of interpretive exhibits on the lives of both plantation owners and slaves during the antebellum period. Antique furniture and heirlooms represent the physical culture of the plantation era.

Currently this site is owned by the State of Georgia and operated as a state park, with a museum and a number of preserved historic buildings, as well as ruins from the rice cultivation era.

Elizafield/Boys Estate

Located on Highway 99 in north Glynn County, Elizafield was the name of a rich River Plantation on the Altamaha River dating back to the early 19th century. At first, it was the home of Dr. Robert Grant, and then later it was passed to his son, Hugh Fraser Grant. Elizafield Plantation was cultivated for rice and sugar cane, and the ruins of a large sugar mill built are visible on the site. Other ruins on the site include those of two plantation buildings and cemeteries for the Grant family and their slaves. In 1935, Cator Woolford gave this tract to Georgia for a State Park, and in 1945 it was made available by the Legislature for the establishment of Boys' Estate.

Boys' Estate was the vision of a group of local men who wanted to set up a home and school for disadvantaged boys. Among the leaders who helped to set up Boys Estate were J. Ardell Nation, Richard W. Peters Jr., Clarence Dubs, J.M. Rozier and T.G. Myers. After the passing of Mr. Nation, in the 1980's the facility was operated by a group from Savannah. Currently the site is run by Morningstar Baptist Treatment Services, and it is still used for the treatment of emotionally and mentally disturbed adolescents.

City of Brunswick

Old Town Brunswick

The Brunswick Old Town Historic District is the site of the original planned town of Brunswick. Originally, Brunswick was established and planned in its current pattern of streets and squares by the British colonial authority in Georgia, though it was not substantially developed until the 19th century. The British foundation of the city is reflected in the street names, which come from various British royalty of the time. Brunswick contains an outstanding collection of late 19th century residential and public buildings. Also of note are the hexagonal stone tiles which were originally used to pave the sidewalks.

Glynn County Courthouse

The historic Glynn County Courthouse was constructed in 1906 in the Neoclassical Revival style under the designs of C.A. Gifford and E.S. Betts. This courthouse replaced an older courthouse that was damaged in the hurricane of 1896. The historic Glynn County Courthouse was used for holding court until 1991.

Currently the Courthouse hosts offices for the Board of Commissioners, the Administration, and the County Attorney. Commission Chambers on the second floor serve as the meeting location for the Board, the Planning Commission, and other groups.

Mary Ross Waterfront Park – Liberty Ships

Brunswick was the site of the construction of the Liberty Ships used to haul cargo for the United States during World War II. The J.A. Jones Construction Company oversaw the construction of 99 Liberty ships, over 440 feet in length, during the height of the war mobilization period. The employees received a commendation from the crew of the U.S.S. Pompon for continuing work during Christmas Day with no compensation to support the war effort. A 23-foot scale replica of a Liberty Ship is displayed on the grounds of the Mary Ross Waterfront Park in downtown Brunswick.

Glynn County, Georgia

Old City Hall

Old City Hall was designed by Alfred Eichberg and completed in an Richardson Romanesque/Queen Anne style in 1889. It is notable for its wealth of period detail including granite exterior, pine flooring, fireplaces, and gaslight fixtures. Currently it is used as a part-time city courthouse and an event facility open to the public.

Ritz Theatre

The Ritz Theatre was originally constructed in 1898 to house a theatre, accompanying shops, and offices. Later, the Ritz became a venue for vaudeville and motion pictures in the 1930's. The City of Brunswick purchased the building in 1980. Since 1989, the building has gradually been rehabilitated to reflect its original Victorian roots revealing its brick detailing, transoms, and glasswork. Today, the Ritz houses the Golden Isles Arts & Humanities Association, which oversees a regular series of performing arts.

Selden Park – Selden Normal & Industrial Institute

Selden Park, near the banks of the Turtle River, is built on the former site of The Selden Normal & Industrial Institute. The Institute was considered one of the finest black educational facilities of its time. The institute was conceived of by Rev. Samuel Dent, an alumnus of Morehouse College in Atlanta, and came to fruition largely due to the efforts of an educator named Carrie E. Bemus. Miss Bemus, an African-American woman, was responsible for developing the curriculum and recruiting the original faculty of the Institute. The early buildings and land acquisition for the Institute were largely financed out of her personal savings and her fund-raising efforts. Opened in 1903, the Institute, which was originally called the Christian High School and Normal and Industrial Institute, pioneered the intermediate education of blacks throughout the coastal area. The Selden Institute merged with other educational institutions over the years, until its historic campus in the City of Brunswick was no longer needed.

Selden Normal & Industrial Institute was named for Dr. Charles Selden, a missionary noted for his work in China, who helped to finance the Institute. Dr. Selden's philanthropic contributions financed the expansion of the Institute through the acquisition of land where Selden Park sits today. The school was later purchased by Glynn County for a public park. Today, Selden Park's 33 acres are a popular gathering spot for family reunions, picnicking, and recreational sports, including swimming, basketball, and soccer.

Jekyll Island

Jekyll Island National Historic Landmark District

Jekyll Island's claim to fame is based on its selection and establishment as a resort for America's elite starting in 1886. Some of the wealthy families who wintered on the Island include the Rockefellers, Vanderbilts, Goulds, Astors, Morgans, and Goodyears. The private resort they established became known as the Jekyll Island Club, and was perhaps the most exclusive private club in the nation. As a result of the business and political elite who came to the Island, a number of important events and decisions were made there, including the first transcontinental public telephone conversation. In 1947, the State of Georgia purchased the Island to make it open to the public. The former grounds of the 240 acre club are now part of one of the largest historic restoration projects in the Southeastern US.

St. Simons Island

Christ Church

Christ Church was established by state charter in Fredericka in 1808. The church is notable in that John and Charles Wesley served as the Reverends for this church in Frederica; the Wesley brothers later went on to found the Methodist church in America. No physical building was built for the church until 1820 and that church stood until the Civil War. In the 1870's, Anson Greene Phelps Dodge, part of a family that owned the major lumber mill in the area, moved to St. Simons and joined the church. Soon after he married, his wife died while they were on their honeymoon. Dodge returned and had the present-day Christ Church built in her honor in the 1880's. Later he attended seminary and became a rector at the church. The current church is little modified since his time and the church cemetery reflects two centuries of island inhabitants.

Coast Guard Station

The Historic Coast Guard Station is just off of East Beach on St. Simons Island. Built in 1936, it served as a lifesaving station for nearly 60 years. The Coastal Georgia Historical Society has taken over management of the Historic Station and is

Glynn County, Georgia



managing a \$5 million campaign to restore both the Coast Guard Station and the Historic St. Simons Lighthouse. When work on the Coast Guard Station is complete, it will serve as an interpretive center for history and ecology of Georgia's barrier islands.

Ebo Landing

Ebo Landing is located on Dunbar Creek off of Sea Island Road on St. Simons Island. Ebo is a simplification of the term "Igbo," which refers to peoples from the west African area known as Igboland. This area is known for the Igbo people who were on a slave ship, the schooner York, which landed in this area in 1803. Upon landing, they tried to escape from their captors, and in the struggle that ensued, the Igbo walked into the creek to escape, chanting a prayer to their water god for deliverance. Many of the Igbo drowned rather than submit to slavery. Survivors became slaves at Cannon's Point Plantation on St. Simons and Sapelo Island. These survivors passed along the story of these brave Igbo resistors, and that story is still remembered and recounted to this day.

Fort Frederica

Fort Frederica was established as a small town and defensive fort by General Oglethorpe in 1736 to defend English territory in Georgia from invasions by the Spanish from their settlements in Florida. Fort Frederica was successfully defended from a Spanish incursion at the Battle of Bloody Marsh in 1742. When Great Britain and Spain signed a peace treaty in 1748, the Fort was no longer needed and was disbanded. Currently, Fort Frederica is managed as a national monument by the National Park Service. Today, visitors can walk through the original plan layout for Frederica and observe the ruins of houses and military fortifications from Oglethorpe's time.

Hamilton Plantation/ Gascoigne Bluff

Three former slave cabins are preserved near the grounds of Epworth by the Sea Methodist Center. These cabins are owned and maintained by the Cassina Garden Club. Since 1932, a principle mission of Cassina has been the preservation and beautification of the two tabby slave cabins and surrounding grounds. These were listed on the National Register of Historic Places in 1988.

Harrington

In colonial times, this property was owned by Capt. Raymond Demere who served under General Oglethorpe.

Harrington is the location of a settlement for slaves freed from plantations on St. Simons Island. Many freed men were able to acquire small tracts of land in this area, and many worked in sawmills on the island. Residents of Harrington today can trace their ancestry back to slave times on the Island.

St. Simons Lighthouse

The first St. Simons Lighthouse was originally constructed in 1810 and was primarily made of tabby. The original lighthouse was destroyed in 1862 by retreating Confederate soldiers who did not want the lighthouse to fall into the hands of Federal troops. The current structure, standing at 104 feet in height, was built of brick in 1872. The tower, which has a 129-step cast-iron spiral staircase, and the adjacent keeper's house, were designed by one of Georgia's most noted architects, Charles Cluskey. The historic site also includes the historic lighthouse keeper's dwelling, an 1880 oil house, and a Victorian gazebo.

The keeper's dwelling currently houses a small museum memorializing the history of the lighthouse and the broader history of coastal lighthouses and lighthouse keeper's lives. The Coastal Georgia Historic Society is conducting a \$5 million capital campaign to renovate the Lighthouse and the Historic Coast Guard building. A new Heritage Center is planned on the site which will have expanded programming and exhibit space. The lighthouse, which was automated in 1953, continues to operate as a beacon for nearby ships to this day.

Other Properties Listed on the National Historic Register

Ballard School

Colored Memorial School and Risley High School

Evelyn Plantation

Faith Chapel

Horton-Dubigonon House, Brewery Ruins, Dubignon Cemetery

King and Prince Hotel

Jekyll Island Club

Glynn County, Georgia

Rockefeller Cottage

Strachan House Garage

Needwood Baptist Church and School

Scenic Views

The following is a list of scenic views developed during the 1997 Comprehensive Plan. This list will be augmented during the Community Agenda segment of the planning process with input from public stakeholders:

- US 17 Corridor
- East Beach Causeway
- Avenue of Oaks
- US 17 from SR 99 to county line
- US 95 at river and marsh crossings
- Brunswick-Altamaha Canal
- Frederica Road
- Demere Road at Bloody Marsh curve
- St. Simons Island Lighthouse
- Torras Causeway
- Sea Island Road
- Kings Way

4.3 Cultural Resource Needs Assessment

Glynn County could increase its efforts in preserving and capitalizing upon its historic and cultural resources. With regard to historic resources, Glynn County could benefit from a comprehensive strategy to protect, catalog, and promote its unique resources. Glynn County's cultural and historic resources could be capitalized upon to promote its allure as a tourist destination. In order to promote these resources for tourism, these resources must be preserved, identified, and interpretive information must be developed in order to make them accessible and comprehensible to the general public. The beginnings of a comprehensive strategy are available in the 1997 historic resource survey. Also, the county should coordinate with the Coastal Georgia Regional Development Center and the City of Brunswick on its historic preservation and cultural tourism strategy.

Glynn County, Georgia

5.0 Natural Resources

5.1 Natural Resource Overview

Glynn County has geography typical of Georgia coastal counties. The coastal area is defined by large areas of wetlands and marsh, with a series of barrier islands beyond. The major inhabited islands of Glynn County are St. Simons Island, Jekyll Island, and Sea Island, the largest being St. Simons Island. Large areas of marshland intercut with intercoastal waterway lie between the islands and the mainland.

Glynn County has three rivers, the Altamaha, the Little Satilla, and the Turtle River. Glynn County's rivers are intimately connected with its marshlands and barrier islands, as marshlands surround most of the river corridors and the rivers add sediment to the marshlands and barrier islands.

Wetlands play a vital role as both an ecological and cultural resource for the County.

As a coastal county, Glynn County is very flat and drainage can be a problem. Some of the major aquifers are close to the surface and can easily be polluted by septic tanks and other sources of water contamination. Soils in the county are predominantly sandy on the coastal side of the county and predominantly clay on the western side of the county. The clay soils in the county drain poorly and demonstrate poor suitability for septic tanks.

Overall, Glynn County's many environmentally sensitive areas create a major constraint on development patterns. Much of Glynn County's land lies in environmentally constrained land such as wetlands, floodplains, and poorly drained soils. As a result, development patterns must largely conform to environmental constraints. Also, quality land for development is relatively scarce and the search for quality developable land forces development to spread out to more rural areas.

5.2 Climate

The Glynn County climate is classified as subtropical, with high temperatures in summer and moderate temperatures in winter with generally high humidity. July is the hottest month with average highs of around 90 and average lows of around 75. December is the coolest month with average highs around 66 and average lows around 44. The number of days with temperatures over 90 degrees ranges from 75-

80 days. The temperature drops below freezing only a few days a year and then only for brief periods.

Rainfall averages between 49 to 54 inches with greater rain in summer than in fall. The water table is usually highest in October due to these rainfall variations.

Glynn County is potentially subject to tropical storms and hurricanes. During the 1900's Glynn County experienced fewer hurricane-level storms than many other parts of the Atlantic coastline. However during the 1800's Glynn County experienced several major storms. Weather patterns are always evolving, and Glynn County may experience a major tropical storm or hurricane in the near future. Preparedness for the county and for county residents is vital. Glynn County has a local emergency management plan that is coordinated out of the Police Department. This plan is discussed in more detail in section 9.7, Hurricane Mitigation Planning.

5.3 Geology and Topography

Glynn County is part of Georgia's Coastal Plain. The Coastal Plain consists partly of sediment eroded from the Piedmont over the past 100 million years, and partly from limestone generated by ocean creatures and ocean-related organic processes. As the edge of Georgia's Coastal Plain, Glynn County consists primarily of sands and muds from the Quaternary era, the most recent ice age dating back 1.6 million years.

Due to its history of gradual formation by the receding of the Atlantic Ocean, Glynn County's soils are primarily sedimentary, composed of sands and muds. Receding ocean levels have resulted in a series of ridges that represent former shorelines at times of higher ocean levels. Thus Glynn County is characterized by a series of gentle ridges running largely parallel to the current shoreline. As a result, the coastal plain has a very gradual slope upwards from the Atlantic coast and little topographical variation.

Barrier islands have been formed by the accretion of beach and dune sands, deposits from nearby rivers, and as a result of stable ocean levels.

Glynn County, Georgia

Like the Glynn County coast, Glynn's barrier islands reflect a series of prehistoric terraces that represent fluctuating primordial seashores. Georgia's barrier islands are relatively short and wide compared to other islands on the Atlantic shoreline. Barrier islands are separated from the mainland by deep tidal inlets as well as salt marsh, tidal creeks, and estuaries. On the Georgia coast, sand generally moves southward, meaning that barrier islands tend to erode at their northern ends and grow at their southern ends.

5.4 Environmentally Sensitive Areas

5.4.1 Regionally Important Resources

The Coastal Georgia Regional Plan, developed by the Coastal Georgia Regional Development Center, identifies several potential Regionally Important Resources in Glynn County. Upon official designation of a Regionally Important Resources by the Department of Community Affairs, a resource management strategy can then be adopted for that resource.

Potential regionally important resources in Glynn County include (taken from the Coastal Georgia Regional Plan):

A. Altamaha River

The Altamaha River, which drains over 25 percent of the land area of Georgia, is important in maintaining the ecological balance of Georgia's estuarine coast. The undeveloped portion of the Altamaha contains the most extensive bottomland forest in the southeastern US.

B. South end of Jekyll Island

The south beach area is an important loggerhead turtle nesting area. Rare birds also population the area.

C. Jekyll Causeway Wood Stork Roost

Wood Storks are known to use this area for roosting. Roosting habitats are important for the preservation of this species.

5.4.2 Wetlands

Rivers, freshwater wetlands, tidal wetlands, inlets, marshes, and barrier islands all form an inter-related ecosystem involving the circulation of water, soil, nutrients, and biological life. Wetlands are a particularly fragile and valuable part of this ecosystem. Wetlands compose a large

proportion of Glynn County lands, and constitute a large coastal buffer for the mainland.

The US Army Corp of Engineers defines wetlands as follows:

"Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Wetlands in their natural state protect adjacent lands from flooding, create nutrients for the river system, filter pollutants, and generally improve downstream water quality. Wetlands also are often habitat for many species of wildlife and can serve as spawning habitat for many fish and shellfish species. Most commercial fish and shellfish species, including shrimp, breed and raise their young among coastal marshes and estuaries. Migratory waterfowl also use coastal and inland wetlands for resting, feeding, breeding and nesting.

The following is a simple classification scheme for different types of wetlands. It should be noted that many wetlands are difficult to classify due to regional and seasonal variations in hydrology, soils, vegetation, and climate:

- Nontidal Marshes – Marshes in general are defined by soft-stemmed vegetation which is adapted to saturated conditions. These marshes occur adjacent to fresh bodies of water or in poorly draining areas.
- Tidal Marshes – Like non-tidal marshes, tidal marshes have soft-stemmed vegetation but are influenced by ocean tides and are often brackish. These are the dominant type of wetlands in Glynn County.
- Swamps – Swamps are dominated by woody plants such as trees or shrubs. Swamps are characterized by saturated soils and occasional standing water.
- Bogs – Bogs are characterized by sphagnum moss, spongy peat and acidic waters. Most of their water comes from rainwater rather than from groundwater or surface water.
- Fens – Fens are similar to bogs but most of their water comes from groundwater and

Glynn County, Georgia

surface water. They are less acidic than bogs and have more nutrients.

Here are the findings of the Coastal Management Plan on Freshwater Wetlands:

“Wetlands are some of the most productive natural areas in the world. Important fish and wildlife habitat, wetlands are the nursery areas for most of the fish and shellfish used for human consumption. These fish and shellfish also depend on wetlands for breeding, spawning, feeding, and cover. Migratory birds and waterfowl use wetlands for food, shelter, breeding, and wintering grounds. Many other animal species, including many threatened and endangered species, rely on wetland habitats for their survival.

Wetlands are critical to humans as habitat for commercially-important fish and shellfish species, and as habitat for hunted waterfowl and fur-bearers. They also provide important recreation areas for boaters, hunters, fishers, hikers, photographers, etc. Functionally, wetlands are important in helping control flooding and erosion. They are also frequently located between water bodies and high ground, thus serving as buffers. Finally, wetlands help improve water quality and availability. They purify water by processing nutrients, suspended materials, and other pollutants. They help increase water availability by absorbing water in wet seasons and gradually releasing it during dry periods.”

Source: State of Georgia Coastal Management Program and Draft Environmental Impact Statement, 1997.

Wetlands are regulated through federal, state, and local regulations. Wetlands are also indirectly regulated through regulations pertaining to surface waters, as surface water quality upstream directly affects the water quality of wetlands downstream.

The most important federal regulation pertaining to wetlands is Section 404 of the Clean Water Act. If a wetland is considered to be part of federal jurisdiction, it is known as a “jurisdictional wetland.” Any development on jurisdictional wetlands requires a permit from the Army Corps of Engineers. Because of extensive federal requirements on identifying and mitigating potential environmental impacts on jurisdictional wetlands, development on jurisdictional wetlands is severely restricted.

State regulations of importance to wetland protection include the Georgia Water Quality Control Act, the Georgia

Erosion and Sedimentation Act, and the Georgia Marshlands Protection Act.

The Georgia Water Quality Control Act allows the Environmental Protection Division the authority to monitor and ensure the quality of State waters. Environmental Protection Division regulations address the treatment of sewage, industrial waste, and other wastes prior to discharge into State waters.

The Georgia Erosion and Sedimentation Act requires a minimum 25' undisturbed buffer adjacent to any State waters in order to protect water quality.

The Georgia Coastal Marshland Protection Act helps to protect all estuarine areas that are coastally influenced, including waters, marshes, and marshlands. A permit is required to develop, dredge, fill, or build upon any of the areas covered by the Act, except docks for private recreational use. Any type of community dock or marina requires a permit. Permits are issued at the discretion of the Coastal Marshland Protection Committee, which evaluates applications based upon their environmental impacts. Projects are generally permitted if they are water-dependent, do not alter the flow of navigational waters, do not increase erosion, and do not interfere with marine life.

Individual private docks must apply for a Revocable License Permit, available through the Coastal Resources Division.

Glynn County has some policies in place to protect wetlands, but less than many similarly situated communities. Glynn County’s Conservation Preservation zoning classification applies to much of the county’s wetlands. The Conservation Preservation zoning classification generally prohibits most types of development but permits compatible uses such as forestry and wildlife preserves.

Another initiative that will help protect wetlands is Glynn County’s recently passed Water Resources Protection ordinance. This ordinance will protect wetland quality by minimizing the volume of stormwater runoff and improving stormwater quality. High volumes of stormwater and/or

Glynn County, Georgia

polluted stormwaters can impair the functioning of wetlands as wildlife habitats.

The Georgia Department of Natural Resources requires local government to map wetlands over a certain minimum size and indicate the presence of wetlands in their comprehensive plans. The comprehensive plan must address the following impacts on wetlands:

1. Whether impacts to an area would adversely affect the public health, safety, welfare, or the property of others.
2. Whether the area is unique or significant in the conservation of flora and fauna, including threatened, rare or endangered species.
3. Whether alteration or impacts to wetlands will adversely affect the function (including the flow or quality) of water, cause erosion or shoaling, or impact navigation.
4. Whether impacts or modification by a project would adversely affect fishing or recreational use of wetlands.
5. Whether an alteration or impact would be temporary in nature.
6. Whether the project contains significant state historical and archaeological resources, defined as “Properties On or Eligible for the National Register of Historic Places.”
7. Whether alteration of wetlands would have measurable adverse impacts on adjacent sensitive natural areas.
8. Where wetlands have been created for mitigation purposes under Section 404 of the Clean Water Act, such wetlands shall be considered for protection.

Recommended uses for wetlands by the Department of Natural Resources include timber production, wildlife and fisheries management, wastewater treatment, recreation, and natural water quality treatment. Hazardous waste facilities and landfills should not be permitted in wetlands.

F.I.R.M. data based on latest
DFIRM information as of September,
2006.



GLYNN COUNTY WETLANDS AND SPECIAL FLOOD HAZARD AREAS

LEGEND

- Wetlands
- Special Flood Hazard Areas
- FIRM Zones A, AE & VE
- Major Roads
 - Interstate
 - Highways
 - Arterial
 - Railroads
- Glynn County
- Brunswick Boundary
- Hydrography
 - Upland
 - Marsh
 - Water

OCT 2006

0 0.5 1 2 3 4 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.

Glynn County, Georgia

5.4.3 Floodplains

Large areas of Glynn County lie within the 100 year floodplain as determined by the Federal Emergency Management Agency (FEMA). Glynn County is susceptible to flooding from three sources: 1) from heavy amounts of local rainfall, usually caused by tropical storms, 2) storm surge from a tropical storm or hurricane, and 3) rainfall occurring upstream along the Altamaha during storm events. Flooding can cause massive damage to existing property and poses a threat to the health and welfare of Glynn County citizens. Some of the strategies for addressing flooding are included in the Community Facilities section of this Community Assessment.

One way Glynn County seeks to minimize flood damage is by participating in the National Flood Insurance Program (NFIP). This program includes minimum standards for construction including minimum heights above sea level. Some areas are prohibited from construction altogether due to the high probability of flooding. In Glynn County, these restrictions are enforced through the issuance of development permits.

FEMA also offers a Community Rating System program, in which Glynn County participates. This system encourages the county to use its zoning and subdivision regulations to further reduce the likelihood of flood damages. Because Glynn County participates in this program, National Flood Insurance is available to Glynn County homeowners.

5.4.4 River Corridors

Three rivers flow into the Atlantic Ocean through Glynn County. Each of these rivers also has buffers of marshland in their estuary areas, often several hundred feet in width. The Little Satilla River and Turtle River have small drainage basins primarily located within Glynn County and Camden County and empty out on the southern end of Glynn County. The Altamaha River has a larger drainage basin, reaching about 140 miles inland to near the fall line, and it empties out on the northern end of the county. The river serves as the boundary between Glynn County and McIntosh County to the north. The Altamaha has a great volume of discharge, the largest of any river on the Georgia coast. The Altamaha is a potential source of potable water, limited by the fact that the water is brackish for tens of miles upstream.

The Altamaha River Basin Plan was completed by the Environmental Protection Division in 2004. The Altamaha River Basin Plan includes an inventory of natural resources

and environmental conditions, a review of water quality conditions, and recommended actions by the Environmental Protection Division, resources management agencies, and local governments. Generally, the trend is towards greater water planning efforts being required for local governments to ensure adequate quality water and watershed protection.

5.4.5 Soils

Many soils in Glynn County demonstrate a poor suitability for the use of septic tanks. In the last Comprehensive Plan, it was estimated that 67% of soils in Glynn County are not suitable for septic system usage without extreme modification. Although general suitability for septic systems can be determined by soil maps, each site requires its own evaluation to determine if it is suitable for septic system waste disposal. In Glynn County, this evaluation is performed by the Environmental Health Department.

When a septic system is located in inappropriate soils or in areas of high water tables, the septic system may fail or contaminate nearby waters. Ground and surface waters as well as wetlands may be threatened by inappropriately located septic systems.

Most commonly, the solution to the problems posed by septic tanks is to extend public water and sewer systems to areas seeing strong development or of particular environmental susceptibility.

Erosion is less of a concern in Glynn County due to its gradual slopes and wet soils. However, erosion can occur during major construction with earth moving equipment. Glynn County addresses erosion concerns through its Soil Erosion and Sediment Control Ordinance, which is enforced by the Community Development Department. This ordinance specifies certain erosion control measures be installed by contractors who work on construction projects in the county.

GLYNN COUNTY SOILS

Legend

Soil Types

- Albany Fine Sand
- Bohicket-Capers
- Beaches
- Bladen Loam
- Brookman Clay Loam
- Cainhoe Fine Sand
- Fripp-Duckston
- Kingsland Mucky Peat
- Mandarin Fine Sand
- Mandarin-Urban
- Meggett Fine Sandy Loam
- Meggett Loam
- Olustee Sand
- Pelham
- Pottsbury Sand
- Rains Fine Sandy Loam
- Rutledge Fine Sand
- Sapelo Fine Sand
- Satilla Loam

Major Roads

- Interstate
- Highways
- Arterial

Railroads

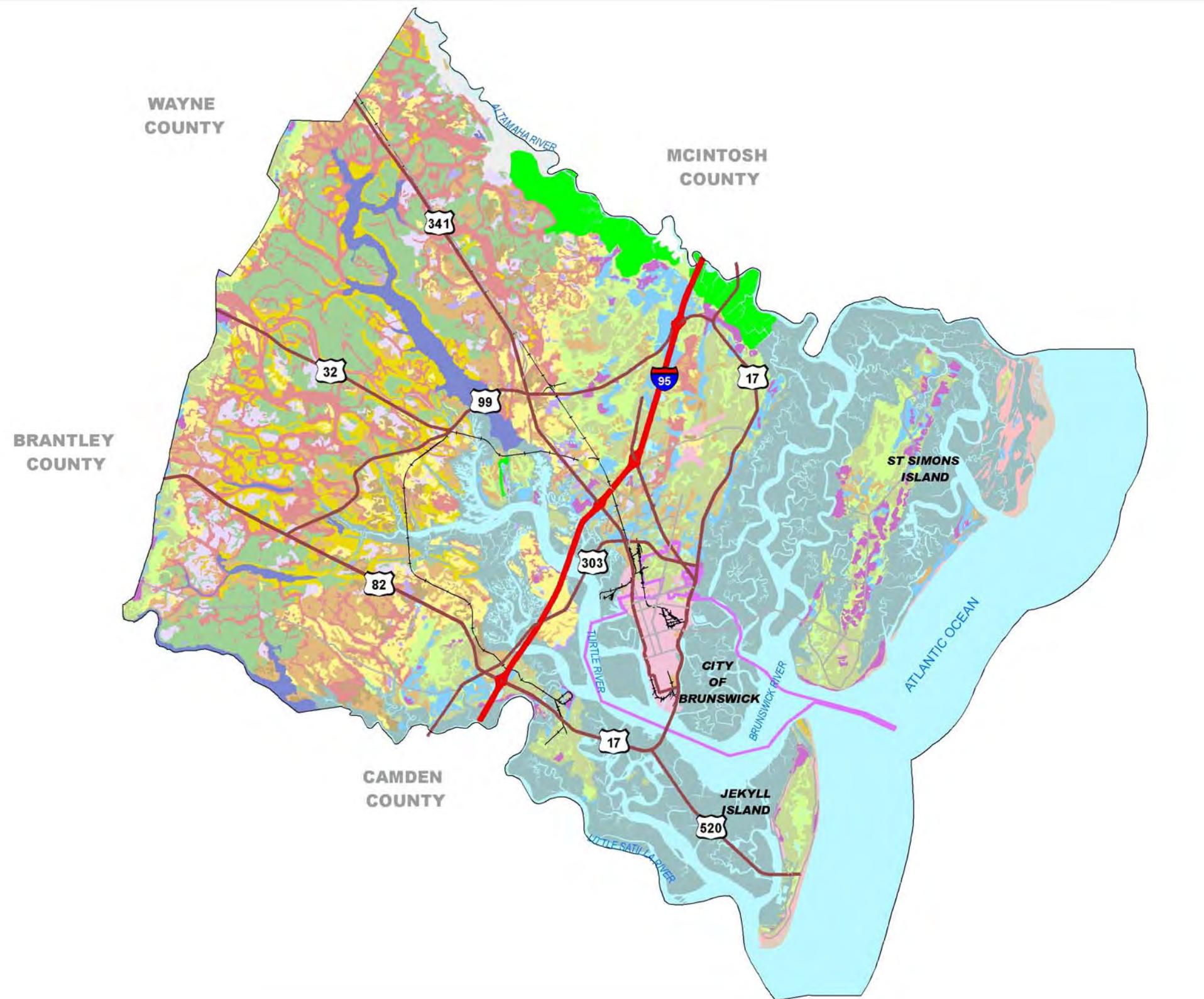
- Glynn County
- Brunswick Boundary

Hydrography

- Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

5.4.6 Plant and Animal Habitat

Glynn County's unique habitats – its coastal areas, its marshes, its river corridors, and its forests – are host to a number of rare and endangered species. The following lists from the Georgia Department of Natural Resources include plant and animal species in Glynn County of special concern.

Species with a Federal Status

Animals

Species Scientific Name	Common Name
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon
<i>Caretta caretta</i>	Loggerhead
<i>Charadrius melanotos</i>	Piping Plover
<i>Chelonia mydas</i>	Green Sea Turtle
<i>Dermochelys coriacea</i>	Leatherback Sea Turtle
<i>Drymarchon couperi</i>	Eastern Indigo Snake
<i>Eubalaena glacialis</i>	Northern Right Whale
<i>Gopherus polyphemus</i>	Gopher Tortoise
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Himantopus mexicanus</i>	Black-necked Stilt
<i>Lepidochelys kempii</i>	Kemp's Or Atlantic Ridley
<i>Mycteria americana</i>	Wood Stork
<i>Sterna antillarum</i>	Least Tern
<i>Trichechus manatus</i>	Manatee

Source: Georgia Department of Natural Resources.

Georgia Protected Species

Animals

Species Scientific Name	Common Name
<i>Charadrius wilsonia</i>	Wilson's Plover
<i>Elanoides forficatus</i>	Swallow-tailed Kite
<i>Haematopus palliatus</i>	American Oystercatcher
<i>Sterna nilotica</i>	Gull-billed Tern

Plants

Species Scientific Name	Common Name
<i>Epidendrum conopseum</i>	Green-fly Orchid
<i>Litsea aestivalis</i>	Pondspice
<i>Sageretia minutiflora</i>	Tiny-leaf Buckthorn
<i>Sarracenia minor</i>	Hooded Pitcherplant
<i>Tillandsia recurvata</i>	Ball-moss

Source: Georgia Department of Natural Resources.

Other Species of Special Concern

Animals

Species Scientific Name	Common Name
<i>Ammodramus henslowii</i>	Henslow's Sparrow
<i>Aramus guarauna</i>	Limpkin
<i>Cyprinella leiodsi</i>	Bannerfin Shiner
<i>Farancia erytrogramma</i>	Rainbow Snake
<i>Lampropeltis triangulum triangulum</i>	Eastern Milk Snake
<i>Menidia beryllina</i>	Inland Silverside
<i>Micruurus fulvius fulvius</i>	Eastern Coral Snake
<i>Myotis austroriparius</i>	Southeastern Myotis
<i>Ophisaurus compressus</i>	Island Glass Lizard
<i>Rynchops niger</i>	Black Skimmer
<i>Tyrannus dominicensis</i>	Gray Kingbird

Plants

Species Scientific Name	Common Name
<i>Agalinis divaricata</i>	Pineland Purple Foxglove
<i>Asclepias pedicellata</i>	Savanna Milkweed
<i>Carex decomposita</i>	Cypress-knee Sedge
<i>Coreopsis integrifolia</i>	Tickseed
<i>Eleocharis albida</i>	White Spikerush
<i>Forestiera segregata</i>	Florida Privet
<i>Hibiscus grandiflorus</i>	Swamp Hibiscus
<i>Leitneria floridana</i>	Corkwood
<i>Palafoxia integrifolia</i>	Palafoxia
<i>Peltandra sagittifolia</i>	Arrow Arum
<i>Piloblepharis rigida</i>	Pennyroyal
<i>Plantago sparsiflora</i>	Pineland Plantain
<i>Polygala balduinii</i>	White Milkwort
<i>Psilotum nudum</i>	Whisk Fern
<i>Quercus austrina</i>	Bluff White Oak
<i>Quercus chapmanii</i>	Chapman Oak
<i>Thalia dealbata</i>	Flag
<i>Tillandsia bartramii</i>	Bartram's Air-plant
<i>Tillandsia setacea</i>	Pine-needle Air-plant
<i>Zamia integrifolia</i>	Florida Coontie

Source: Georgia Department of Natural Resources.

Glynn County, Georgia

5.4.7 Other Natural Resources

Glynn County does not have any areas that would qualify for Mountain Protection according to the Georgia Department of Natural Resources' definition of protected mountain, and therefore does not need a Mountain Protection Plan.

Since Glynn County's river corridors all have significant wetlands around their perimeter, protection of these wetlands provides a substantial protection for the river corridor itself. The Department of Natural Resources normally recommends a 100-foot buffer around rivers to be protected from development. In Glynn County, this area is generally covered by wetlands and is therefore undeveloped.

5.5 Significant Natural Resources

5.5.1 Ground Water Supply

Nearly all water supply in Glynn County is obtained from ground water. Ground water is obtained from three aquifer systems: 1) The surface aquifer, 2) The Miocene aquifer, and 3) The Floridan aquifer. The Miocene and surface aquifers are shallow relative to the Floridan aquifer, which is the major source of water for much of southeastern Georgia and parts of Florida as well. The Floridan aquifer is generally between 600 and 800 feet below the surface.

All of the aquifers are ultimately recharged from the surface. Groundwater recharge areas are areas where aquifers are thought to source most of their water. Limiting the kinds of waste disposed in groundwater recharge areas and regulating the land uses in groundwater recharge areas are ways of protecting the water quality of ground water supply resources. It is thought that the different aquifers exchange flows of water, so any contamination in one aquifer has the potential to contaminate the aquifers above or below it.

The groundwater recharge area for the Floridan aquifer is near the fall line of Georgia. The groundwater recharge areas for the Miocene aquifer include most of St. Simons Island and the area in the vicinity of the US 82 exit (Exit 29) off of I-95. Land use protections for these groundwater recharge areas are advisable for protecting the quality of the Miocene aquifer.

The Georgia Environmental Protection Division completed a report on water and wastewater management for coastal Georgia in June of 2006. The report responds to the potential threat to the water quality of the Floridan aquifer

posed by saltwater intrusion and chloride contamination. Monitoring of the Floridan aquifer has detected a T-shaped plume of chloride contamination beneath downtown Brunswick. The Environmental Protection Division has a four-part strategy to manage contamination:

- 1) Avoiding further water withdrawals in sensitive areas,
- 2) Increased conservation and reuse for all water users,
- 3) Clear and consistent justification of need for water withdrawal permits, and
- 4) Continuous monitoring of the Floridan aquifer.

The EPD report forecasts that the City of Brunswick and Glynn County have enough joint water and wastewater capacity to meet growth demands for the next couple of decades. The report suggests that water demands could be more efficiently met through the cooperation of the city and the county.

The status of the Miocene and surface aquifers are less well known and are currently under study. Generally, these shallower aquifers are thought to be more susceptible to contamination than the larger and deeper Floridan aquifer. The quantity and quality of these aquifers must be better known before adequate regulation of these sources can be put in place.

Glynn County does not currently have an ordinance to protect groundwater recharge areas. Significant groundwater recharge areas are susceptible to pollution and contamination of water quality and need special protections. The Georgia Department of Natural Resources has developed a model ordinance for counties to protect significant groundwater recharge areas. The ordinance works by limiting the location of landfills and hazardous wastes, establishing containment mechanisms for other types of waste, and establishing minimum lots sizes for the use of septic tanks in these areas. Adoption of an ordinance based upon Georgia Department of Natural Resources guidelines is recommended.

GLYNN COUNTY AQUIFER GROUNDWATER RECHARGE AREA

Legend

Aquifer Recharge Area



Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

5.5.2 Surface Water Supply

Glynn County does not currently use any surface water for drinking or industrial use. However, surface water quality is important as natural habitat, and surface water may become a major water source in Glynn County's future.

The current main obstacle to using surface waters is cost. To draw quality surface water from the Altamaha, the source must be many miles inland to avoid salt water contamination. As a result, expensive infrastructure must be put in place to bring the water from the Altamaha to concentrations of current development. In the long run, surface water from the Altamaha may be a viable source of water for Glynn and other adjoining counties.

Surface waters can become contaminated from point and non-point pollution sources. Point sources refer to specific industrial plants that dispose of waste into a water body. Nonpoint sources of pollution include any surface area on the earth that can carry pollutants, such as parking lots, roads, and farms with fertilizers. Surface waters can be protected in part from nonpoint sources of pollution by vegetative buffers and by good stormwater management practices.

The Department of Natural Resources is currently developing watershed management plans in order to protect surface water quality throughout the state.

Glynn County does not currently have an ordinance to protect water supply watersheds. The Georgia Department of Natural Resources has developed a model ordinance for counties to protect water supply watersheds. The purpose of the ordinance is to protect current and future water supplies and to ensure that water from water supplies remain treatable to meet drinking water standards. The model ordinance protects water supplies through buffer zones around streams feeding into water supply reservoirs, through regulating the amount of impervious surfaces allowed inside watersheds, and through the establishment of reservoir management plans. Different standards are set for large and small water supply watersheds. Adoption of an ordinance based upon the Georgia Department of Natural Resources guidelines is recommended.

5.5.3 Water Use

Most water use in Georgia's coastal areas is for power generation and industrial production that is water-intensive – namely pulp and paper manufacturing. With the new

coastal Georgia water permitting plan, all new and continuing industrial water users will be held to high standards with regard to water conservation, the efficient use of water resources, and the justification of water need. Also, no new water permits will be issued for areas near the existing saltwater plume boundary.

5.5.4 Air Quality

The Georgia Environment Protection Division monitors ambient air quality including the levels of different pollutants in the air. Acceptable levels of pollutants are defined by the US Environmental Protection Agency. Pollutants of concern to the US EPA include Sulfur Dioxide, Particulate Matter, Carbon Monoxide, Ozone, Nitrogen Dioxide, and Lead. The Environmental Protection Division's air monitoring site in Glynn County has not detected any pollutants in excess of EPA standards. In short, Glynn County appears to have good air quality according to EPA air monitoring conducted to date.

5.5.5 Agricultural and Forestry Lands

Glynn County does not have significant agricultural lands; however it does have significant forestry lands. High water levels in soils make much of the land suitable for both soft and hard wood production. Trees in these forests include slash pine, loblolly pine, longleaf pine, cypress, blackgum, sweetgum, and water oak. Over 100,000 acres, about 42% of Glynn County's land, is estimated to currently be in forestry uses. Most of this land is believed to be owned by private forestry concerns. Forestry products are important for Glynn County's paper and pulp industries.

The State of Georgia produces about 1 billion cubic feet of softwood roundwood and about 200 million cubic feet of hardwood roundwood annually. "Roundwood" is the term used to describe trees as a product when they are first cut down and before they are processed. Glynn County's production in 2003 was about 12.2 million cubic feet of softwood roundwood and about 0.1 million cubic feet of hardwood roundwood. So Glynn County supplies approximately 1% of the state's softwood roundwood and a negligible amount of the state's

Glynn County, Georgia

hardwood roundwood annually. Glynn County has among the highest productivity of softwood per acre for Georgia's counties.

Much of the roundwood that is harvested in Georgia is also processed by industrial facilities in Georgia. About 37% of Georgia roundwood is processed in facilities in southeast Georgia. More than half of the roundwood from southeast Georgia is processed as "pulpwood" which includes paper, pulp, and related products. About 40% of roundwood from southeast Georgia is processed as "saw logs" which includes lumber, pallets, and timber. The rest of roundwood goes to other uses such as flat panels of wood and composite productions.

Glynn County is host to a number of roundwood processing industrial facilities. These facilities include Koch Cellulose LLC's pulp and cellulose plant, Georgia Pacific's gypsum and sawmill operations, and Hercules' resin and paper chemicals plant. Paper manufacturing is the largest manufacturing sector in Glynn County and employed 1,849 people in 2004.

Forestry lands are increasingly being viewed with an eye towards potential residential development. The size and location of these forestry tracts mean that any potential development of former forestry land can have major impacts in terms of land use, the natural environmental, transportation, and community facilities.

With proper planning, forestry programs can be managed to have a minimal impact on natural resources. Forest companies with an eye to long term stewardship often employ environmental scientists to help them manage their lands. Large stands of trees can serve many purposes beyond forestry as they grow, such as serving as wildlife habitat and protection against erosion.

The Georgia Forestry Commission encourages responsible environmental practices through its voluntary program of Best Management Practices. The Georgia Forestry Association, a voluntary organization of land owners and paper companies, promotes adherence to the Georgia Forestry Commissions' Best Management Practices. One of the important BMPs for coastal areas is the establishment of a minimum 20 foot Stream Management Zone along perennial and intermittent streams.

Another voluntary program, the Forest Stewardship Program, addresses other forest-related concerns such as wildlife management and scenic view protection. Landowners that adhere to these standards can qualify as "Forest Stewards."

Glynn County's identity is associated with the Live Oak. Many of Glynn County's streets are lined with Live Oaks that provide both beautiful views and ample shade. Glynn County's management of trees on county land is based on the advice of the Tree Board. Glynn County has no regulations concerning trees on privately owned land.

5.5.6 Fishing Industry

The state of Georgia harvests an average of 10.9 million pounds of fish products annually with an average total value of \$22.4 million. In terms of value, the top products are shrimp, blue crabs, and demersals (bottom feeding fish). Shrimp are by far the dominant product accounting for 75% of the value of the annual catch. The latest data from NOAA's Fishery Office of Science and Technology indicates that the port of Brunswick brought in a catch of 1.9 million pounds worth \$5.1 million in the year 2000.

5.6 Natural Resource Needs Assessment

As development occurs, Glynn County is losing its public access to its natural resources. Access to locations for fishing, boating, and scenic views are highly prized both by local residents and tourists. Glynn County needs a long term strategy for preserving public access to natural resources to ensure their continuing value to the county.

Much of Glynn County is covered with environmentally sensitive lands that can be unsuitable for development. Development in some of these areas poses an undue threat to the environment; in other areas, development poses an undue threat to property. The prime example of development that poses an undue threat to property is development in floodplains. Glynn County needs a strategy for discouraging development in environmentally sensitive areas that pose undue hazards.

Septic systems must be maintained to be effective over the long term. Glynn County has seen an increase in the number of septic systems that are failing and has seen evidence of decreased water quality in beach areas. Also, most of the remaining

Glynn County, Georgia



developable land in the county is not suited to septic tanks. Glynn County needs an approach for dealing with existing septic tanks and controlling the growth of new septic tank dependent development.

Glynn County lacks many of the standard environmental protection ordinances recommended by the Georgia Department of Natural Resources. It will be up to local stakeholders to set priorities along these diverse environmental protection regulations. Currently, Glynn County lacks ordinances for the protection of water supply watersheds, for wetlands, for groundwater recharge areas, and for the protection of river corridors. The State of Georgia has developed model ordinances for the protection of each of these resources, so Glynn County should consider adopting these ordinances as appropriate with the county's priorities.

Glynn County, Georgia

6.0 Community Facilities

6.1 Community Facilities Overview

As population has grown in Glynn County, government facilities and staff have remained about the same size. It is expected that as Glynn County's population continues to grow, many staff functions will need to expand proportionately. The tax base of the county has grown with development and has improved the county's fiscal situation. This means the county is in fairly good shape to meet needed expansion of services.

Glynn County's population and economy are expected to grow significantly over the next 25 years. As the population and economy grow, community facilities and services will need to keep pace. The best and most efficient way to provide for these major expansions in facilities and infrastructure – new roads, new parks and greenways, new buildings, new stormwater facilities – is with a long reaching plan that comprehensively evaluates needs and helps to establish priorities. Such a Comprehensive Plan, along with associated documents for Solid Waste Management and Service Delivery, is the basis for a planned and thorough investment strategy for the county.

It should be noted that an Update to the Solid Waste Plan and the Service Delivery Strategy are being developed concurrently with the Comprehensive Plan. The Solid Water Plan will address solid waste management in depth, while the Service Delivery Strategy will address the coordination of service provision between local governments. Both plans will be complete in approximately the same timeframe as the Comprehensive Plan.

The existing Service Delivery Strategy between the City of Brunswick and Glynn County was executed on May 28, 1999. This 1999 version of the Service Delivery Strategy has remained in effect since that date. Throughout our process of assisting Glynn County with the update to the Comprehensive Plan, we have reviewed the Service Delivery Strategy, especially the service areas, providers, adequacy of facilities, and future expansion plans.

With the sole exception of the provision of water and sewer services, our analysis of existing community facilities and services, combined with the best available information from County staff, shows that these are consistent with the existing Service Delivery Strategy. We have identified no other changes in the delivery of government services provided by the City and the County.

The provision of water and sewer services is in the process of consolidation between the City and County. The General Assembly of Georgia adopted House Bill 1585, signed into law by the Governor on April 19, 2006, approved by referendum on July 18, 2006, creating the Brunswick-Glynn County Joint Water and Sewer Commission as a separate legal entity from the City and the County.

Therefore, the Community Agenda and the Comprehensive Plan will resolve this change for the provision of water and sewer services to recognize the formation of the Brunswick-Glynn County Joint Water and Sewer Commission.

All of the other services presented in and submitted in the 1999 version of the Service Delivery Strategy are expected to remain in full effect.

6.2 General Government Facilities

Most of Glynn County's government facilities are concentrated in Brunswick. Unfortunately, as the population of Glynn County spreads out over the county, the City of Brunswick may no longer be a convenient location for many residents. On the other hand, the City of Brunswick is the historic center of the region and therefore has special cultural significance as the traditional government center. For certain public services it may make sense to seek other, more central locations or provide satellite offices. Recently a ¼ mill fund has been passed for the repair and maintenance of buildings and the purchase of large equipment.

One major new government facility is the public safety campus which was recently completed. This new campus addresses the need for more central locations for certain facilities, as it is located near the I-95 corridor towards the center of the county.

GLYNN COUNTY COMMUNITY FACILITIES

Legend

Community Facilities

- Elementary School
- Middle School
- High School
- Pre Kindergarten
- Private School
- College/Adult Education
- Specialty School
- Library
- Community Center
- Park

Major Roads

- Interstate
- Highways
- Arterial

Railroads

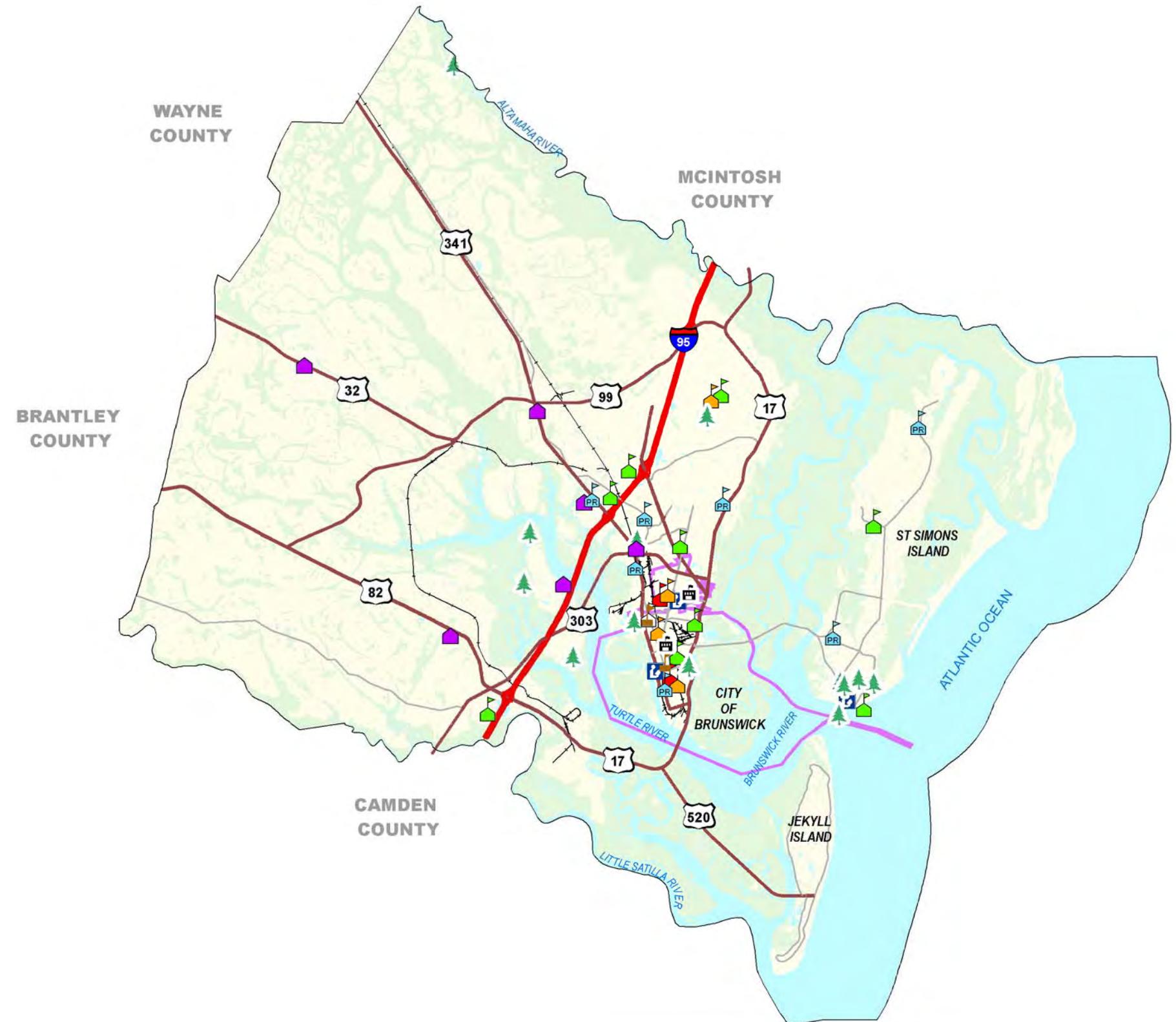
- Glynn County
- Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

6.3 Public Safety

The following is the Mission Statement of the Glynn County Police Department:

To provide professional law enforcement services in Glynn County to protect life and property by working with the community to maintain the peace, control crime, and to promote public safety through educational opportunities, enforcement of traffic regulations to enhance the safe travel of vehicles and commerce on the roadways, and the enforcement of State Law and Local Ordinances. Furthermore, the Police Department will provide quality of life assistance to the community, visitors, and businesses.

The Glynn County Police Department protects public safety through the following divisions: The Uniformed Patrol Division, the Animal Services Division, the Criminal Investigation Division, the Drug Enforcement Division, the Emergency Management Division, the Internal Affairs Division, the Special Services Division, and Training/Support/Records Division. Of these divisions, by far the largest is the Uniformed Patrol Division whose responsibility is to patrol the county, respond to calls, and apprehend offenders.

Every month the Glynn County Police Department issues an executive summary of its primary activities including calls responded to, arrests, citations, and other police activities. In February of 2006, a total of 124 officers served in the police department, making 215 arrests and responding to 3,643 calls.

It is not expected that Glynn County will need an additional police headquarters as the population grows. The current headquarters is located centrally and close to I-95, which provides convenient access to most of the county. In order to maintain the current level of service, the number of police officers will need to increase to 180 by 2030.

Police Level Of Service Forecast			
Year	Population	Headquarters	Officers
2005	72,427	1	124
2030	105,088	1	180

Source: EDAW, 2006.

The Mission Statement of the Sheriff's Office is as follows:

The Glynn County Sheriff's Office will serve its citizens by efficiently executing all of the duties and responsibilities constitutionally mandated and/or authorized by the laws of the United States of America, the State of Georgia and the County of Glynn. Services provided will include maintaining order and safety in the Courts, execution of criminal warrants and civil processes and management of the Detention Center.

The Sheriff's Office provides security at all of the courts in Glynn County and oversees administration of the Glynn County Detention Center. The Sheriff's Office is also responsible for serving civil processes and criminal warrants. The Glynn County Detention Center has the capacity for 344 inmates.

The Mission Statement of the Glynn County Fire Department is as follows:

To protect life and property of the citizens and visitors of Glynn County by providing technically advanced Emergency Medical, Fire Suppression, Education and Prevention Services in the most cost effective and customer oriented manner from a trained staff of professionals while recognizing our personnel as the key to our success.

The Glynn County Fire Department provides the following services:

- Fire Suppression
- Emergency Medical Services & Transports
- Search & Rescue
- Cause and Origin Investigation
- Hazardous Materials Response (Limited)
- Construction and Maintenance of Facilities
- Code Review and Enforcement
- Construction Plan Review
- Inspection of Public Buildings
- Public Fire Safety Education and Prevention
- Public Education (CPR, First Aid, etc.)
- Speakers for Schools, Civic Groups, Churches
- Utility & Non-fire Emergencies

Approximately 423 square miles are served with 8 fire stations serving 8 fire districts. Six smaller fire districts serve the eastern half of the county, while two large fire districts serve the less populated

Glynn County, Georgia

western half of the county. Fire stations personnel include both professional fire fighters as well as volunteer staff. Other Fire Department facilities include the administration building and the mechanical division.

The Glynn County Fire Department addressed 560 fires and 3,214 emergency medical calls in 2003. The Glynn County Fire Department cooperates with corresponding fire departments in the City of Brunswick and Jekyll Island as necessary.

The following facilities will be provided by the latest round of SPLOST funding:

- Training Tower
- Fire Department Maintenance Complex
- Fire Department Administration Facility
- Replace Engine #11
- New Aerial Truck
- New Tactical Support Truck

As the urbanized area in Glynn County expands, more Fire Stations will likely be needed to serve the population. Current level of service forecasts indicate that three new fire stations will be necessary over the 25-year planning horizon.

Fire Department Level Of Service Forecast		
Year	Population	Fire Stations
2005	72,427	8
2030	105,088	11

Source: EDAW, 2006.

GLYNN COUNTY PUBLIC SAFETY

Legend

Public Safety

- H Hospital
- ◆ Fire Stations
- ◆ GA Forestry Commission
- ★ Police Stations
- ★ Georgia State Patrol
- ★ Sheriff's Office/Jail

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

- Glynn County
- Brunswick Boundary

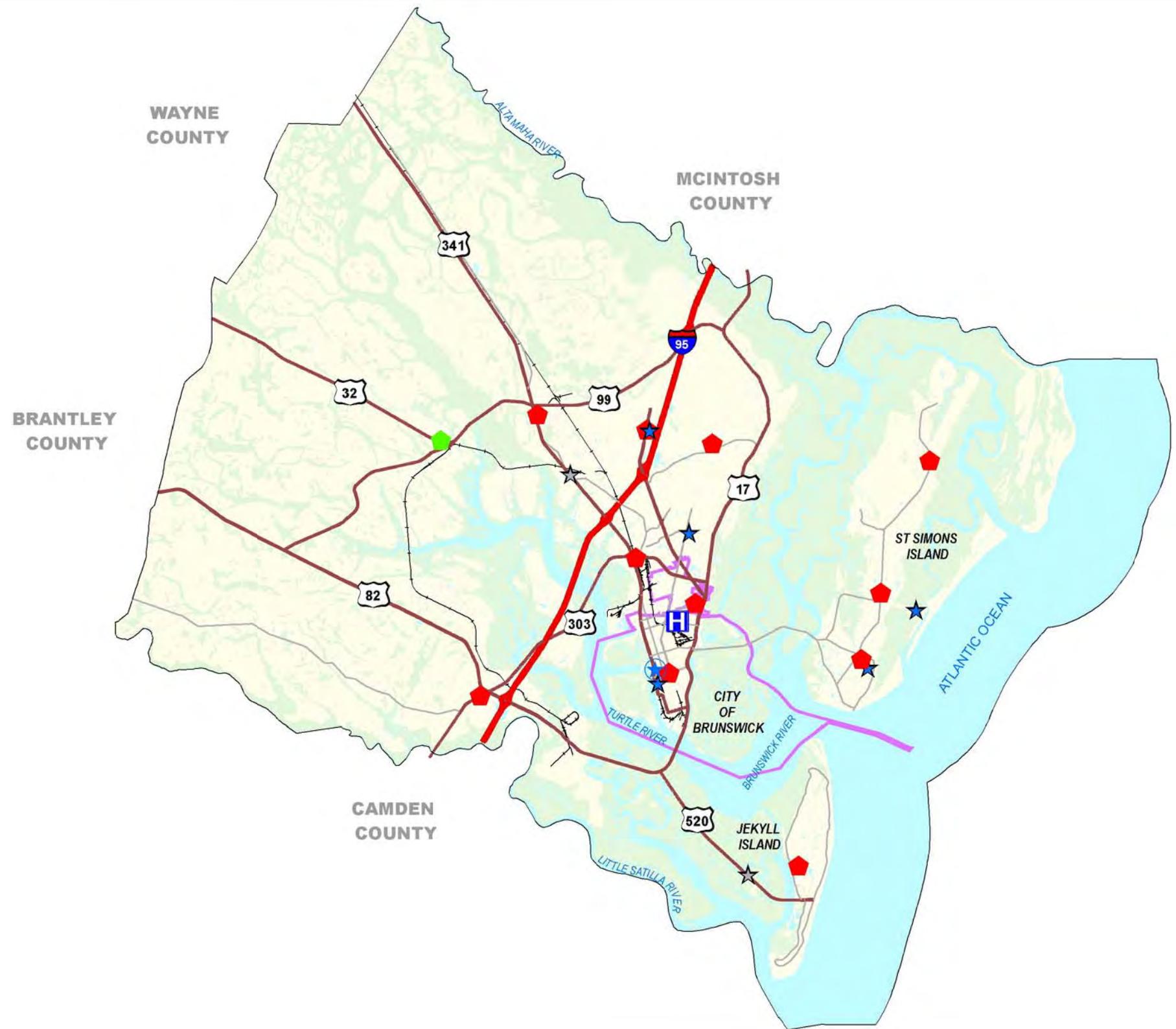
Hydrography

- Upland
- Marsh
- Water



0.0 0.45 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

6.4 Water and Wastewater

Water System Background

Glynn County is divided into four water systems and three sewer service districts: The four water systems include, St. Simons Island (South SSI), Hampton Plantation (North SSI), North Mainland and South Mainland. The Turtle River serves as the boundary between the two mainland sewer districts. Sea Island and Lanier Island are served by water and sewer facilities on St. Simons Island, while Little St. Simons Island is not served by water and sewer facilities. The Glynn County Commission operates all county owned water and wastewater systems. Glynn County contracts, with United Water Suez, to provide operation and maintenance services on the water and wastewater systems. The Glynn County water supply system consists of a water source, treatment plants, distribution and storage network. The sources for Glynn County water are both Miocene and Floridian aquifers. Water from the aquifer is aerated and chlorinated then pumped into the system.

Water is supplied to individual users by a network of pipes and storage tanks. Large transmission lines, called distribution mains, carry water to major demand areas and interconnect with a network of smaller lines which eventually supply individual establishments. Both the distribution mains and distribution network should be interconnected to form flow loops to allow water to circulate from various portions of the system to areas of highest demand. Water is delivered under pressure within the distribution system in order to ensure adequate flow to meet demands. Demand fluctuates during the day with peaks during the morning and evening related to residential use. Demand also fluctuates during the year with peaks during the summer months. To provide adequate quantities and pressure to meet peak use and fire flow demands, storage tanks are linked with the distribution system. During low demand periods these tanks are filled with water. During the peak demand periods, water is pumped from the tanks back into the system.

Water Regulatory Framework

The federal government has established quality standards for the protection of water for public use, including operating standards and quality controls for public water systems. These regulations are provided in the Safe Drinking Water Act. The Safe Drinking Water Act directed the Environmental Protection Agency (EPA) to establish minimum drinking water standards. The EPA standards are

divided into “primary” (those required for public health) and “secondary” (recommended for aesthetic quality) categories.

In accordance with federal requirements, the State of Georgia has adopted the Georgia Safe Drinking Water Act of 1977. The Georgia Department of Natural Resources, Environmental Protection Division (EPD) is the state agency responsible for implementing this act. In this regard, EPD has rules classifying and regulating public water systems.

The Glynn County Commission is responsible for enforcement of programs required by the EPD regulations. The Glynn County Health Department, a division of Georgia Department of Human Resources, has the responsibility for regulating and permitting individual and semi-public water systems in the county. Mandatory connection is required for new building construction permits within 500 feet of existing public water lines.

The City of Brunswick provides water within the city limits and to portions of the unincorporated county. The Jekyll Island Authority provides potable water on Jekyll Island.

St. Simons Island Water System Inventory

The St. Simons Island Water System is divided into two permitted water systems: the Hampton Point system at the north end of the island and the St. Simons system that serves the central and southern parts of the island. These two systems were connected along Lawrence Rd. in summer of 2006. Permits will be updated to reflect this change. Sea Island has a private water system.

Ground Storage Tank / Clear Well Sites

The St. Simons Island system has six permitted wells: Mallory Street (2), McKinnon Airport (3 total permitted, only two wells are on-line) and, South Harrington Road. The St. Simons Island system is currently permitted to draw 5.670 MGD, and 4.350 MGD monthly average. The Harrington and Mallory well sites each have a 350,000 gallon ground tank clear well while two tanks, 300,000 and 200,000 gallon, are located at McKinnon Airfield. Harrington site is being prepared for a possible future well.

Glynn County, Georgia

The Airport, Harrington and Mallory well sites are equipped with portable electric generators powered by diesel fuel. The Hampton Point system has two wells permitted for 0.28 millions of gallons per day (MGD) daily average, 0.17 MGD monthly average.

Elevated Tanks

The St. Simons Island system has two existing elevated storage tanks. A 500,000 gallon elevated storage tank is located on Demere Road. The Frederica Road elevated tank will be demolished, in winter 2007. This will be replaced by a new 500,000 gallon elevated storage tank (April 2007) that is under construction, at Frederica Township. This new elevated tank will provide a combined system storage capacity of 2.2 million gallons. SSI water master plan calls for an additional elevated tank to serve the Village and new condominium development, along Ocean Blvd.

St. Simons Island Water System Assessment

St. Simons Island water system serves most of the island. Service has been developed at the northern end of St. Simons Island to serve the development at Hampton Point and Frederica Township. Long term development on St. Simons Island is expected to be low-density residential and commercial nodes because of limited land availability and roadway capacity.

The St. Simons Island water system has some problems within the distribution system. Certain areas, e.g. Kings Way and Redfern Court, have experienced low-water pressure problems due to inadequately sized water lines. These problems are being addressed by replacing or adding new water lines in the affected areas. The St. Simons water and sewer master plan has been developed to evaluate the entire distribution system. Glynn County received an increase of permitted water withdrawal capacity on St. Simons Island from the Georgia EPD. The permit was conditional on development of a Water Conservation Plan and a Long Term Water Supply Plan. The Conservation Plan was submitted to EPD and has been followed.

North Mainland Water System Inventory

Water is provided to the unincorporated mainland by the Glynn County Commission, the City of Brunswick, private community systems or private individual wells. The Glynn County Commission supplies water to two separate mainland water systems. The County system is not connected to the City of Brunswick. The City of Brunswick water system serves the unincorporated area immediately

north and west of the city limits and the area of I-95 at exit 29.

Ground Storage Tank / Clear Well Sites

The North Mainland System consists of four wells that fill upon demand the Cate Rd. elevated tank. Golden Isles #1 well, has a 200,000 gallon ground tank. Canal Rd. is a pumping well. Golden Isles #2 well, has a 200,000 gallon ground tank. Ridgewood well is a pumping well, with a hydropneumatic tank. All the North Mainland system is permitted to draw 2.450 MGD daily average, and 2.350 MGD monthly average.

Elevated Tanks

The wells in the North Mainland system fill upon demand the 500,000 gallon elevated tank at Cate Road. These wells are linked with a SCADA (supervisory control and data acquisition) system that monitors levels and fill the Cate Rd. elevated tank and provides operational data and alarms. This new elevated tank will provide a combined system storage capacity of 900,000 gallons.

South Mainland Water System Inventory

Ground Storage Tank / Clear Well Sites

The South Mainland District has two wells, a 200,000 gallon ground tank and a hydro-pneumatic tank. This system serves the Exit 29 truck stops and the commercial and residential developments near Interstate 95 at the Exit 29 interchange. At Fancy Bluff, there is well with a 200,000 gallon ground tank. A back-up well, with hydro-pneumatic pressure tank, that boosts system pressure is located at Exit 29 waste water treatment plant. There are currently no backup generators incorporated into the South Mainland system. Well flows and pumps are relied upon for the provision of fire flows. Water draw permitted is 1 MGD daily average, 1 MGD monthly average for Fancy Bluff well and 0.3 MCD daily average, 0.3 MGD monthly average for the Exit 29 well.

Elevated Tanks

There are no elevated tanks, in the South Mainland system. Planning is underway for an elevated tank and ground storage tank in Myers Hill Rd. area to

Glynn County, Georgia

serve the new residential development, along Hwy. 82 and Hwy. 99.

North & South Mainland Water System Assessment

The mainland water system demands are expected to grow steadily over the next 20 years. The growth will be directly related to development plans along I-95 corridor, between exits 29 and 42 and along SR 99 and US 82 corridors. The development on the mainland is also expected to accelerate because of diminishing land availability on St. Simons for moderate income families. Long term planning is underway to connect the North and South Mainland systems, along SR 99, to hydraulically balance the system and maintain water quality.

The County will need to increase the capacity of water withdrawals from existing wells on the mainland during the next 10 years. The increased water withdrawals are expected to be offset by reductions in commercial and industrial use and through conservation measures. The proposed improvements stated above will provide adequate water availability for development projections during the next five to ten years.

Long Term Water Supply Plan and Permitted Withdrawals

The State of Georgia passed two laws in the past two years for managing long-term coastal water supply. The Georgia EPD has implemented certain strategies during the past year for enacting these laws. The Water Conservation law, SB 10, requires water conservation guidelines for all water permit holders. SB 202, Water Supply Planning and Permits, deals with required water supply planning.

The City of Brunswick has experienced saltwater intrusion above acceptable limits in several wells. The area of saltwater intrusion is directly related to pumping levels in the downtown area. The EPD reports that the area of intrusion has stabilized since the mid-1980. The stabilization has resulted from decreasing water withdrawal usage of industrial permit holders. The decreased withdrawal has also been noticed in water levels which have increased slightly since 1990.

Glynn County has developed a Long term Water Supply Plan. The County has organized a Long-Term Water Supply Study Technical Committee. The Committee members represent the large groundwater permit holders in the county. The Committee is currently developing a strategy to address the 30 year projected water needs of the county. The EPD is not permitting new golf courses or other recreational

uses to access the Floridian aquifer. In the future all non-potable water, non-industrial users may be required to use alternate water sources. Among the recommendations from the EPD for future water supply are the following; 1) Consider alternate sources of water including surface, alternate aquifers and wastewater for some users, 2) Implement water conservation and efficiency measures, 3) Possible permit reductions. The Georgia Institute of Technology is currently studying methods for conservation in the pulp and paper industry.

Glynn County will be required to locate additional water sources during the next 20 year period. These water sources may include additional wells, reuse and intake and treatment of water from the Altamaha River.

Table 1 provides the current permitted capacity and actual county well withdrawals.

Table 1: Well Permits and Withdrawals

Well	Permit MGD*	Actual MGD	Peak Reserve	Avg. Reserve
St. Simons	5.670 / 4.350	3.7 / 2.7	1.97	1.65
Hampton	0.280 / 0.17	0.08/ 0.06	0.20	0.11
Ridgewood	0.450 / 0.350	0.241/ 0.144	0.209	0.206
Golden Isles	2.000 / 2.000	0.075/ 0.036	1.925	1.964
1-95/Exit 29	0.300 / 0.300	0.06/ 0.04	0.06	0.26
Fancy Bluff	1.00 / 1.00	0.32/ 0.19	0.68	0.81

*MGD - million gallons per day

Permit MGD = GA EPD Permitted Daily Average/ GA EPD Permitted Monthly Average

Actual MGD = 2006 Daily Average Withdrawal/2006 Monthly Average Withdrawal

Peak Reserve = Permit Daily – Actual Daily

Avg. Reserve = Permit Monthly – Actual Monthly

Source: Glynn County Commission, United Water Services, Inc. 2006.

Sewer System Background

Sewerage systems are comprised of three components which perform basic functions of collection, treatment and disposal of sewage. The collection system is composed of a network of

Glynn County, Georgia

sewer pipes which collect sewage (wastewater) from individual establishments and convey it to a central location for treatment. Due to the relatively level terrain of Glynn County, a pumping system is used in conjunction with the major components of the collection systems. This allows sewage to be conveyed under pressure against the force of gravity and for long distances at minimal slopes. In conjunction with this type of system, the term "force main" is often applied to pressurized sewers without regard to their location within the network.

Effluent and sludge are the waste products of the treatment process. Effluent is the treated wastewater which flows out of the treatment plant. Sludge refers to the accumulated solid residues of the treatment process. Prior to final disposal, sludge is usually subjected to an additional biological treatment process to remove pathogens and water. Common disposal methods include burial in solid waste landfills and land application as a soil conditioner for agricultural purposes. Treated effluent water is discharged to state waters or sprays irrigated.

Regulatory Framework

The Federal Water Pollution Control Act is the controlling national legislation relating to the provision of sanitary sewer service. The goal of this act is the restoration and/or maintenance of the chemical, physical and biological integrity of the nation's waters. The act established the national policy of implementing area wide waste treatment and management programs to ensure adequate control of sources of pollutants. The U.S. Environmental Protection Agency is responsible for implementing the act. The Georgia Department of Natural Resources Environmental Protection Division (EPD) is responsible for the regulation of wastewater facilities.

The Glynn County Health Department is responsible for regulating and permitting individual and semi-public septic tank/drain field installations within the county, in accordance with rules and regulations of the Georgia Department of Human Resources.

The Water and Sewer Department has the operational responsibility for wastewater treatment facilities in unincorporated Glynn County. Mandatory connection is required for all new building construction permits within 500 feet of an existing sewer line. In April of 1988 Glynn County and the City of Brunswick entered into a 20 year inter-local agreement, whereby the city will accept raw sewage from Glynn County for treatment at the city's Academy Creek Water Pollution Control Plant.

St. Simons Island Sewer System Inventory

The St. Simons Island service district is primarily served by the Glynn County Commission. However, there are areas served by private community sewer systems or rely on septic systems. The Harrington Road area and German Village and other scattered areas rely on septic tanks. The wastewater treatment facility for St. Simons Island is located west of Frederica Road between Sea Island Road and the Glynn Haven Subdivision. In 2006, the facility was upgraded and expanded to handle its new permitted flow capacity of 4 MGD monthly average and 3.75 MGD weekly average. Annual average flows are approximately 2.2 MGD with higher flows recorded during periods of heavy rain and during the summer tourist season. The treatment process utilized is conventional treatment, with UV disinfection. The plant is equipped with two aeration tanks, a UV disinfection system, aerobic digesters and sludge drying beds. Effluent is discharged into Dunbar Creek and sludge is transported to commercially available landfills. Septic tank problems have been reported on several unsewered streets such as Peachtree Street, Broadway, and Youngwood Drive. Plans are underway to provide sewers in those areas.

St. Simons Island Sewer System Assessment

Sewage Lift Station Number 3, located on Stewart Avenue east of Frederica Road, serves approximately two-thirds of the southern part of the island. This station, which transmits wastewater through a 12-inch force main under Frederica Road, has been in need of repair for several years. This lift station will be upgraded and in service, by fall 2007. Major sewer rehabilitation projects have been or are being completed in St. Simon Heights, Kelvin Grove, Broadway/Peachtree and East Beach neighborhoods. However, there are more sanitary sewer areas in need of rehabilitation to eliminate excessive inflow/infiltration. In winter 2007, a project will be initiated to install flow meters and rain gages at five suspect lift stations. The data will be monitored and studied with the county SCADA system to determine what areas are in critical need of sewer rehabilitation. This equipment will be moved yearly to other lift stations to determine the system health. The upgraded wastewater treatment plant will be able to serve the existing and projected population of St. Simons Island in the near future. As development occurs on the northern

Glynn County, Georgia

portion of the island, new sewers and water mains will have to be constructed.

Mainland Sewer System Inventory

Sewage treatment to the unincorporated mainland is provided either directly from Glynn County, City of Brunswick or from the use of private septic systems. The wastewater that is generated in the Northern service district is transmitted to the City of Brunswick's system and is treated at the Academy Creek wastewater plant. The Academy Creek plant is designed as a regional facility. The plant provides secondary treatment and discharges the effluent into Academy Creek. The city buries its sludge on private property through agreements with landowners. The Academy Creek plant has a permitted capacity of 13.5 MGD and averages close to 6.0 MGD, however due to inflow and infiltration the plant handles close to 10 MGD during wet weather. Wastewater that is generated in the Southern service district is treated at the county's Exit 29 wastewater treatment plant. The plant performs secondary treatment. The effluent is sprayed into the marsh along the Little Satilla River and the sludge is disposed to commercially available landfills. The Exit 29/Southport plant has a permitted capacity of 300,000 gallons per day.

Mainland Sewer System Assessment

Glynn County plans to address the provision of sewerage service to existing developed areas of the mainland in the Capital Improvements Program. The northern service district will be served by the City of Brunswick's Academy Creek wastewater treatment plant. The Academy Creek Plant, with a capacity of 13.5 MGD, should be able to handle the projected flows from the area of the county to be served by this facility. The Exit 29/Southport wastewater treatment plant has a design and permitted capacity of 300,000 MGD. The plant is scheduled to be upgraded to a treatment capacity of 1.5, expandable to 4 MGD. (Early 2008) Blythe Island will likely be served by the Exit 29/Southport plant. The Exit 29 area is designated as a high pollution susceptibility and ground water recharge area for the Miocene Aquifer. Therefore, public wastewater disposal should be a priority in the area. This is an example of how the geographic distribution of sewer facilities and sewer capacity in Glynn County does not always match the areas experiencing growth.

Table 2 provides the current permitted and actual waste treatment capacity.

Table 2: Waste Treatment Permits and Treatment			
Treatment Plant	Permit MGD*	Peak	Average
St. Simons	4.0 / 4.8	3.35	2.98
Exit 29	0.3 / 0.37	0.208	0.18
Academy Creek	13.5/20	No info	No info

Source: Glynn County Commission, United Water Services, Inc, 2006.

*MGD - million gallons per day

Permit MGD = GA EPD Permitted Monthly Average/GA EPD Permitted Weekly Average

Peak = Max. Monthly Treatment Volume

Avg. = 2005-2006 Avg. Treatment Volume

Source: Glynn County Commission, United Water Services, Inc

In June of 2006, Applied Technology and Management completed a Water Master Plan for St. Simons Island. The Water Master Plan evaluated both the current condition of the water treatment and distribution systems as well as their adequacy for land use and population forecast for the year 2025. Current county water treatment and distribution facilities were inspected and a hydraulic model of the entire system was run to determine deficiencies. The review of water facilities included the Hampton System, with two water treatment facilities, the St. Simons Island System, with three water treatment facilities, as well as two elevated storage tanks, and water mains throughout the island. The primary water system deficiency of concern is lack of adequate water pressure, as adequate water pressure is necessary for fire protection.

The Water Master Plan identified five specific projects, to be implemented over the next five years, to address deficiencies in the current system. These five projects are projected to cost \$850,000 and are needed in addition to current work already underway on the system. In order to address longer term needs of the island, an additional major project is required, and the plan proposes three alternative solutions to meeting this long term need. Out of these three alternatives, the recommended solution is the replacement of piping along Frederica Road with 16-inch PVC pipe from South Harrington Road to Demere Road. The cost for this recommended project is estimated at \$3.6 million. Moreover, the Water Master Plan

Glynn County, Georgia

recommends that the island's water treatment and distribution systems be re-evaluated in five years.

With these improvements, the water system is forecast to have adequate capacity for the 2025 land use and population, including the land use and population of Sea Island and Lanier Island. Specifically, future annual average daily flow demand is projected at 4.2 million gallons per day, whereas the combined permitted capacity of the Hampton and St. Simons Island Systems is 4.52 million gallons per day.

The St. Simons Island Water Master Plan, developed by Applied Technology & Management, Inc. in June of 2006, is incorporated into this Comprehensive Plan Update by reference.

In June of 2006, Applied Technology and Management completed a Sewer Master Plan for St. Simons Island. The Sewer Master Plan evaluated both the current condition of the wastewater treatment, collection, and transmission systems as well as their adequacy for land use and population forecast for the year 2025. Current county wastewater treatment and pump stations were inspected and a hydraulic model of the entire system was run to determine inflow and infiltration into the sewer system. Gravity mains were not inspected as this was beyond the scope of this plan.

The wastewater facilities include the central wastewater treatment plant, currently being upgraded to a 4.0 million gallons per day capacity, 60 pump stations (of which 55 are owned and maintained by the county), 90 miles of gravity sewers and 29 miles of forcemains. As the gravity sewers are over 60 years old, they have experienced major deterioration and are in need of major renovation/replacement. As a result of the current conditions of the gravity sewers, there is significant inflow/infiltration of ground water into the sewer system, which results in an increase of the amount of water the central wastewater treatment plant must process and an effective decrease in the capacity of the central plant.

The Sewer Master Plan identified a five-year Capital Improvement Plan for the central wastewater treatment facility and the pumping and transmission systems. A sketch five-year plan was also developed for the gravity sewer system, however further inspection is necessary before the precise engineering needs and costs of necessary renovations can be determined.

The primary Capital Improvement Plan is estimated to cost \$9.3 million. A complete rehabilitation of the eleven worst

subbasins of the gravity sewer system is estimated to cost \$42.3 million.

With these improvements, the sewer system is forecast to have adequate capacity for the 2025 land use and population, including the land use and population of Sea Island and Lanier Island. The adequacy of the current wastewater treatment plant depends upon how successfully inflow/infiltration can be curbed by repairs to the gravity sewers. Specifically, projected 2025 average daily wastewater flow with 25% of current inflow/infiltration will create a demand for 3.6 million gallons per day of wastewater treatment, less than the current facility capacity of 4.0 million gallons per day.

The St. Simons Island Sewer Master Plan, developed by Applied Technology & Management, Inc. in June of 2006, is incorporated into this Comprehensive Plan Update by reference.

Glynn County and the City of Brunswick have been exploring a Joint Sewer Water Commission, which was approved by voters in July of 2006. The City and County would like to coordinate their sewer and water infrastructure to create a single, unified water and wastewater system and to enhance the overall efficiency and service to public and private customers. Coordination of sewer and water infrastructure will avoid duplication of resources and will better serve future growth within the City and County. This Joint Commission should benefit both the county and the city as the city is currently low on water supply and the county is currently low on wastewater processing capacity.

GLYNN COUNTY WATER SUPPLY FACILITIES AND SEWER TREATMENT FACILITIES

Legend

- WTP** Water Treatment Plant
- Water Main
- WWTP** Waste Water Treatment Plant
- Gravity Mains
- Forced Mains

*Water Mains for the City of Brunswick are not available at this time.

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

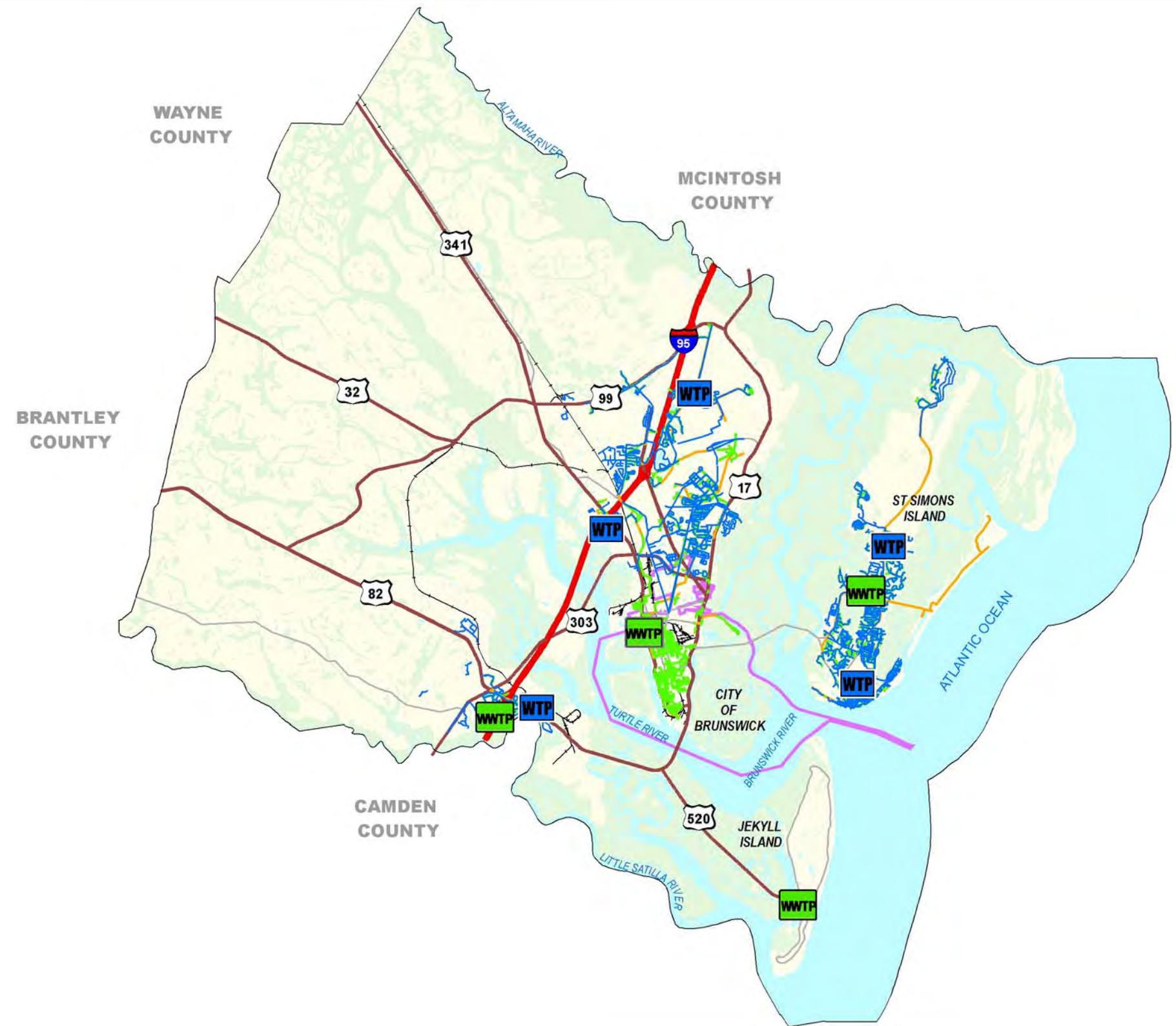
Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



Glynn County, Georgia

6.5 Stormwater Management

Glynn County has a typically flat coastal topography and shallow aquifers, which makes stormwater management an important issue. As the amount of development increases, and as lower lying areas are increasingly developed, the threat of flooding increases. Increased development can increase impervious surfaces, and cause places that did not previously flood to be susceptible to flooding. The county engineer's assessment is that the current stormwater system is at capacity in many areas and major rain events could cause significant flooding of residential properties. Recently Tropical Storm Tammy in 2005 increased awareness of stormwater issues as several Glynn County neighborhoods experienced flooding difficulties. One area of particular concern is the bowl-shaped area west of I-95 and east of 341. The quality of drainage facilities in the western areas of the county has not been ascertained. Drainage facilities in the western areas of the county were created by the US Department of Agriculture in the early 1940's for draining forest lands. These old ditches may be inadequate to drain modern-day residential development. On the positive side, Glynn County has several potential drainage destinations, with the Altamaha River to the north, and the Little Satilla and the Turtle Rivers to the south.

St. Simons Island also has some stormwater drainage issues, but less so than the mainland. Although St. Simons Island is mostly developed, significant redevelopment is occurring on the island, often increasing the amount of impervious surfaces. Stormwater drainage and flooding could be exacerbated by this increasing redevelopment, especially considering the difficulty and expense of adding additional stormwater drainage facilities on the island. However, steady maintenance of existing stormwater facilities is the primary need on the island.

In response to worsening stormwater issues, Glynn County recently passed a stormwater ordinance which was effective July 1, 2006. The ordinance requires that post-development runoff be no greater than pre-development runoff, and it requires that water quality be improved by catching and filtering water. Land owners must also maintain their stormwater filters to ensure their continued effectiveness.

In the long run, more effective measures may be necessary to prevent increased flooding. The county is planning to develop a stormwater master plan which would create a comprehensive drainage and stormwater treatment plan for the county. Even with a stormwater master plan developed, acquiring the lengthy rights of way from developed areas to their drainage destinations is an expensive and time

consuming proposal. In order to finance the stormwater master plan a stormwater utility is being considered, as this could create a steady and dedicated source of revenue to address stormwater issues.

One major project of significance for stormwater drainage is the restoration of the Brunswick-Altamaha Canal. If this canal were restored not only as a greenway but also as a functioning waterway, it could convey large amounts of stormwater to either the Altamaha or Turtle Rivers. Therefore, a restored Altamaha Canal could serve several important county needs at once.

6.6 Parks and other Community Facilities

Glynn County Recreation and Parks Department provides a variety of recreation services and maintains the county's parks. Recreation activities are focused on youth sports, which include baseball, softball, T-ball, football, soccer, cheerleading and basketball. In the 2004-2005 year, over 3,000 youth participated in one of these recreation programs. Besides youth sports, the Department conducts adult sports programs, a summer day camp program, aquatics programs covering both pools and beaches, community education programs, and special events. Additionally, the Recreation and Parks Department has hosted several regional and state-wide youth sports tournaments in recent years.

Blythe Island is the largest park facility run by the Recreation and Parks administration. Located on the western banks of the Turtle River across from the City of Brunswick, Blythe Island is a 1,326 acre regional park that includes developed camping grounds for recreational vehicles and tent campers, fresh and salt water fishing, picnic locations, a boat launch, a lake for swimming or fishing, walking and biking trails, and associated playgrounds and casual sports facilities. Boats, kayaks, and canoes are available for rental at the lake.

North Glynn Park is an 153-acre active recreation park that includes Glynn County's largest sports complex. The sports complex includes five soccer/football fields, four softball fields, four baseball fields, and requisite parking. Restroom,

Glynn County, Georgia

concessions, and storage facilities are also available.

Selden Park is a 33-acre park near downtown Brunswick with a wide variety of facilities in a scenic, oak-covered setting. Selden Park includes a swimming pool, basketball court, volleyball, a gym, and various pavilions and shelters for picnicking. Selden Park is highly used for private event rentals.

Neptune Park is a small park nestled in the heart of the village on St. Simons Island. The park offers tree-covered picnic tables, a covered fishing pier, and a small playground. Adjacent to the park are the St. Simons Library, the Casino pool, and the historic St. Simons Lighthouse.

The Casino facility, which is adjacent to Neptune Park, is currently undergoing a \$3M renovation expected to be complete in 2006. The renovated Casino will include multiple meeting rooms and space for theatre performances, as well as continue to house the St. Simons Island Library.

Complete List of Parks (listed alphabetically):

- Altamaha Park – 2 acres
- Altamaha Regional Park – 9 acres
- Anguilla/Kelsall Park – 1 acre
- Arco Ball Park – 2 acres
- Baldwin Park – 6 acres
- Ballard Park – 2 acres
- Blythe Island Regional Park – 1,326 acres
- Brookman Park – 6 acres
- Brunswick Villas – 1 acre
- Coast Guard Park – 4 acres
- Demere Park – 4 acres
- East Beach Park – 4 acres
- Elizabeth Harrison Park – 0.5 acres
- Ellis Point Park – 4 acres
- Epworth Park – 4 acres
- Fancy Bluff Park – 5 acres
- Gascoigne Bluff Park – 24 acres
- Glynn County Annex Park – 2 acres
- Hampton Point Park – 1 acre
- Highland Park – 2 acres
- King Oak Park – 6 acres
- Kings Park – 6 acres
- Leake Street Park – 0.3 acres
- Mallery Circle – 0.5 acres
- Mallery Park – 7 acres
- Marsh Park – 0.2 acres
- Massengale Park – 7 acres
- Moore Park – 0.5 acres
- Neptune Park – 9 acres
- North Glynn Park – 153 acres

- Northwood Estates – 2 acres
- Ocean Breeze Park – 0.3 acres
- Oglethorpe Park – 0.5 acres
- Page Court Park – 0.3 acres
- Palmetto Estates Park – 2 acres
- Paulk Park – 5 acres
- Perth Court Park – 0.4 acres
- St. Simons Park – 3 acres
- Selden Park, - 33 acres
- Sterling Ball Field Park – 5 acres
- Sterling Community Center Grounds – 2 acres
- Thalmann Park – 7 acres
- Turtle River Park – 0.5 acres
- Waverly Pine #1 – 2 acres
- Waverly Pine #2 – 2 acres
- Wesley Oak Park – 1 acre

Parks with Athletic Fields

- North Glynn Park – 13
- Ballard Park – 5
- Mallery Park – 3
- Selden Park – 2
- Sterling Ball Park – 2
- Arco, Baldwin, Blythe Island, Demere, Epworth, Fairway, Gasciogne Bluff, Paulk, Thalmann Parks – 1

Parks with Beaches

- Massengale Park
- Coast Guard Park
- Neptune Park

Parks with Swimming Pools

- Selden Park
- Neptune Park (Casino)

Community Centers

- Baldwin Park
- Ballard Park
- Highland Park
- Selden Park
- Sterling Park
- Thalman Park
- Turtle River Park (Blythe Island)

Boat Ramps

- Altamaha Park
- Blythe Island Beach Drive
- Blythe Island Regional Park
- Jekyll Island Boat Ramp
- Jekyll Harbor Marina
- Golden Isles Marina
- Hickory Bluff Marina

Glynn County, Georgia

- MacKay River Boat Ramp
- South Brunswick River Ramp (Ga Hwy 303)
- Turtle River Ramp (Ga Hwy 303)
- Village Creek (Harrington) Landing

Fishing Piers

- Blythe Island Regional Park
- Gascoigne Bluff Park
- Neptune Park

In order to maintain current levels of service for parks and recreation, Glynn County would need an additional 735 acres of parks, four community buildings, three soccer fields, nine baseball/softball fields, five basketball courts, one swimming pool, and seven tennis courts. However, Glynn County already exceeds national standards for parks and recreation in many categories and this expansion of facilities may not be necessary for every type of facility. For example, the national standard for provision of park space is 10 acres per 1,000 people. In this category, Glynn County currently exceeds its projected need for 2030. Likewise, Glynn County's recent expansion of recreation facilities at North Glynn Park suggests that it is ahead of the game with regard to baseball, softball, and soccer fields. A greater concern than the number of the facilities is the location and accessibility of recreation facilities to areas experiencing rapid population growth.

The services provided by the Brunswick-Glynn County Library include access to a variety of information materials such as books, video tape, books on CD and DVDs. Materials for blind and physically handicapped persons are also provided. The library also conducts programs related to its informational and educational mission.

The St. Simons Island Library is currently under renovations as part of the Casino renovation project.

The Three Rivers Regional Library System also provides a Bookmobile to provide library access to rural residents. The Bookmobile rotates among locations according to a publicized schedule.

Glynn County is forecast to need an additional library over the time frame of the plan. It should be noted that library facilities are provided not by the county but by the Three Rivers Regional Library System.

Parks and Recreation Department Level of Service Forecast									
Year	Population	Acres	Community Buildings	Soccer Fields	Baseball/Softball Fields	Basketball Courts	Swimming Pools	Tennis Courts	
2005	72,427	1,665	8	7	20	11	2	16	
2030	105,088	2,416	12	10	29	16	3	23	

Source: Glynn County Recreation & Parks Department 2004-2005 Annual Report, EDAW, 2006.

Library Level Of Service Forecast		
Year	Population	Libraries
2005	72,427	2
2030	105,088	3

Source: EDaw, 2006.

Glynn County has two public libraries. The Brunswick-Glynn County Library is located in downtown Brunswick and the St. Simons Island Library is located in the Casino on St. Simons. Both libraries are administered by the Three Rivers Regional Library System.

Glynn County, Georgia

6.7 Solid Waste Facilities

This section provides an overview of the current solid waste facilities in Glynn County. It should be noted that an update to the County's solid waste plan is being prepared concurrent with the Comprehensive Plan and will provide detailed analysis of the current solid waste operations and recommendations.

One private landfill currently operates in Glynn County, according to the EPD's database. The landfill, called Eller-Whitlock Avenue, accepts construction and demolition (C&D) waste only. EPD's database also lists 18 inert landfills permitted by rule in Glynn County. These inert landfills are primarily on industrial sites or sites owned by construction companies and used exclusively by the permittee on a temporary basis.

Waste Management (WMI) operates a transfer station in Brunswick; WMI then hauls the waste to their Superior Landfill in Chatham County, Georgia. At the transfer station incoming wastes are either grouped as municipal solid waste (MSW) or C&D and their origination point is recorded.

Glynn County provides contracted curbside collection as well as two drop-off centers for residents and businesses in the County. The Mainland drop-off location, at 126 Perry Lane Road, and the St. Simons location, on Demere Road between Frederica Road and Airport Road, are open to residents from 10:00 a.m. to 3:00 p.m. Monday-Friday and 9:00 a.m. to 5:00 p.m. on Saturday. Materials accepted at the centers include MSW, yard debris, white goods, bulky items, metal and construction debris. The current contractor transports most of the MSW collected curbside and at the drop-off centers to the Republic Broadhurst (Environmental) disposal facility in Jesup, Wayne County, Georgia. The contractor also can deliver waste to WMI's transfer station located in Brunswick.

The Jekyll Island Authority (JIA) employs their own staff for weekly collection services for its 600 residents. The collected wastes are transferred to WMI's transfer station. JIA also operates a recycling center for its residents located on South Riverview Drive. The center is open daily from 7:00 a.m. to 7:00 p.m. and accepts cardboard, aluminum and tin cans, newspaper, plastic, and glass. The collected wastes are transferred to WMI's Chapman transfer station.

The current collection and disposal system will adequately address the needs of the future population. However, consideration should be given to expand the commercial recycling programs in the unincorporated County and maximize participation in the county's curbside recycling program.



Glynn County, Georgia

6.8 Community Facilities Needs Assessment

Glynn County provides a solid set of community facilities for the current population. The county needs to take a proactive approach to providing community facilities to meet the imminent population growth. As increasing population growth occurs in western areas of the county, it is important that adequate community facilities be available for water, sewer, public safety, stormwater management, and parks. The county needs to have a future forecast of need for various public facilities including targeting areas most in need of new or expanded facilities. Priorities must be set between competing interests, and plans for future community facilities must be squared with budget and financial realities for the county.

One issue upon which Glynn County probably needs to take a more proactive stance is stormwater management. Much of the county lies in or near floodplains, and increasing development is exacerbating the threat of flooding while at the same time consuming land that could be used for creating new drainage facilities. Without a county-wide comprehensive strategy for creating new stormwater drainage facilities, the threat of a highly damaging flood is serious.

In terms of parks and recreation, as the senior population grows rapidly in the county an increasing emphasis on programs related to that population may be needed.

Critical and emergency facilities for the county should be located on land that is less vulnerable to hurricane and storm surge where feasible. The county's recent location of public safety facilities along the I-95 corridor is a wise example of this practice. Other facilities that may be appropriate for prioritizing in these areas include hospitals and medical treatment facilities and detention centers.

Glynn County, Georgia

7.0 Transportation

7.1 Transportation Plan Summary

In 2005, the Glynn County Metropolitan Planning Organization developed a Long Range Transportation Plan for Glynn County for the years 2005-2030. The Long Range Transportation Plan (LRTP) recommends and ranks potential transportation projects for a 25 year time horizon; however, a new Long Range Transportation Plan is developed every 5 years.

The Long Range Transportation plan begins with a thorough overview of existing conditions, including current social, economic, and land use conditions in the county. Taking guidance from stakeholder committees, the plan develops a vision and goals for the county's transportation infrastructure. Projections are made about future transportation needs and, taking into account the potential cost of projects, transportation projects are prioritized to meet the future needs of the county. Only projects in the LRTP are eligible for federal and state transportation funding. The plan addresses all aspects of transportation, including roads, bicycle and pedestrian facilities, transit, airports, ports, trucking, rail, and multimodal connections between modes. Transportation Enhancements, such as scenic corridors or recreational trails, are also addressed.

The following is the Vision Statement for the LRTP:

The citizens of Brunswick and Glynn County envision a multimodal transportation system in Glynn County that is economically efficient, environmentally sound, and moves people and goods in an energy-efficient manner. It will position Glynn County to compete in the global economy of the 21st century, and to prepare for future technologies and future limits on fossil fuels. Citizens value a transportation system that will support sustainable economic development and quality of life, while preserving their investment in neighborhoods natural resources historic sites, air and water quality. They want a system that meets both personal and business transportation needs and provides affordable, safe, convenient choices for transportation. The public wants full participation in transportation planning to ensure a system that is physically and economically accessible to all citizens of Brunswick and Glynn County. Citizens want transportation planning integrated with overall community planning and land use policies, so that transportation design is pro-active and supports planned orderly growth, rather than reactive to development.

7.2 Agencies and Roles

The Metropolitan Planning Organization is the organization in charge of transportation planning efforts for a metropolitan area. As Glynn County constitutes its own metropolitan area, the Metropolitan Planning Organization role is fulfilled by the Glynn County Planning Department.

The Georgia Department of Transportation provides technical support and advice to the Glynn County Metropolitan Planning Department during the planning process. The Federal Highway Administration oversees the process and ensures that the LRTP meets federal planning standards.

The current LRTP was the product of extensive public participation process, including three steering committees to help develop the plan. The Transportation Policy Committee, consisting of elected officials, appointees, and Georgia Department of Transportation representatives, was the primary decision-making body for the planning process. The Technical Coordinating Committee, which includes local and state officials with transportation backgrounds, provided technical advice on the feasibility and expense of transportation projects. The Citizens Advisory Committee played the role of representing general citizenry and their concerns during the planning process.

Methodology

A detailed transportation model is used to determine the adequacy of the transportation system for future needs. The model involves a forecast of population, employment and predictions of trip numbers from various origins to various destinations. The transportation model allows transportation planners to predict which road segments are likely to become congested as future growth and development occurs.

Glynn County, Georgia

7.3 Plan Recommendations

Recommendations for Roads

Road project recommendations are based on a number of considerations including projected level of service, connectivity, safety, and hurricane evacuation. Level of service is a measurement of the capacity of the road in comparison to the amount of traffic on that road. Roads are graded between "A" and "F" with grades "E" and "F" considered to be "failing" roads – highly congested roads that greatly slow down the speed of traffic. Transportation planners projected what the level of service would be on all major Glynn County roads in 2030 without new transportation projects being introduced. This analysis showed that nearly 25% of vehicle miles traveled in 2030 would be on significantly congested roads. Some of the roads that would have the worst congestion include State Road 99, State Road 25, Frederica Road, and the Torras Causeway.

As a result of this analysis, a list of 31 road or bridge projects is recommended in the LRTP. These projects include road widenings, new facilities, bridge replacements, intersection improvements, and corridor studies. This list of projects is considered cost-feasible, which means the projects should be capable of being funded out of current transportation funding mechanisms based on current trends. Some of the highest priority projects in the LRTP include widening I-95 to 6 lanes throughout Glynn County, a bridge replacement for County Road 78, and widening and other improvements to State Road 99.

Recommendations for Bike/Pedestrian

The LRTP reviews previous studies for bicycle and pedestrian infrastructure. A review of existing bicycle and pedestrian paths, which are fairly extensive on St. Simons Island, Jekyll Island, and in downtown Brunswick, is included. Brunswick Area Transportation Study conducted a bicycle and pedestrian study in 1994. This plan recommended and prioritized proposed sidewalk and bicycle facilities, particularly for the Brunswick peninsula and the islands. The LRTP also reviews the Coastal Georgia Recreational Trail Plan. This plan reaches throughout the entire Georgia coastline creating a network of trails, greenways, and related facilities for bicyclists and pedestrians, linking to historic, natural, and cultural amenities. This plan was further developed into a set of specific recommendations for Glynn County in the Coastal Georgia Alternative Plan. The LRTP document includes recommended routes and facilities along 25 miles of greenway in Glynn County from the CGRT plan. Most recently, the Coastal Georgia Regional Development Center produced a 10 county

regional bicycle and pedestrian plan in 2005. This plan is less detailed in its recommendations, but does highlight some potential regional connections for bicycle travel.

Bicycle and pedestrian projects are recommended in the Transportation Enhancement section of the LRTP.

Recommendations for Transit

The LRTP reviews existing transit service in Glynn County. Existing transit service is primarily provided as demand-responsive transit provided by the social service agencies Gateway Behavioral Health Services and Coastal Georgia Area Community Action Authority. The Coastal Georgia Area Community Action Authority provides demand responsive transit to the elderly and those with mental and physical disabilities.

The LTRP explains the recommendations in the Brunswick/Glynn Transit Needs and Opportunities study conducted in 2004 and adopts these recommendations. The goals of the proposed transit network are reviewed. The primary recommendations from the Transit Needs and Opportunities study are for 4 fixed routes and a rideshare program. The recommended fixed routes include downtown, the I-95 corridor, and St. Simons Island and are illustrated in the LRTP. A detailed financial plan for transit implementation is also included. The LRTP adopts the recommendations from the earlier transit study into the larger transportation plan.

Recommendations for Airports & Ports

The LRTP relies heavily on a previous airport study conducted by the LPA Group. Two airports are studied: The Brunswick Golden Isles Airport (BQK), and the McKinnon St. Simons Airport (SSI). The LRTP reviews the history, the existing facilities (as of the LPA report date), and the existing land use around each airport. A list of recommended airport projects is provided for each airport. The recommended improvements to the Brunswick Golden Isles Airport include additional and improved taxiways, runways, hangers, and terminals. Expanded parking and new terminal access roadways are also recommended. The purchase of land north of the airport to act as a land use buffer is also recommended. For the St. Simons Airport, recommended projects include the rehabilitation of structures, safety improvements, additional hangars, and new instrumentation. Projects

Glynn County, Georgia

are intended to meet the needs of the airports through 2020.

The LRTP goes on to propose a 5-year short term work program for improvements at each airport, and discusses sources of financing. Past traffic trends and future forecasts of traffic are included for each airport.

This section of the report also details Brunswick's port facilities. The report describes the port facilities available at the Colonel's Island Terminal, the Marine Port Terminals and the Mayor's Point Terminals. Future needs are also discussed, with the need for harbor deepening and expansion of the Colonel's Island Terminal emphasized. Recommended improvements to the Colonel's Island Terminal include an expansion of rail capabilities and an overpass, which are currently under construction.

Recommendations for Trucking & Rail

Eleven freight terminals exist in Glynn County. The LTRP recommends that roadway systems be maintained efficiently in order to ensure that movement can be maintained through the trucking industry. Many of the roads projects recommended in the plan will serve the needs of the trucking industry as well. One specific project that is recommended is the construction of an overpass for Colonel's Island along US 17 in order to enable the north and south sides of the island to be connected. This project is currently underway.

The existing rail network, including Norfolk Southern, CSX, and the Golden Isles Terminal Railroad are reviewed in the LRTP. Existing facilities and operations are described, including an in-depth description of how freight works its way from the Colonel's Island Terminal to the Norfolk Southern and CSX rail lines. A new rail connection is proposed from the Golden Isles Terminal Railroad to Norfolk Southern to reduce the time in transit for freight from the Colonel's Island Terminal. This project, which is estimated to cost \$2.6 million and is expected to result in a reduction in transit time by 2 or more days, is recommended by the LRTP.

Recommendations for Transportation Enhancement Projects

Transportation Enhancement projects include pedestrian and bicycle projects, as well as historic preservation, landscaping, and beautification projects related to surface transportation. The LRTP reviews a list of recommended transportation enhancement projects and describes steps towards their implementation including funding and a review of existing conditions where appropriate. The recommended Transportation Enhancement projects include:

- Bay Street/Oglethorpe gateway to historic Brunswick project – Park and mixed use development project to anchor gateway into downtown.
- St. Simons Island Land Trust Master Trail Plan – Trail connecting St. Simons Island Village to existing bike path along Kings Way and continuing to connect to Gascoigne Bluff Park by Torras Causeway.
- Highway 17 Beautification – Landscaping and a bike path along US 17 from Spur 25 to the Sydney Lanier Bridge.
- Harry Driggers Boulevard Multi-use Path, Phase II – Completion of Harry Driggers Boulevard Multi-use Path.
- St. Simons Island Lighthouse Improvements – Restoration of lighthouse tower.
- Brunswick-Altamaha Canal Greenway – First phases would involve reviewing right-of-way ownership and clearing ownership issues along the canal.
- Altamaha Park Recreation Trails – Purchase of lands along the Altamaha River and construction of a 1,200 foot path through the new park.
- Jekyll Island Multi-Use Trail-Phase II – Completion of circuit of pathways on Jekyll Island including along Riverview Drive and the South Dunes Crossover.
- Sidney Lanier Bridge Park Phase II – Additional features to the park including a connecting trail, a multipurpose building, a playground, and landscaping.

7.4 Financial Feasibility

Section 11 of the LRTP, the Financial Plan, demonstrates the financial feasibility of the recommended projects. Future state and federal funding of transportation in Glynn County is forecast and compared with estimated expense of transportation projects. Expenses and funding are separated into maintenance projects and non-maintenance (new construction, etc.) projects. The total cost of the proposed road projects matches the expected funding and is approximately \$347M dollars (in 2004 dollars) exclusive of maintenance projects. Costs for Transportation Enhancement Projects and transit costs and their required local matches are estimated separately from roadway projects. The total local cost for implementation of

Glynn County, Georgia

the proposed transit service was estimated at \$8 million.

Since the completion of the LRTP, rapidly increasing construction costs may have changed the financial feasibility of this plan. This may have implications on the project funding and timing of many of the recommended transportation projects.

7.5 Transportation Plan Needs Assessment

Glynn County's transportation plan is just recently completed and addresses most of the county's future transportation needs. One area that may merit reconsideration is if there is adequate road connectivity between different areas of the county. Right-of-way is always easier to acquire before substantial development occurs. Glynn County's transportation system is limited by the existing set of major US and State roadways and by rivers and railroads which create a series of bottlenecks for the county. The county should consider creating new roadway connections to enhance the set of alternative routes available for getting between different major sections of the county.

The population and employment projections used for the 2005 LRTP have been modified for this Comprehensive Plan. Population projections are higher than those of the LRTP, while employment projections are lower. These new projections have an implication for future transportation demand and travel patterns, and suggest that the adequacy of the proposed transportation network should be re-evaluated based on these latest projections.

Plans to develop a rural transit system for Glynn County are presently on hold. Such a system would greatly benefit the residents in the county, providing greater access to community services and employment centers.

On another note, although the county has participated in several related bicycle and pedestrian planning efforts, no single county policy exists for prioritizing between these multiple proposals. Policies are needed to help establish which bicycle and pedestrian projects are the priority as funding becomes available. A unified bicycle and pedestrian plan would help the county establish where limited funding should be spent and what the ultimate form of the bicycle and pedestrian network in the county should be.

Glynn County, Georgia

8.0 Intergovernmental Coordination

Glynn County has a number of other governmental entities with which it must relate and coordinate policy. Glynn County Schools is an independent body serving the same geographic area. The county and the school system must coordinate on planning and facility investments. At the historic center of Glynn County is the City of Brunswick, where many Glynn County government facilities are located. Jekyll Island is also part of Glynn County, but is managed independently by the state-mandated Jekyll Island Authority. Glynn County and Jekyll Island must coordinate on many issues, from transportation to economic development. Overall, Glynn County has positive relationships with these related governments and a history of collaboration in working on joint problems. The Comprehensive Planning effort seeks to build on this history of collaboration so as to most efficiently serve the people of Glynn County.

8.1 Glynn County Schools

Glynn County schools provide a full range of educational and related services for students, including programs in special education, gifted education, guidance counseling, pre-school, instruction in English to Speakers of Other Languages, a free and reduced meal program, and athletics for middle and high school students. At the high school level, Glynn County schools provide diplomas in College Preparatory studies and in Career/Technology studies. The Glynn County school system is governed by statements of Mission, Vision, and Beliefs that guide faculty, staff, students and parents in their participation in the school system.

The Glynn County school system is administered in accordance with four clearly articulated goals:

- To successfully educate all students.
- To develop a climate/culture of success, credibility and trust with the community, Board members, students, parents, and employees.
- To provide clean, safe, and orderly educationally appropriate facilities conducive to learning.
- To provide fiscal accountability to the citizens of Glynn County.

To illustrate its pursuit of these goals, Glynn County maintains a list of supporting Objectives and publicly available reports on how these Goals are being met.

The Glynn County school system is governed by a Board of Education that includes five district members and two at-large members. The Board meets twice monthly, with one of its monthly meetings open for public comment and feedback.

Glynn County's facilities include nine elementary schools, four middle schools, and two high schools, as well as other special schools and administrative facilities.

Elementary Schools

Altamaha Elementary
5505 Altama Ave., Brunswick, GA 31525

Burroughs Molette Elementary
1900 Lee St., Brunswick, GA 31520

Glyndale Elementary
1785 Old Jesup Rd., Brunswick, GA 31525

Golden Isles Elementary
1350 Cate Rd., Brunswick, GA 31525

Goodyear Elementary
3000 Roxboro Rd., Brunswick, GA 31520

Greer Elementary School
695 Harry Driggers Boulevard, Brunswick, GA 31525

Oglethorpe Point Elementary
6200 Frederica Rd., St. Simons Island, GA 31522

Satilla Marsh Elementary
360 South Port Pkwy., Brunswick, GA 31523

St. Simons Elementary School
805 Ocean Blvd., St. Simons Island, GA 31522

Middle Schools

Glynn Middle School
901 George St., Brunswick, GA 31520

Jane Macon Middle School
3885 Altama Ave., Brunswick, GA 31520

Needwood Middle
669 Harry Driggers Boulevard, Brunswick, GA 31525

Glynn County, Georgia

Risley Middle School
2900 Albany St., Brunswick, GA 31520

High Schools

Brunswick High School
3920 Habersham St., Brunswick, GA 31523

Glynn Academy
1001 Mansfield St., Brunswick, GA 31520

Special Schools and Facilities

Coastal Academy
2 Ross Rd., Brunswick, GA 31520

FACES Pre-Kindergarten Center
3400 Norwich St., Brunswick, GA 31520

Performance Learning Center
1410 I Street, Brunswick, GA 31520

Perry Building
2301 Stonewall St., Brunswick, GA 31520

Risley Learning Center
1800 Albany St., Brunswick, GA 31520

The school system has developed a seven-year plan for future facility development which is available under the third goal on the school's website. Highlights from the future facilities plan include:

- Construction of a new Sterling Elementary School
- Construction of a new Sterling Middle School
- Siting and development of a new Satilla Marsh Middle School
- Planning and Construction of a Middle School for the Creative and Performing Arts
- Construction of a new Glynn Academy at current Glynn Middle School site
- Planning and Construction of a new Charter Vocational School/Pheonix Academy
- Siting and development and/or renovation of a new, all-inclusive Administration building
- Construction of a new, redesigned Brunswick High School at the current Jane Macon Middle site
- Relocation of Leaps and Bounds program
- New location and development of a new transportation facility
- Renovation of the Risley Learning Center
- Renovation of the FACES Pre-Kindergarten

- Renovation of Altama, Burroughs-Molette, and Risley Middle School

8.2 City of Brunswick

The City of Brunswick is seeing significant investment after a long period of disinvestment. In 2003, the City of Brunswick completed its Blueprint Brunswick study, a comprehensive economic and physical development study for the core of historic Brunswick. The Blueprint Brunswick is moving forward with full force, and a variety of residential, governmental, and commercial development projects are proposed, most notably the over \$1B Liberty Harbor development. The City of Brunswick continues to seek revitalization and infill development, and better coordination between the city and the county on redevelopment issues in the city could be of benefit to both parties.

Glynn County and the City of Brunswick have recently adopted a joint water-sewer commission. A resolution was passed in the Georgia Assembly and approved by the citizens of the city and the county in July, 2006. A joint water-sewer commission has the potential to create efficiencies for both the city and the county, by providing access to county water for city use and by providing city sewer access for county use.

Another issue of concern to both the City of Brunswick and Glynn County is historic preservation. The City of Brunswick is home to the county's only established historic district, the Brunswick Old Town Historic District. The City of Brunswick has a local historic preservation board and is working on design guidelines for infill development to ensure new development is compatible with historic structures in the Old Town area.

8.3 Jekyll Island

The Jekyll Island Authority was created in 1950 as a governing board responsible for the management and conservation of the island. This board consists of nine gubernatorial appointed members. An important charge of the Authority is to ensure that sixty-five percent of the island remains undeveloped as mandated by the Georgia State Legislature. The island affords many opportunities for visitors and residents of Glynn County.

Glynn County, Georgia

While Jekyll Island is self-supporting and the Authority maintains a separate planning process for the island, they maintain a strong cooperative relationship with the county. The county is currently under contract to provide building inspections on the island. The county has offered to provide development review services to the Jekyll Island Authority which is currently implementing a new master plan for the island. Additionally, the Authority and the county will need to coordinate on upcoming environmental efforts such as the State Coastal Management Plan and county's Coastal Management Element of the Comprehensive Plan.

8.4 Development Authorities, Districts, and Major Federal, State & Regional Programs

8.4.1 Brunswick-Glynn County Development Authority

The Brunswick-Glynn County Development Authority plays the lead role in economic development for both Glynn County and the City of Brunswick. The development authority runs several industrial parks and develops and implements the county's economic development strategy in cooperation with other local partners. Coordination between the county and the development authority is strong and the Development Authority is working closely with the county on the development of the Comprehensive Plan.

8.4.2 Southeast Georgia Joint Development Authority

The Southeast Georgia Joint Development Authority was formed in 2004 in order to pool resources among the five counties of McIntosh, Glynn, Camden, Brantley, and Charlton to increase industrial recruitment potential for the region. The Joint Development Authority's Board is newly formed and just beginning to meet and define a strategy. The Southeast Georgia Joint Development Authority has achieved some recent success in helping to finance the improved Norfolk Southern connection with the Port of Brunswick. Glynn County is currently represented on the Board through the Executive Director of the Brunswick and Glynn County Development Authority, Nathan Sparks.

8.4.3 Georgia Department of Natural Resources

The Georgia Department of Natural Resource (GADNR) plays a particularly involved role with land use management and environmental resource protection in Glynn County because it is a coastal county. GADNR oversees the Georgia Coastal Management Program, which applies to Glynn County. The Coastal Management Program is a comprehensive program of environment protection and economic development for the coastal regions of Georgia. The program includes environmental monitoring, issues permits for shore and marsh disturbance activities, incentive grants, local government technical assistance, and other aspects. The program implements the Georgia Shore Protection Act and the Georgia Marshlands Protection Act. These activities are discussed in greater detail in the Coastal Resources chapter of this Community Assessment.

The Georgia Department of Natural Resources is also involved in the identification and clean-up of hazardous waste sites in the county.

8.4.4 Coastal Georgia Regional Development Center

The Coastal Georgia Regional Development Center (CGRDC) provides a number of services to local governments. The CGRDC serves 10 counties including the entire Georgia coastline. Planning activities by the CGRDC include regional planning, development of regional impact review, environmental planning, economic development, historic preservation, transportation planning, and GIS. In addition the CGRDC provides services in other areas such as cross-county transportation systems and acts as the area agency on aging. Currently, the CGRDC is working on a regional plan for the entire 10-county region that is expected to be completed in 2007. Glynn County has been known to draw on the services of the CGRDC for support in issues such as historic preservation.

Glynn County, Georgia



8.5 Intergovernmental Needs Assessment

As population growth occurs, Glynn County and Glynn County Schools could benefit from joint planning on the need for new and renovated school facilities. Population growth is occurring in new areas – more so on the western side of the county – that generally lack community facilities. The county and the school system must work cooperatively on all aspects of new school development including projections of population growth, siting of school facilities, and management of new school facilities and support facilities.

Glynn County and the City of Brunswick need to coordinate and collaborate on redevelopment policy. Public resources will be used most efficiently if the county and the city have a coordinated and mutually supportive redevelopment policy.

Glynn County, Georgia

9.0 Coastal Resources

Many of Glynn County's natural resources and natural resource issues relate to its coastal location. Coastal resources include barriers islands, beaches and dunes, freshwater and saltwater wetlands and marshes, marsh hammocks, and related special and rare habitats. Beyond their environmental values, coastal resources create substantial economic value – as navigable waterways, as fisheries, as tourist resources, and for their functions in preventing flooding and improving water quality. Furthermore, Glynn County's coastal location also creates an excellent opportunity for associated recreational activities and public access to beaches, marinas, boat launches, fishing, and nature-related public access. Glynn County's coastal resources and their stewardship should be a major concern of the Comprehensive Plan.

Most regulation and management of coastal resources is at the state and federal levels. The primary coordinating agency for Georgia's coastal policy is the Coastal Resources Division of the Department of Natural Resources. The primary guiding document for Georgia's coastal policy is the Georgia Coastal Management Program, which was adopted in 1997 after a lengthy process of public discourse. The Coastal Advisory Committee continues to meet and shape the ongoing implementation and revisions to the Coastal Management Program.

Georgia's Coastal Management Program (CMP) is part of the Federal Coastal Zone Management Program. The overall mission of the CMP is to balance environmental conservation and economic development in Georgia's coastal areas. The CMP focuses on technical assistance, coordination, and education and does not create new regulation. Rather, the CMP seeks to coordinate and communicate existing regulations in a more efficient and more effective manner. The objectives of the program that help it achieve its goal are to simplify government, to improve enforcement and compliance, to enhance environmental science and understanding, to increase public education and outreach, and to initiate Coastal Incentive Grants. The CMP addresses the full spectrum of coastal environmental issues, including impacts to surface water quality, shorelines and beaches, marsh and wetlands impacts.

The Coastal Management Program is concerned with the impacts that continuing growth and development will have on coastal resources. Key issues of concern include increased demand for fresh water, increased impervious surfaces that come with development, increased sewage and

solid waste and their impacts on water quality and increased demand on recreational areas associated with coastal locations.

The Coastal Management Program is run primarily through state agencies and the coordination between state agencies, but the role of local governments is also important. Every local government is represented on the Coastal Advisory Committee, which oversees the implementation of the Coastal Management Program. The Coastal Management Program offers Coastal Incentive Grants to local governments. Coastal Incentive Grants are allocated on a competitive basis to local governments and/or state agencies to fund specific local coastal needs. The Coastal Advisory Committee defines the criteria for awarding Coastal Incentive Grants, but all grants must further the goals of the Coastal Management Program.

The Coastal Management Program also seeks to provide local governments with technical assistance in developing land use policies that protect coastal resources. Two key programs in this regard are the Green Growth Guidelines and the Nonpoint Source Pollution Management Program.

The Green Growth Guidelines consist of a report designed for both local government and developers that illustrates how development can best fit within the environmental constraints of a site. The Guidelines show how new technologies such as GIS and GPS can be used to make site-specific, environmentally friendly designs for development. Following the Green Growth Guidelines allows development that is compatible with existing natural features and creates both economic and ecological benefits. Some of the goals furthered by the Green Growth Guidelines include reducing impervious surfaces, conserving natural areas, and reducing stormwater runoff pollution. Topics addressed include land conservation, street and parking design, lot development, and stormwater management. In short, the Green Growth Guidelines provide guidance on current best practices for development and the regulation of development in a way that protects environmental resources.

Glynn County, Georgia

The Nonpoint Source Pollution Management Program is another program that primarily works through providing technical advice to local governments. The goal of the program is to improve water quality by reducing the amount and improving the quality of water runoff from nonpoint sources – parking lots, streets, fertilizers from agriculture, marina operations, and so on. This program tries to promote 56 specific measures identified by the US EPA that help reduce nonpoint source pollution. The Nonpoint Source Pollution Management Program can provide funding, program development, and technical assistance for activities that help to promote its overall goal.

9.1 Barrier Islands

Glynn County has four barrier islands: St. Simons Island, Little St. Simons Island, Sea Island, and Jekyll Island. Ten of Georgia's barrier islands, including Jekyll Island are publicly owned. Outside Glynn County, Tybee Island is the only other Georgia barrier island that is directly accessible by automobile. The result is that much of the pressure for recreational and tourism-related development in Georgia is concentrated at St. Simons, Sea, and Jekyll Islands. Of these, only St. Simons and Sea Island are generally available for private sector development. All of Glynn County's beaches are on its barrier islands and are located on the seaward side of the islands.

Shorelines naturally shift over time due to the forces of water and wind. The erosion of beaches and shorelines can be exacerbated by natural events such as tropical storms or by human actions such as the dredging of rivers for navigation. Over time, the shifts of shorelines and beaches can affect buildings, property values, and flood hazards. In geologic time, no island land is permanent by nature, as the sands which islands are built upon are constantly shifting.

The Coastal Resources Division does not undertake activities to prevent beach or shoreline erosion. Local governments or private entities must initiate erosion control activities and they must seek a permit from the Coastal Resources Division in order to do so. Beaches on Sea Island are protected by the Sea Island Company, on St. Simons Island by Glynn County, and on Jekyll Island by the Jekyll Island Authority. There are two primary types of beach stabilization activities. One is erosion control activities, including beach restoration and renourishment and includes the construction of jetties. The second type of beach stabilization is called shoreline stabilization and includes the construction of revetments. The Coastal Resources Division prefers beach restoration activities to shoreline stabilization activities because the latter separate

the land from the sea. Generally, shoreline stabilization is only permitted where no reasonable alternative exists. Local governments that wish to engage in beach stabilization activities are strongly encouraged to develop comprehensive beach erosion control programs that including ongoing monitoring of erosion and accretion rates. They also should monitor the project's effectiveness after construction as well as any unanticipated adverse impacts to nearby properties. Finally, beach stabilization activities must be consistent with State and Federal laws regarding the protection of threatened and endangered species.

9.2 Beaches, Dunes, and Sand Sharing System

Beaches, dunes, sandbars, and shoals are part of the sand sharing system. Water and wind move sand between these various locations, but the system as a whole serves environmental, recreational, and economic functions. Beaches are a naturally occurring valuable recreational resource which, if lost, are extremely expensive to replace. Dunes are fragile and easily disturbed, and their resistance to erosion can be undermined by development and human activity. Beaches and dunes also protect property from floods, winds, tides, and erosion. The protection of the natural functioning of the sand sharing system and the prevention of man-made erosion is in the interest of Glynn County.

Here are the findings of the Coastal Management Plan on Beaches, Dunes, and the Sand Sharing System:

"Georgia's coast is comprised of barrier islands and marshes. All of Georgia's beaches and dunes are found on barrier islands. Major elements of the island-marsh-tidal system are interrelated: sand beaches and dunes protect the islands from erosion and flooding, islands protect marshes from the force of storms, and marshes provide feeding and nursery grounds for aquatic life. The dunes, beaches, and sediment transport provided by the rivers of Georgia and neighboring states comprise 'the sand-sharing system.' This system is vitally important for retaining beaches and barrier islands."

Through the Georgia Coastal Management Program, the Coastal Resources Division recognizes the need to protect the fragile sand-

Glynn County, Georgia

sharing system, while allowing recreational access to the beaches and waterfront areas. This sand-sharing system, however, is evolving over time. The impacts of unrestrained development can greatly exaggerate the migration of the barrier islands, lead to flooding problems, and reduce the recreational opportunities provided by Georgia's beaches. Careful planning and management of the sand-sharing system are essential to continued and sustainable use of this resource."

Source: State of Georgia Coastal Management Program and Draft Environmental Impact Statement, 1997.

The main regulatory tool for protecting beaches, dunes, and the sand-sharing system is Georgia's Shore Protection Act. This act serves to protect the entire beach area and dynamic dune fields from any major man-made disturbance. No development or land disturbance, including docks, marinas, and boat ramps are permitted on the beach or dune areas. Permits are required for any beach enhancements, jetties, boardwalks, or related projects and are granted only if they preserve dune topography and vegetation. Development on the landward side of dunes is permitted if at least 1/3 of the topography and vegetation is maintained and if the project is hurricane resistant.

9.3 Wetlands and Marshes

See section 5.4.2, Wetland, in the Natural Resources Chapter of this report.

9.4 Marsh Hammocks

Marsh Hammocks, also known as maritime forests, are small islands usually located between the major barrier islands and the mainland. Marsh hammocks have seen increasing development pressure in recent years, and the Coastal Resources Division called together a group of stakeholders to discuss marsh hammock protection, private property rights, the role of government in regulating development on marsh hammocks, and related issues. This group of stakeholders issued a summary report in 2003. Although the stakeholder report is detailed and addresses many issues in depth, overall the report suggests that the construction of new roads to marsh hammocks should be discouraged, with boat access being preferred. Also of concern are septic tanks on marsh hammocks, which must be evaluated on a case-by-case basis depending upon available soils. Ideally, septic tanks should be located on a minimum size acreage, set back from wetlands and maintained regularly.

Here are the findings of the Coastal Management Plan on marsh hammocks:

"In addition to barrier islands, there are forested islands called marsh hammocks amidst salt marshes. Marsh hammocks exist for a number of reasons. Some are the remnants of old barrier islands formed during times of higher sea level; some are islands separated from larger islands by erosion; some are formations from ballasts dumped by ships during the colonial era; some are dredge spoil disposal sites. Marsh hammocks act as protectors for other areas by slowing erosion from high spring or flood tides, acting as wind barriers, and impeding stormwater runoff. Marsh hammocks are botanically unique and can be valuable habitat for eagles and other animal species, as well as rarer plants whose seeds have washed ashore. In many cases, Indian middens have been found on these islands. Marsh hammocks are unique scenic counterparts to coastal marshes."

Marsh hammocks are sometimes developed for residential sites, used as platforms for causeways, or used as wetland mitigation sites. As population and development pressures increase, more interest in developing these small upland areas is expected. Since development of these sites often requires considerable investment of infrastructure such as building causeways, laying utility lines to more remote areas, as well as disrupting valuable habitat, the extent of marsh hammock development that is in the public interest must be carefully evaluated. Erosion and sedimentation buffers help protect surrounding marsh."

Source: State of Georgia Coastal Management Program and Draft Environmental Impact Statement, 1997.

The Georgia Erosion and Sedimentation Act, which requires a minimum 25' undisturbed buffer adjacent to any State waters, applies to marsh hammocks. Glynn County regulations pertaining to the installation and maintenance of septic tanks are also applicable.

9.5 Rare Communities

Barrier islands, marshes, and wetlands are home to numerous species of wildlife in various stages of their life cycle as mentioned in above descriptions of these environments. Some species of special

Glynn County, Georgia

concern include shorebirds and waterfowl. Hundreds of species of birds either reside in or migrate through Glynn County and similar coastal areas. In addition to providing bird habitat, bird watching is a major recreational and tourist activity. Another species of particular concern is the loggerhead turtle, which is known to nest on a number of beaches including southern Jekyll Island. The following table contains Federal or Georgia endangered or threatened species that use coastal habitats:

Endangered or Threatened Animals known to live in Coastal Habitats in Glynn County

Juris-diction	Species	Common Name
US	<i>Himantopus mexicanus</i>	Black-necked Stilt
US	<i>Sterna antillarum</i>	Least Tern
US	<i>Acipenser brevirostrum</i>	Shortnose Sturgeon
US	<i>Caretta caretta</i>	Loggerhead
US	<i>Charadrius melanotos</i>	Piping Plover
US	<i>Chelonia mydas</i>	Green Sea Turtle
US	<i>Dermochelys coriacea</i>	Leatherback Sea Turtle
US	<i>Drymarchon couperi</i>	Eastern Indigo Snake
US	<i>Eubalaena glacialis</i>	Northern Right Whale
US	<i>Haliaeetus leucocephalus</i>	Bald Eagle
US	<i>Lepidochelys kempii</i>	Kemp's Or Atlantic Ridley
US	<i>Mycteria americana</i>	Wood Stork
GA	<i>Sterna nilotica</i>	Gull-billed Tern
US	<i>Trichechus manatus</i>	Manatee
US	<i>Gopherus polyphemus</i>	Gopher Tortoise

Source: Georgia Department of Natural Resources, Georgia Rare Species and Natural Community Information, 2006

Endangered or Threatened Plants known to live in Coastal Habitats in Glynn County

Juris-diction	Species	Common Name
GA	<i>Litsea aestivalis</i>	Pondspice
GA	<i>Sageretia minutiflora</i>	Tiny-leaf Buckthorn
GA	<i>Tillandsia recurvata</i>	Ball-moss

Source: Georgia Department of Natural Resources, Georgia Rare Species and Natural Community Information, 2006

Many rare species also find habitat in coastal areas, but are not currently listed as threatened or endangered. A complete list is available from the Georgia Department of Natural Resources, Wildlife Resources Division.

9.6 Public Access and Open Space

Waterfronts, beaches, and most wetlands are in public ownership. Preservation of public access to these natural and recreational amenities is an important priority. Recreational activities relating to these public resources include hunting, fishing, canoeing, boating, swimming, birding, and wildlife observation. These recreational opportunities also serve as a major draw for the tourism industry of Glynn County. Public access is provided by publicly owned land adjacent to these resources, beach paths, boat launches, marinas, fishing docks, parking areas, and pedestrian and bicycle paths that create access to these areas.

Sea Island and Little St. Simons Island are privately owned and little public access to beaches and other natural areas is possible on these islands. Sea Island's beaches are technically public, but are only accessible by non-motorized boat for those not staying in the island's resorts.

St. Simons Island has 3.8 miles of beaches and the island is highly accessible with access by auto, boat, and small airplanes. Public beaches on St. Simons Island are easily accessible with 24 beach access points, many of which have associated public parking areas. The largest parking lots providing direct access to the beach are East Beach and Massengale Park. Neptune Park also provides a pier for wildlife viewing and fishing. Bike paths throughout St. Simons Island enhance beach access.

Jekyll Island has 8.0 miles of beaches and the island is highly accessible with a causeway connecting to the mainland. Beaches are generally accessible for people who are not staying at Jekyll Island lodging. There are nine public beach areas with over 2,500 parking spaces. Handicapped access facilities are also provided in four of these areas. Other associated facilities provided include picnicking facilities and a campground for tents and recreational vehicles.

Marsh access and boardwalks along marshlands have not historically been a priority in Glynn County. One site with access to marshlands is the Coastal Resources Division Regional Headquarters, located at the foot of Sidney Lanier

Glynn County, Georgia

Bridge. This site provides an Earth Day Nature Trail available to educators by appointment. As private marsh front development becomes more desirable, public access to and views of marshlands may become scarce. Preserving views to and access of marshlands is a potential issue of concern for Glynn County residents.

Information about boat ramps is contained in the Parks section of the Community Facilities Chapter (Section 6.6).

The Coastal Management Program engages in the following activities to promote public access to coastal areas:

- Publicize public access
- Provide technical assistance
- Acquire property for coastal access
- Encourage beach access on county and Municipal properties

As the population of Glynn County continues to grow, especially the mainland population, demand for public access to beaches and other coastal areas may increase. Existing facilities may become strained if they are inadequate to meet the needs of a growing population. Monitoring the utilization of existing beach facilities may be helpful in determining their adequacy. Some public access beaches charge for parking in order to both finance beach maintenance and to make most efficient use of scarce beach access resources.

9.7 Hurricane Mitigation Planning

The Georgia Emergency Management Agency created a new Georgia Hurricane Plan in 2006. The Hurricane Plan addresses hurricane preparedness, response, and initial recovery. Protocols, Standard Operation Procedures, and Operating Conditions (OPCONS) are elaborated upon so that every agency associated with hurricane preparedness knows what to do in any condition – before, during, and after hurricane and tropic storm impacts. The Hurricane Plan includes a hazard analysis of the four types of hazards associated with hurricanes and tropical storms – storm surge, winds, rainfall-induced flooding, and tornados. Each type of hazard is evaluated for its scope and degree of threat to lives and property. The Georgia Hurricane Plan is available from the Georgia Office of Homeland Security website (<http://www.gema.state.ga.us/>).

The 2006 Georgia Hurricane Plan relies heavily on a Hurricane Evacuation Study completed in 2002. The plan establishes evacuation zones that can be evacuated systematically relative to the degree of threat. Glynn

County has three evacuation zones. A hazard analysis identifies those areas that are vulnerable to flooding. A vulnerability analysis in the study identifies populations under threat of hurricane/tropical storm impact and critical facilities. One particularly vulnerable population is that which resides in mobile homes, since mobile homes are highly susceptible to wind damage. The Hurricane Evacuation Study also includes a behavioral analysis of how people will behave during a storm event, how many people will evacuate and how many vehicles will be used in evacuation. A clearance time for complete evacuation has been calculated for Glynn County at between 6 to 21 hours. Evacuation routes and lane reversal plans are established. Also, an estimate of needs for emergency shelters has been established.

Although most of the planning and support for hurricane mitigation planning occurs at the state level, local governments need to be prepared. The local role is led by the director of the local emergency management agency, which for Glynn County is part of the Police Department.

Generally, evacuation orders are issued by the local governmental body. Plans are in place for the county commission to be briefed and act with adequate foresight during a pending hurricane threat. A local emergency operations center has been established where designees from all crucial local government agencies can participate in a daily briefing with the Georgia Emergency Management Agency and coordinate activities. The local emergency management agency director is prepared to provide instructions to local residents on how and when to evacuate and how to seek emergency shelter or transportation if needed. The local emergency management agency director is prepared to assist the state in publicizing evacuation orders to the local population. Finally, plans are in place for how critical facilities such as hospitals, senior homes, detention centers, and fire stations will be handled in the event of a hurricane event.

GLYNN COUNTY HURRICANE SURGE MAP

Legend

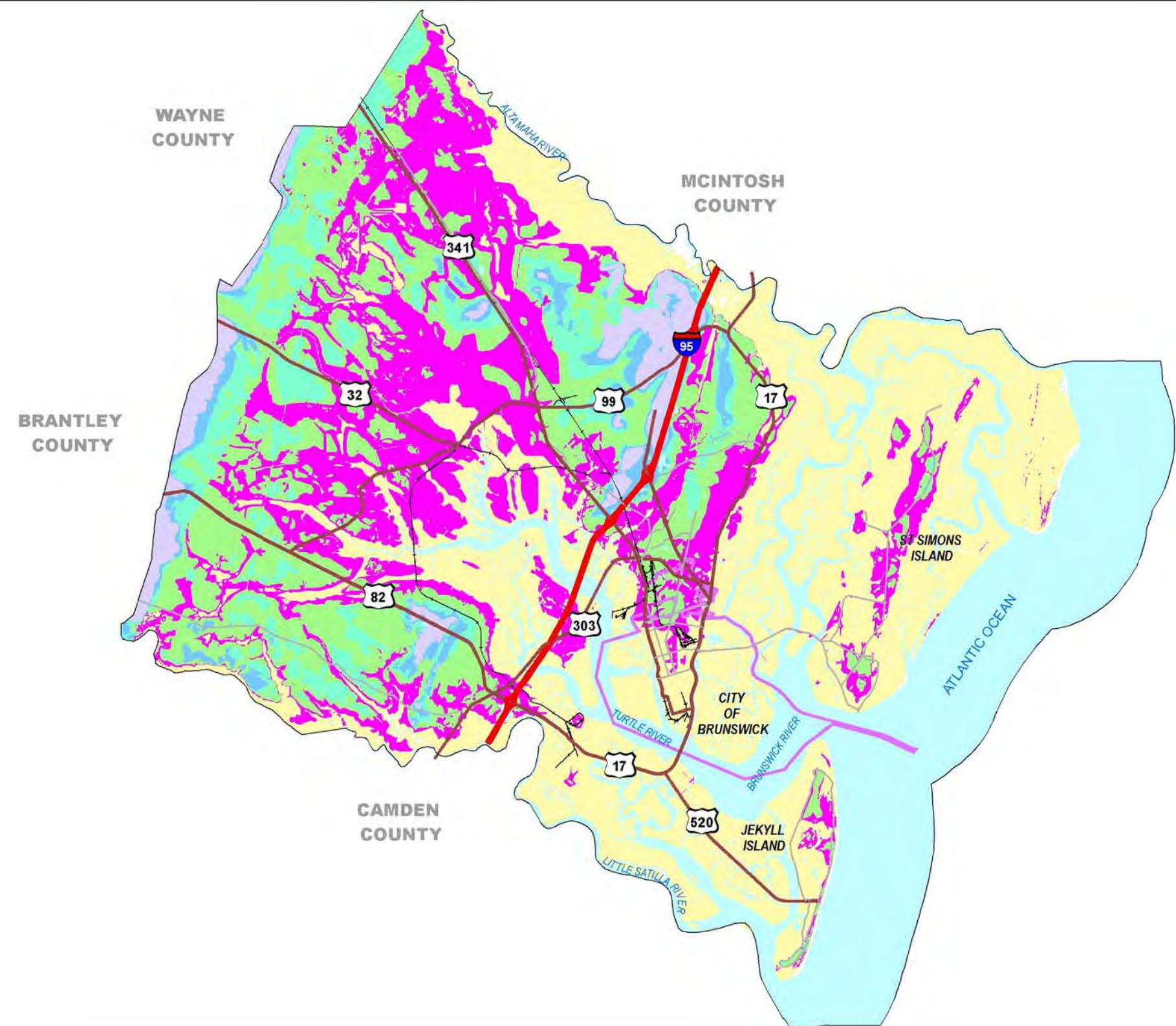
Hurricane Surge Categories:

Category	Wind Speed	Surge
1	74-95	4-5'
2	96-110	6-8'
3	111-130	9-12'
4	131-155	13-18'
5	156+	18'+
6	Areas Not Affected	

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

Glynn County
Brunswick Boundary
Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.

Glynn County, Georgia



9.8 Coastal Development Pressures

Coastal areas nation-wide have seen an increasing interest in residential properties with coastal access or views.

Properties in many coastal areas have risen precipitously, and these areas are under heavy development pressures.

Glynn County has seen some of this development pressure, predominantly on St. Simons Island, as this is the main island available for private development. As the pressure for redevelopment and denser infill development increases, some residents of the island are concerned about the compatibility of new development with existing residential communities.

9.9 State Coastal Planning Effort

The Georgia Department of Community Affairs is currently undertaking a Coastal Comprehensive Plan effort for Georgia's six coastal counties: Bryan, Camden, Chatham, Glynn, Liberty, and McIntosh. A 35- member advisory committee, called the Coastal Comprehensive Plan Advisory Committee, has been appointed to provide council on this planning process.

Much like Glynn County's Comprehensive Plan, the Coastal Comprehensive Plan will look at a broad set of inter-related issues including protection of the natural environment, economic development, tourism, housing, and transportation issues. The plan will look at several large-scale land use scenarios of potential development for the entire coastal region and will include a public outreach process.

Additional information is available on the Coastal Comprehensive Plan website at:
<http://www.georgiaplanning.com/coastal.htm>. Georgia's Coastal Comprehensive Plan will be complete by September of 2007.

GLYNN COUNTY LAND USE

Legend

Land Use

Category

- Agriculture/Forestry
- General Commercial
- General Industrial/Light Industrial
- Mobile Home Residential
- MultiFamily Residential
- Office Commercial
- Park/Recreation/Conservation
- Public/Institutional
- Single Family Residential
- Transportation/Communication/Utility
- Undeveloped/Vacant

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

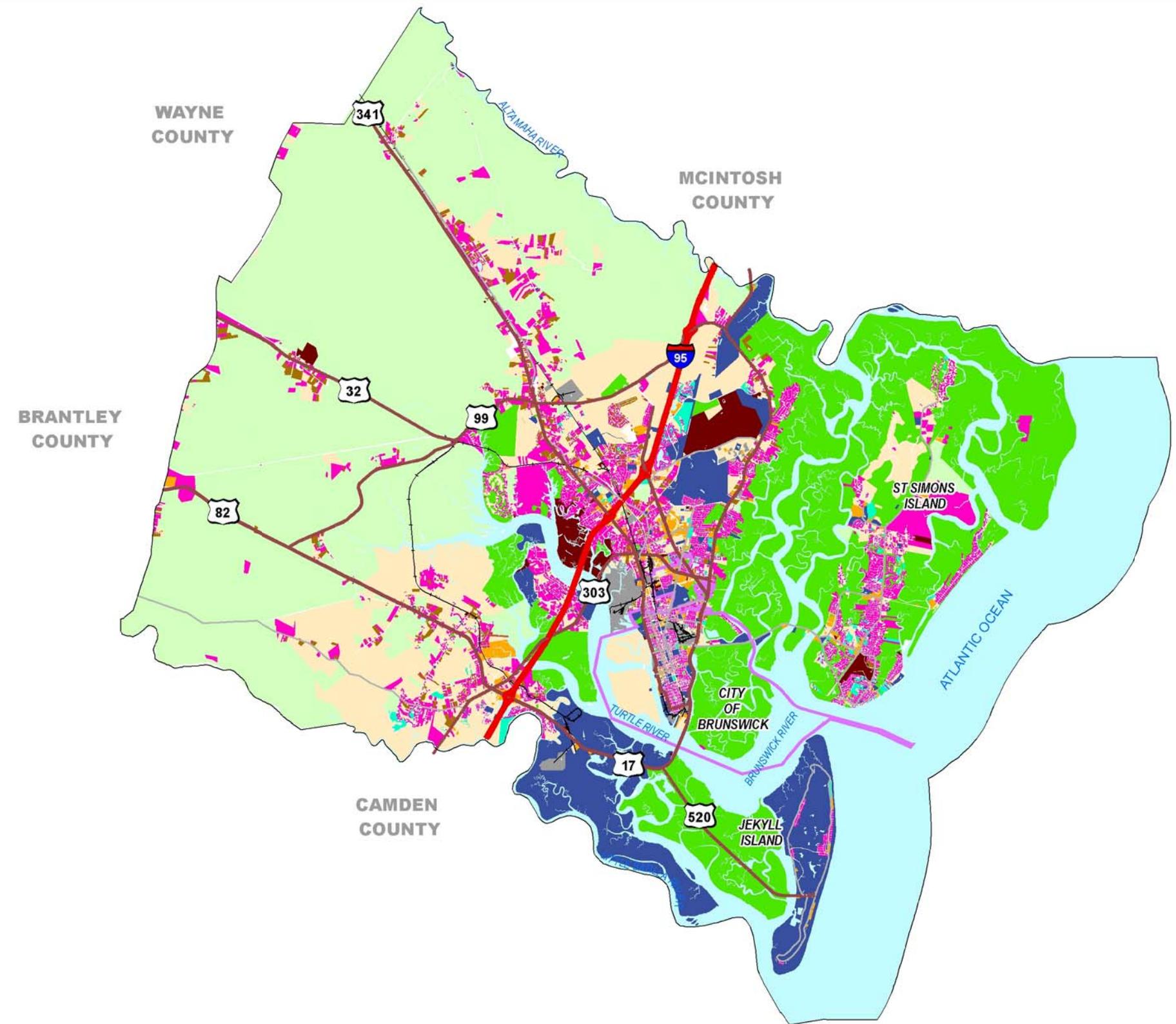
Hydrography

- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY PROPOSED CHARACTER AREAS

Legend

ROADS

- Interstate/U.S. Highways
- State Highways
- Arterial
- Collector
- Light Duty
- Private
- Private/Easements
- Logging

CITY BOUNDARY

COUNTY BOUNDARY

PARCELS

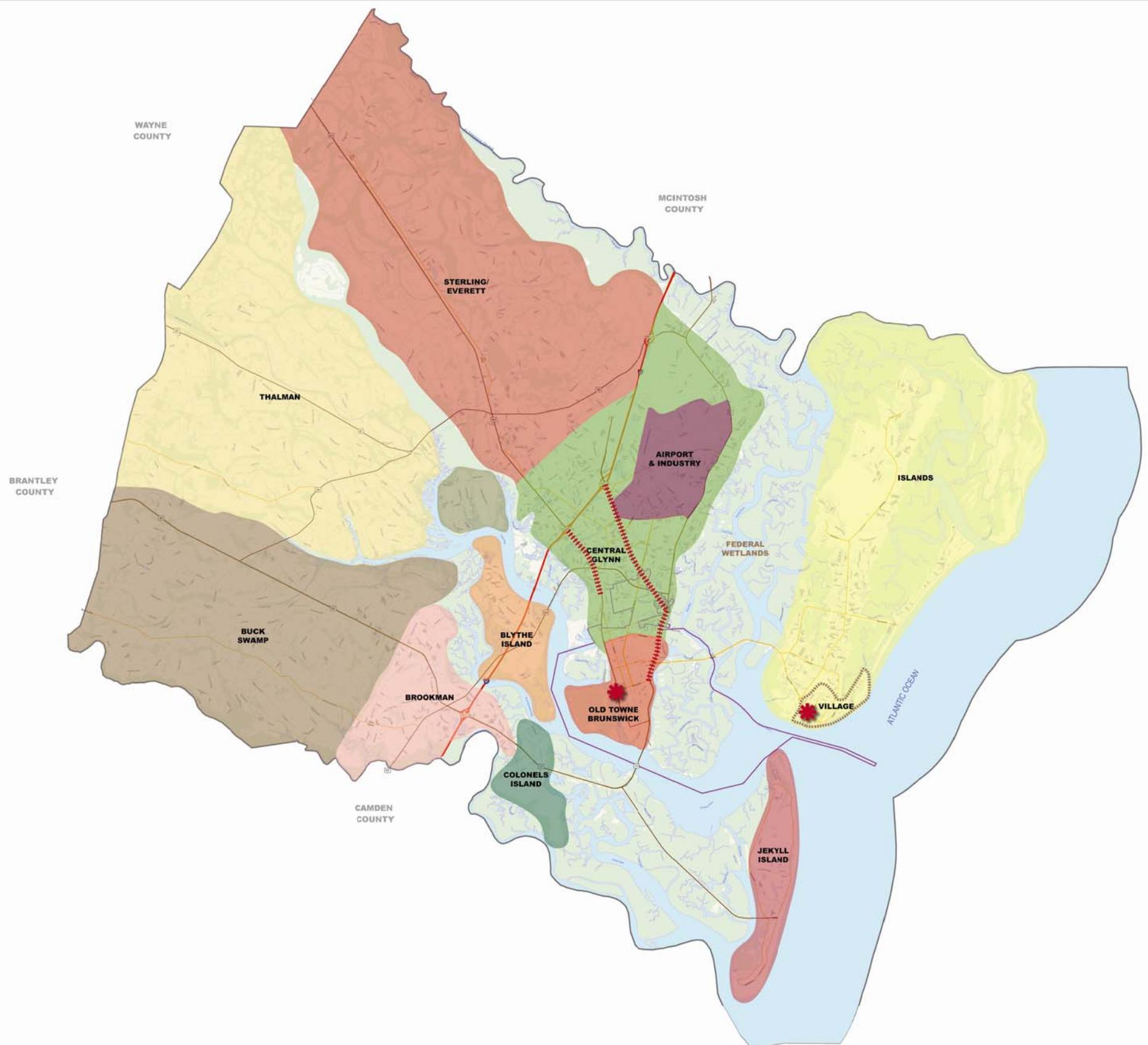
HYDROGRAPHY

- UPLAND
- MARSH
- WATER



0 0.5 1 2 3 4 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY COMMUNITY FACILITIES

Legend

Community Facilities

- Elementary School
- Middle School
- High School
- Pre Kindergarten
- Private School
- College/Adult Education
- Specialty School
- Library
- Community Center
- Park

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY AQUIFER GROUNDWATER RECHARGE AREA

Legend

Aquifer Recharge Area



Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



0.0 0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY HISTORIC LANDMARKS

Legend

Historic Landmarks

- Bloody Marsh
- Christ Church
- City Hall
- Coast Guard Station
- Epworth By The Sea
- Fort Frederica
- Glynn Academy
- Historic City Hall
- Historic Glynn County Court House
- Howfyl Plantation
- Jekyll Island Historic District
- Old Harrington School
- St Simons Light House

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

Glynn County

Brunswick Boundary

Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY HURRICANE SURGE MAP

Legend

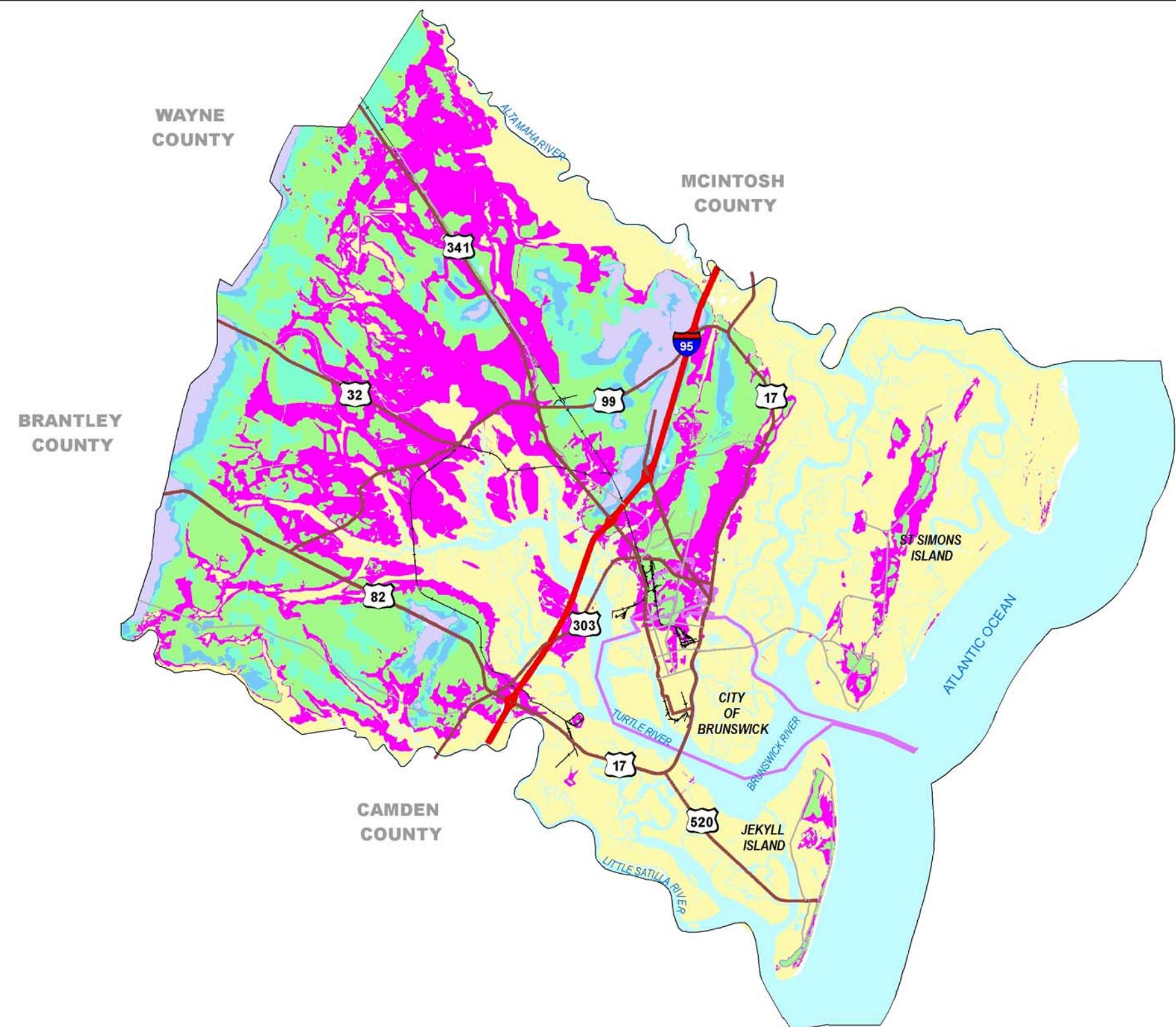
Hurricane Surge Categories:

Category	Wind Speed	Surge
1	74-95	4-5'
2	96-110	6-8'
3	111-130	9-12'
4	131-155	13-18'
5	156+	18'+
6	Areas Not Affected	

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

Glynn County
Brunswick Boundary
Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



0.4 0.9 1.8 2.7 3.6 Miles

GLYNN COUNTY POPULATION GROWTH TRENDS

Legend

Preliminary/Proposed Subdivisions

Lots Per Subdivision

- 1 - 9
- 10 - 99
- 100 - 490
- 1001 - 1900
- 8600

Growth Area greater than 100 lots

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County

- Brunswick Boundary

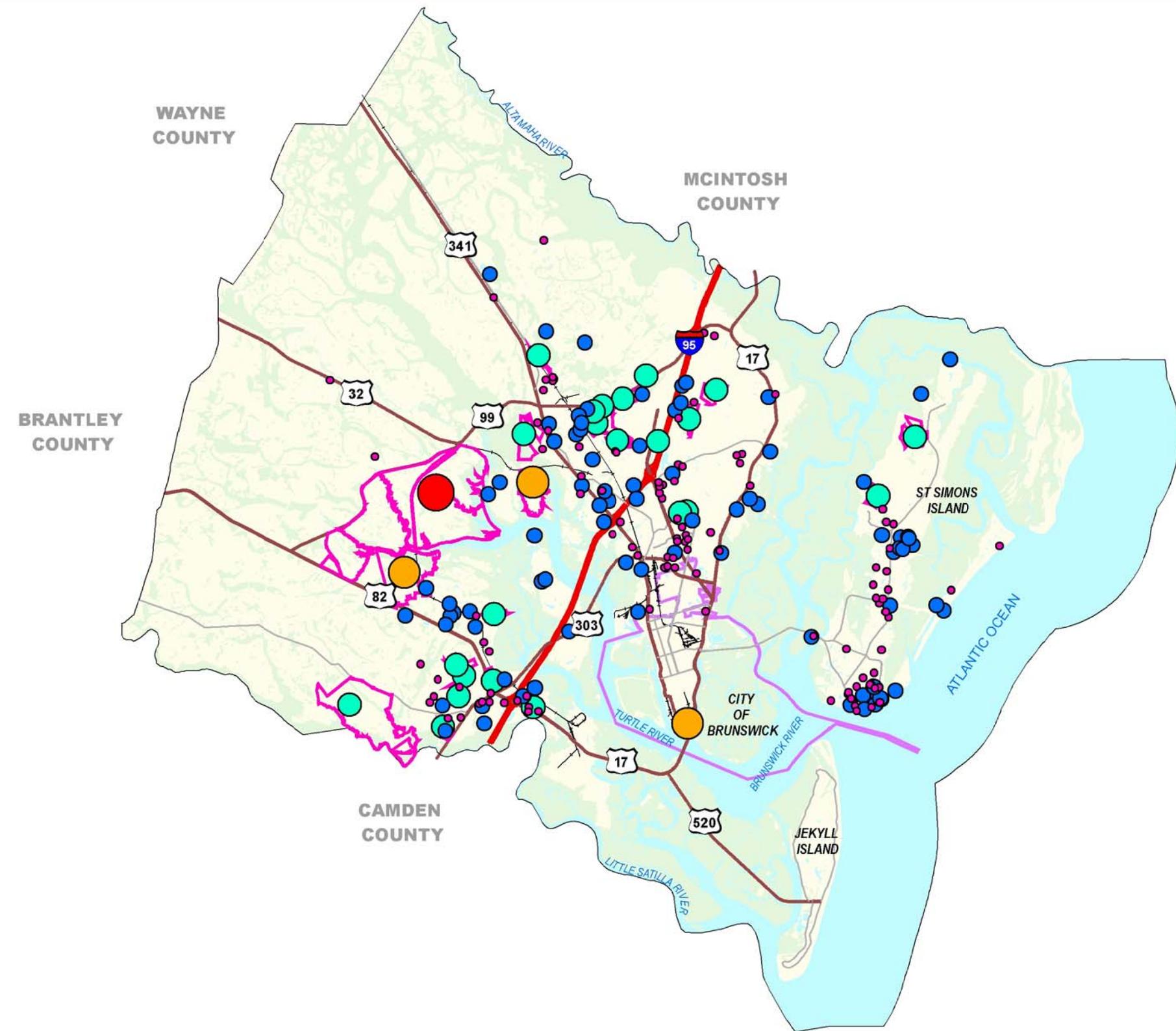
Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY PUBLIC SAFETY

Legend

Public Safety

- H Hospital
- ◆ Fire Stations
- ◆ GA Forestry Commission
- ★ Police Stations
- ★ Georgia State Patrol
- ★ Sheriff's Office/Jail

Major Roads

- Interstate
- Highways
- Arterial
- Railroads

- Glynn County
- Brunswick Boundary

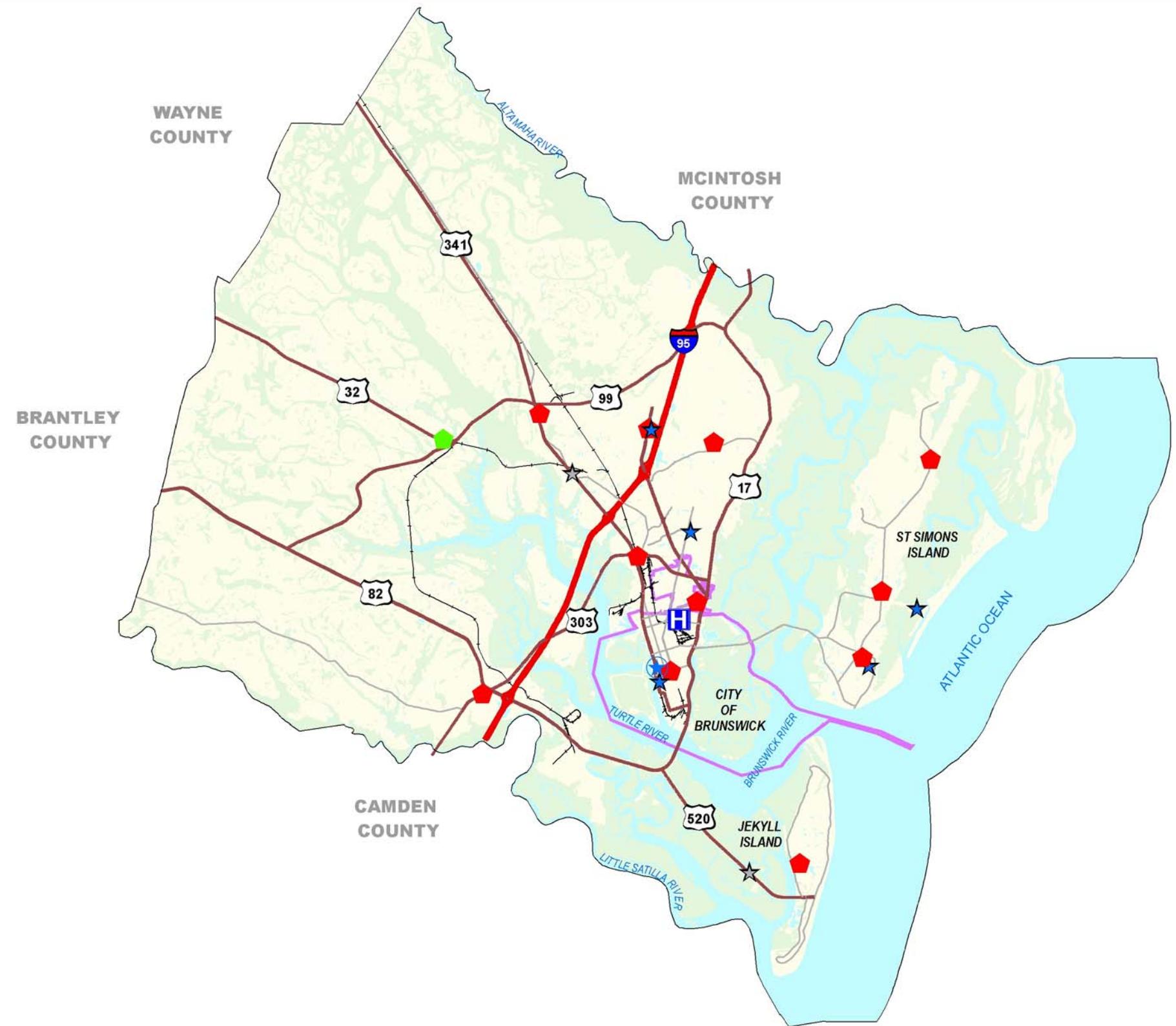
Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY SOILS

Legend

Soil Types

- Albany Fine Sand
- Bohicket-Capers
- Beaches
- Bladen Loam
- Brookman Clay Loam
- Cainhoe Fine Sand
- Fripp-Duckston
- Kingsland Mucky Peat
- Mandarin Fine Sand
- Mandarin-Urban
- Meggett Fine Sandy Loam
- Meggett Loam
- Olustee Sand
- Pelham
- Pottsbury Sand
- Rains Fine Sandy Loam
- Rutledge Fine Sand
- Sapelo Fine Sand
- Satilla Loam

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County
- Brunswick Boundary

Hydrography

- Water



DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



GLYNN COUNTY WATER SUPPLY FACILITIES AND SEWER TREATMENT FACILITIES

Legend

- WTP** Water Treatment Plant
- Water Main
- WWTP** Waste Water Treatment Plant
- Gravity Mains
- Forced Mains

*Water Mains for the City of Brunswick are not available at this time.

Major Roads

- Interstate
- Highways
- Arterial

Railroads

- Glynn County

- Brunswick Boundary

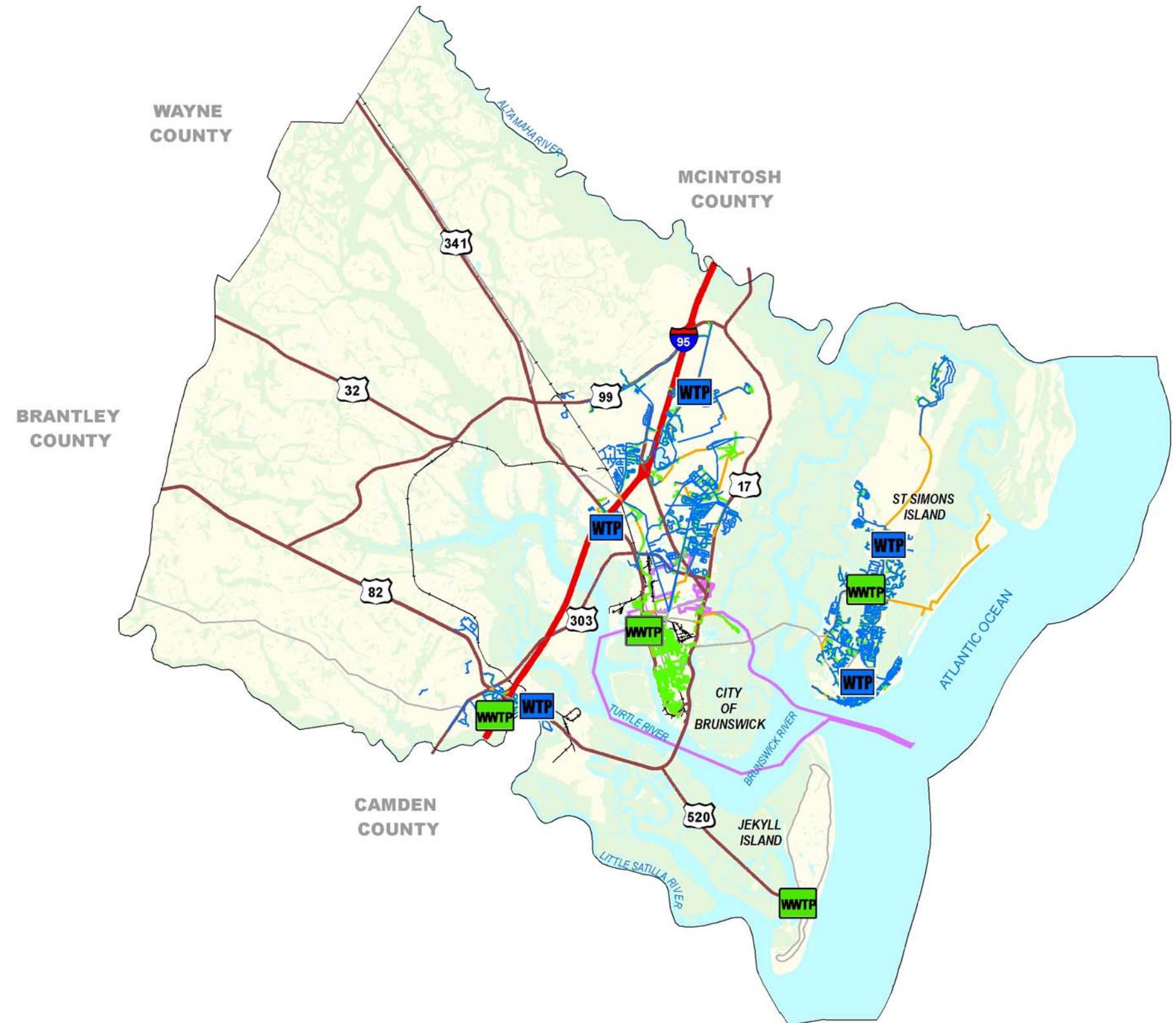
Hydrography

- Upland
- Marsh
- Water



0.4 0.9 1.8 2.7 3.6 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.



F.I.R.M. data based on latest
DFIRM information as of September,
2006.



GLYNN COUNTY WETLANDS AND SPECIAL FLOOD HAZARD AREAS

LEGEND

- Wetlands
- Special Flood Hazard Areas
- FIRM Zones A, AE & VE
- Major Roads
 - Interstate
 - Highways
 - Arterial
 - Railroads
- Glynn County
- Brunswick Boundary
- Hydrography
 - Upland
 - Marsh
 - Water

OCT 2006

0 0.5 1 2 3 4 Miles

DISCLAIMER: This map has been prepared to facilitate public access to information. Data shown is for planning purposes only and its accuracy is NOT warranted. EDAW and Glynn County, GA assume no liability for the quality, content, accuracy, completeness of the information and other items contained in this map. It is advised that you independently verify important information before use.