
PART III LOCAL MAJOR ISSUE ANALYSIS

EGANS CREEK GREENWAY TRAILS



Summary

Part III presents an evaluation of the four (4) identified major issues as identified by the City through interdepartmental staff review, a series of public meetings, a visioning workshop and through and a formal scoping hearing where regional and state agencies provided input. These issues were agreed upon through a Letter of Understanding with DCA. Each issue is addressed separately and includes analysis and recommendations to address each issue.

In many cases, the recommendations are broad in scope however, these issues are complex. While the EAR attempts to define and analyze problems to the highest degree possible, the creation of specific actions and policies will require the time and energy of many diverse interests during the EAR-based amendment process which will follow the adoption and transmittal of this report.

ISSUE 1: NEIGHBORHOOD PRESERVATION**Overview**

The City of Fernandina Beach has two National Register-listed Historic Districts, the Downtown Historic District and the Old Town Historic District, which reflect two significant periods in the City's history. Additionally, the City's Community Redevelopment Area (CRA) along the Amelia River reflects the working waterfront history of the City. While these three areas are protected through overlay designations requiring compliance with special regulations and design guidelines, other historic and culturally distinctive neighborhoods built prior to the establishment of a Land Development Code (LDC) contain historic structures adjacent to the Downtown Historic District but not in the District, are not currently protected. The current LDC contains site design criteria that may in fact lead an existing structure be substantially changed or demolished in order to comply. The existing Comprehensive Plan (Plan) and LDC do not address the needs of these other non-designated, but unique neighborhoods.

These neighborhoods represent building trends from the early twentieth century to the present day. For the most part, these neighborhoods were built out between the 1930's through the 1970's. Over time, American housing has undergone a major change from smaller homes to larger homes; since the 1950's, the average American house size has increased by 138%. Homes in 1950 had an average of 1000 square feet versus 2434 square feet in 2006.¹ The homes in many neighborhoods of Fernandina Beach have less square footage than the typical new home being constructed today. In addition to incompatible or inadequate LDC policies regarding these neighborhoods, they are also subject to development pressure in the form of teardowns. Teardowns can be entire structural demolition with replacement of a new structure, or major reconstruction or renovation that renders the original structure virtually destroyed.

There are economic benefits to new construction for a community's economy, including job creation and increased tax revenue. However, there are also negative impacts of the teardown phenomenon. Balancing these benefits and impacts is important. Where teardowns occur, property values in a neighborhood may change to the point that the neighborhood is no longer affordable for its original residents. The community's character and appearance may be radically altered so that it is no longer recognizable, and non-designated but historic structures may be lost. Quality of life can be diminished when mature trees and landscaping are destroyed, larger homes affect smaller neighboring homes access to light and sense of privacy, and neighborhood stability diminishes.

From a sustainability perspective, teardowns contribute to additional construction waste and energy production. Although newly constructed homes may have increased energy efficiency, the process of demolition and new construction involves losing the embodied energy of the existing structure and utilizing new energy to demolish, haul debris, and construct anew. Embodied energy is the total energy consumed in the extraction and manufacture of raw materials, and construction materials have varying rates of embodied energy.² Demolishing a structure represents a loss of the energy expended to construct the home originally, and new construction increases new energy expended. As for waste generation, according to the Environmental Protection Agency, approximately 60% of total non-industrial waste generated in the United States is construction and demolition debris; of that, 48% is demolition-related.³ Of construction waste alone, approximately 92% is demolition-related.⁴

Establishing policies to protect these neighborhoods has been identified as a major issue in part to protect the community's character and encourage preservation of these neighborhoods, but also in part to

¹ National Trust for Historic Preservation, *Managing Teardowns: Preserving Community Character and Livability*, <http://www.preservationnation.org/issues/teardowns> (last visited July 20, 2009).

² CHARLES KIBERT, *SUSTAINABLE CONSTRUCTION 44* (John Wiley & Sons, Inc.) (2005).

³ Environmental Protection Agency, *Buildings and the Environment: A Statistical Study*, <http://www.epa.gov/greenbuilding/pubs/gbstats.pdf> (last visited July 20, 2009).

⁴ CHARLES KIBERT, *SUSTAINABLE CONSTRUCTION 56* (John Wiley & Sons, Inc.) (2005).

generate interest in reinvesting in these neighborhoods. Policies acknowledging the character of these neighborhoods will demonstrate City support for revitalization and provide clear direction to those interested in investing in these neighborhoods as to appropriate development. In addition to preventing teardowns, neighborhood preservation has numerous benefits including:

- Increasing neighborhood involvement
- Encouraging maintenance of homes
- Flexibility in protecting future historic homes
- Stabilizing property values
- Encouraging orderly and efficient growth
- Demonstrating sustainability
- Improving quality of life
- Highlighting culture, history and architecture
- Ensuring compatible redevelopment
- Retaining affordable housing
- Strengthening civic pride
- Maintaining existing socioeconomic balance

Issue Analysis

In order to address neighborhood preservation in Fernandina Beach, specific neighborhoods must first be appropriately identified. Currently, the City is not broken into sections or neighborhoods for planning purposes, absent the historic district and CRA overlays. Breaking the entire city into planning subsections will help identify neighborhoods at risk and acknowledge that not all areas and neighborhoods in the City can be treated identically. This will also allow planning staff to work with the community on a more manageable scale. Neighborhood plans could be created for each planning subsection with the input and assistance of community members in that area. These neighborhoods would reflect each neighborhood's desires and vision towards future development.

In reviewing any neighborhood preservation strategies, the City must be sensitive of the impacts of any potential regulation on private property rights. Research regarding the legality and enforceability of certain regulatory tools such as overlays, demolition delays or moratoriums, and new zoning requirements must be conducted. The City shall balance protection of private property rights with any new strategies introduced to preserve neighborhoods.

Strict conformance to current LDC regulations can result in substantial change to the existing character of a structure, encourage demolition, or prevent currently non-conforming structures from retaining or expanding their non-conformities. These regulations must be identified and revised to reflect different neighborhood attributes. For example, current zoning regulations that require twenty-five foot front yard setbacks in residential zoned neighborhoods are not necessarily appropriate in neighborhoods built during the 1930s and 1940s that have smaller front yards. Any change a homeowner wishes to create that would violate that setback are deemed to be increasing the "non-conformity" and not allowable absent a variance. This zoning regulation does not adequately take into account the unique development pattern of this neighborhood, and demonstrates only one example of a current regulation that creates a burden on a property owner should they wish to make any changes to their home. To fully comply with all current zoning, it may be easier for a property owner or developer to demolish the structure and start anew under existing codes.

To address the City's teardown status, data illustrating the number of teardowns by neighborhood and what structures, if any, went up as replacement structures must be ascertained. Several strategies exist for determining this information. One, demolition data can be pulled from the City building permit database and a manual check can be performed to determine what was demolished and what new construction has taken place. Alternatively, by looking for a gap between neighborhood house sizes and zoning district regulations utilizing a comparison of average house size and footprint with the building pad defined by setbacks, potential for teardowns can be determined. On small lots, teardowns or major reconstruction are likely on lots where the house footprint is less than 60% of the building pad.⁵ Lastly, a "net replacement

⁵ Lane Kendig, Out With the Old, in With the New: The Cost of Teardowns, American Planning & Zoning Association Practice 6.05, at 3.

method” can be determined based on housing statistics. For example, if statistics list 10000 housing units in an area for 1990 and 10500 for 2000, there was an increase of 500 housing units for that time period. If statistics indicate that 800 houses were constructed, roughly 300 must have replaced existing units.⁶ Additional strategies may exist and should be explored. Based on data discovered, neighborhoods in Fernandina Beach that are at particular risk should be specifically identified.

For those neighborhoods that are identified as “at risk” of extensive teardowns resulting in loss of community character, strategies to protect these areas must be included in the neighborhood plans and Land Development Code. Before establishing any strategies, it is important to identify what elements of the neighborhood contribute to its community character. Examples of these elements include:

- Land Use
- Height/Stories
- Setbacks
- Density
- Building materials
- Garage entrance locations
- Porch enclosures
- Fences + walls
- Scale
- Floor Area Ratio
- Lot coverage
- Street patterns + widths
- Accessory structures
- Architectural style
- Spatial relationships
- Sidewalks + landscaping
- Massing
- Roof line + pitch
- Lot size + width
- Elevation features
- Parking + driveways
- Doors + windows
- Building orientation
- Trees + shrubbery

Identified neighborhoods may not have all of the above elements, but instead may be identified by a few elements that act as defining characteristics of that neighborhood and its development pattern. Strategies to protect these elements of community character include, but are not limited to: form-based zoning; infill development/construction ordinances; neighborhood conservation district overlays; zoning requirements, development standards, and/or design guidelines; demolition delays or review of demolition applications; incentive-based development strategies; and emergency temporary moratoriums on development if the pace of teardowns precedes establishment of protective ordinances. The City should evaluate the effectiveness of these strategies in accomplishing desired goals within identified neighborhoods. In considering new policies for neighborhoods, it is especially important to involve the citizens of the neighborhood to establish what they feel contributes to their neighborhood’s character and how they feel their community is best protected. Equally as important is the need to find a balance between preservation measures or strategies while protecting private property rights.

Neighborhoods identified as “at-risk” for teardowns may be comprised of historic structures. Under National Register evaluation criteria, structures over fifty years old are eligible for listing, and structures less than fifty years old are eligible if they meet special criteria demonstrating exceptional significance. Several neighborhoods in Fernandina Beach were built out over fifty years ago and could potentially be eligible for historic district status. In order to best determine eligibility, the City should enlist a historic preservation consultant to conduct a reconnaissance-level architectural survey of the city limits to provide a professional opinion as to the potential for future historic districts. The City should also investigate recommendations from the 2007 historic structure resurvey of the Downtown Historic District that neighborhoods adjacent to the Downtown Historic District be protected as neighborhood conservation districts. Creating strategies for protecting the character of structures adjacent to the Downtown Historic District boundaries is necessary to ensure compatibility of development given that the boundaries of the Historic District are very irregular and it is not uncommon for properties that are not in the Historic District to be surrounded by properties that are in the Historic District.

⁶ Daniel McMillan, Teardowns: Costs, Benefits, and Public Policy, LAND LINES, July 2006, <http://www.lincolninst.edu/pubs/PubDetail.aspx?pubid=1138> (last visited July 20, 2009).

Additionally, protection for the existing Historic Districts could be enhanced by adding a Historic Preservation element to the Plan. Currently, historic preservation and cultural resource protection are not adequately addressed in the Plan. The Historic Districts in Fernandina Beach are a significant source of economic revenue in the form of heritage tourism, and contribute to the community's quality of life. These unique resources should be addressed independently in the Plan.

One element of neighborhood character also deserves individual attention. Trees are generally a common element of neighborhood character, and are particularly prevalent in neighborhoods throughout Fernandina Beach. The City is currently having a Master Survey created of existing trees in City right-of-ways and recreational areas in order to better understand the existing tree inventory, and also has a tree preservation ordinance in the LDC in order to ensure protection of trees on private property. In essence, this ordinance is designed to function as a "no net loss" policy and requires replacement when trees are removed. As written, however, the ordinance only requires replacement in inches, so that a mature tree could be replaced as several new smaller trees in order to meet the replacement inches requirement. As part of neighborhood preservation, the City should explore revisions to this ordinance that protect the existing tree canopy, or mature trees. This is relevant to neighborhood preservation where teardowns could also result in loss of mature trees on the property, as the ordinance allows removal of mature trees that are within the building footprint of the new structure. Policies to protect the canopy could alleviate the loss of these trees and better protect the existing neighborhood character.

Recommendations

- Evaluate benefits of new construction versus detrimental impacts of teardowns;
- Establish neighborhood planning sections in acknowledgement that different areas of the city have different planning issues;
- Assess the need for any special taxing districts to provide infrastructure improvements in areas of need;
- Evaluate impact of potential preservation mechanisms on private property rights;
- Create neighborhood planning element of the Plan directing a neighborhood plan be created for each neighborhood planning section;
- Ensure visioning and public participation for creation of neighborhood plans;
- Define and identify "at risk" neighborhoods;
- Revisit existing zoning requirements that would prevent a neighborhood from retaining their scale, massing, height, area, setbacks, and other elements that contribute to neighborhood character;
- Explore creation of regulations that would foster maintenance of existing homes, allow for reasonable expansion, and retain elements of community character, but prevent teardowns. Such regulations should utilize diagrams and visual representations demonstrating existing community elements;
- Incorporate sustainability policies into neighborhood planning policies;
- Complete reconnaissance-level architectural survey of remainder of city limits;
- Identify strategies for properties that are adjacent to Downtown Historic District boundaries;
- Create a Historic Preservation Element in the Plan; and
- Incorporate existing canopy protection into tree preservation ordinance.

ISSUE 2: SUSTAINABILITY**Overview**

In evaluating existing and future long-range planning goals, the City acknowledges the essential role sustainable development plays in protecting the health of both the environment and the community. As a local government, the City has the ability to impact the global community, as it is increasingly recognized that sustainability must be integrated at the local level in order to achieve sustainability globally. Currently, the City's Plan does not address sustainability and sustainable practices. The City recognizes the need to address community planning from a perspective that takes into account environmental, economic, and social sustainability.

While numerous definitions and interpretations of sustainability exist, the general precepts involve ensuring resources are available for future generations and protecting natural resources, social equity, and the economy for present generations. The most commonly accepted definition of sustainable development is from the World Commission on Environment and Development Report (1987), which states that sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."⁷ In the United States, under Executive Order 13423 (2007), President George Bush defined sustainable as meaning "to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans."⁸

Employing sustainable practices is relevant given examples of increasing planetary stress on natural resources and the global population. Carrying capacity, which refers to the maximum point at which the Earth is able to support natural resource consumption, is already estimated to have been exceeded by 20%.⁹ Awareness of the effects of climate change continues to grow, as more scientific data regarding the melting of ice caps, sea-level rise, and hazardous or unusual weather patterns is gathered. The incompatible situation of increased energy consumption and decreasing finite resources has made pursuing alternative energy strategies a necessity. Increased population, dwindling or changing biodiversity, and changes in global economies also are contributing to a need for a shift in the status quo.

Economically, there is a tremendous benefit to natural resource protection. Ecosystem services, which are the value of environmental functions translated economically, are estimated to equate to approximately \$33 trillion dollars.¹⁰ Examples of ecosystem services include air quality enhancement, filtering and recharging groundwater, plant pollination, renewable energy resources, recreational tourism, grazing lands, noise barriers, natural fires, and carbon, energy and water storage.¹¹ Sustainability policies will ensure these valuable functions are available in the future.

Various concepts and strategies have been developed to address sustainability. Concepts such as carrying capacity, ecological footprint, ecological rucksack, eco-efficiency, embodied energy, and the precautionary principle all help understand the underlying principles critical to understanding the necessity of sustainable strategies:¹²

⁷ WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE: THE BRUNTLAND REPORT. (Oxford University Press) (1987).

⁸ Exec. Order 13,423, 72 Fed. Reg. 3919 (2007).

⁹ MARK ROSELAND, TOWARD SUSTAINABLE COMMUNITIES: RESOURCES FOR CITIZENS AND THEIR GOVERNMENTS 7 (New Society Publishers) (2005).

¹⁰ MARK ROSELAND, TOWARD SUSTAINABLE COMMUNITIES: RESOURCES FOR CITIZENS AND THEIR GOVERNMENTS 7 (New Society Publishers) (2005).

¹¹ CHARLES KIBERT, RESHAPING THE BUILT ENVIRONMENT: ECOLOGY, ETHICS, AND ECONOMICS 15 (Charles Kibert ed., Island Press)(1999).

¹² CHARLES KIBERT, SUSTAINABLE CONSTRUCTION: GREEN BUILDING DESIGN AND DELIVERY 39, 41, 44 (John Wiley and Sons, Inc.) (2005).

Table III-1 Sustainability Concepts

Concept	Principle
Carrying Capacity	Maximum point at which the Earth is able to support resource consumption
Ecological Footprint	Total land area needed to support a certain population or activity
Ecological Rucksack	Quantifiable mass of materials that must be moved in order to extract a specific resource
Eco-Efficiency	Consideration of environmental impacts and costs as a factor in calculating business efficiency
Embodied Energy	Total energy consumed in acquisition and processing of raw materials
Precautionary Principle	Erring on the side of caution when making decisions affecting nature, ecosystems, and biological systems even when cause and effect relationships are not fully scientifically established

The following are examples of strategies created to address sustainability that can be universally applied:¹³

Table III-2 Strategies for Sustainability

Strategy	Description
Natural Step	Details basic principles that should be adhered to in order to reduce the effects of resource extraction and production
Cradle to Cradle Certification	Certifies products with environmentally-intelligent design that emphasizes material reuse
End of Life Directives	Mandates that manufacturers accept the return of products at no charge at end of products life, which encourages recycling in the manufacturing process
Factor 4	Encourages reducing resource consumption to ¼ of current levels to achieve sustainability
Factor 10	Encourages reducing resource consumption by factor of 10 to achieve long term sustainability
Green Building Rating Systems	Establish criteria to improve health and environmental impact of structures
Life-Cycle Assessments	Determines the environmental and resource impacts of materials and products over products entire life

Sustainability is being integrated at all levels. On a global level, programs such as the International Organization for Standardization 14000 (ISO 14000) Series detail performance and auditing methods for commercial entities in the area of Environmental Management Systems, and the Social Accountability Standard 8000 (SA 8000) provides a verification system for the ethical production of goods.¹⁴ In the United States, environmental laws such as the Clean Water Act, the Clean Air Act, and the National

¹³ CHARLES KIBERT, RESHAPING THE BUILT ENVIRONMENT: ECOLOGY, ETHICS, AND ECONOMICS 20 (Charles Kibert ed., Island Press)(1999). Cradle to Cradle Certification, <http://www.c2ccertified.com/> (last visited July 29, 2009). CHARLES KIBERT, SUSTAINABLE CONSTRUCTION: GREEN BUILDING DESIGN AND DELIVERY 32, 43, 46 (John Wiley and Sons, Inc.) (2005).

¹⁴ CHARLES KIBERT, RESHAPING THE BUILT ENVIRONMENT: ECOLOGY, ETHICS, AND ECONOMICS 20, 23 (Charles Kibert ed., Island Press)(1999).

Environmental Policy Act are in place to ensure natural resource protection. Additionally, however, the federal government has begun to recognize the need to integrate sustainable practices into governmental operations. Executive Order 13423, in addition to defining “sustainable,” also mandated federal agencies to address sustainable design and high performance buildings, fleet management, recycling, green purchasing and procurement, solid waste management, pollution prevention, electronics stewardship, and energy and water management.¹⁵ At the state level, Florida also has environmental protection laws, but recent legislation recognizing the need for sustainability has introduced more stringent energy requirements for buildings, required sustainable construction for public projects, and established “green government” grant opportunities.¹⁶ While the City follows mandatory state legislation, the City would like to establish its own policies.

Rethinking traditional planning and development strategies in the United States is especially important relative to the global community. It would take approximately five planet Earths to support life if everyone in the world lived the lifestyle of North Americans.¹⁷ Another method of examining the impact a particular society has on planetary systems is through determining ecological footprints. An ecological footprint refers to the total land area needed to support a certain population or activity, and is another measure for evaluating resource consumption.¹⁸ North Americans have two times the ecological footprint of Europeans, and seven times the average ecological footprint of Asians and Africans.¹⁹

In order to restore balance, Americans must rethink traditional planning and development. Communities across the country, such as Portland, New York City, and Minneapolis, are beginning to incorporate sustainability into their comprehensive plans. Greensburg, Kansas, devastated by a tornado, has elected to rebuild their town as an entirely sustainable community, and their comprehensive plan provides a model approach to integrating these practices. Local issues facing Fernandina Beach dictate incorporating sustainability into City planning efforts. Due to the City’s location on a barrier island, potential sea level rise as a result of climate change could impact the community. Predicted increases in hurricane activity, also due to climate change, makes disaster preparedness and sustainable redevelopment a necessity. The City is home to unique natural and cultural resources that warrant continued protection. Continued population increases, both seasonally and permanently, will require revisiting existing development patterns and transportation management in relation to energy efficiency. Through the comprehensive plan, the City will follow models of global, national, and state concepts and strategies and incorporate sustainable policies in an effort to reduce its impacts.

Issue Analysis

In integrating sustainability into the City’s Comprehensive Plan (Plan), the City must first identify a working definition of sustainability from which to operate and include this definition in the Plan. This definition should include the general precepts of sustainability which include addressing the environment, economy, and equity, while taking into account the effect of the present generation’s activities on future populations. After a working definition of sustainability is identified, specific categories should be created for the comprehensive plan in order to work towards creating quantifiable goals. Toward Sustainable Communities indicates that these “building blocks” can provide guidance for where best to integrate sustainability into a community.²⁰

¹⁵ Exec. Order 13,423, 72 Fed. Reg. 3919 (2007).

¹⁶ H.R. 697, Reg. Sess. (Fla. 2008); H.R. 7135 (Fla. 2008).

¹⁷ CHARLES KIBERT, SUSTAINABLE CONSTRUCTION: GREEN BUILDING DESIGN AND DELIVERY 39 (John Wiley and Sons, Inc.) (2005).

¹⁸ CHARLES KIBERT, SUSTAINABLE CONSTRUCTION: GREEN BUILDING DESIGN AND DELIVERY 38 (John Wiley and Sons, Inc.) (2005).

¹⁹ MARK ROSELAND, TOWARD SUSTAINABLE COMMUNITIES: RESOURCES FOR CITIZENS AND THEIR GOVERNMENTS 3 (New Society Publishers) (2005).

²⁰ MARK ROSELAND, TOWARD SUSTAINABLE COMMUNITIES: RESOURCES FOR CITIZENS AND THEIR GOVERNMENTS 43 (New Society Publishers) (2005).

- Greening the City
- Water + Sewage
- Waste Reduction + Recycling
- Energy Efficiency + Renewables
- Atmospheric Change + Air Quality
- Transportation Planning + Traffic Management
- Land Use + Urban Form
- Housing + Community Development
- Community Economic Development

Additional building blocks to consider addressing in the City’s comprehensive plan include:

- Natural Resource Preservation
- Cultural Resource Preservation
- Community Health + Safety
- Disaster Preparedness + Resiliency

While the above categories individually provide a useful framework for targeting areas in which to address City sustainability, it is important to recognize that the categories are often inter-linked. For example, including increased pedestrian and bicycle facilities would address at the minimum Transportation Planning + Traffic Management, Energy Efficiency + Renewables, Land Use + Urban Form, and Community Health + Safety. This interconnectivity among categories illustrates the importance of comprehensive planning, and that one element or category cannot be considered in a vacuum. When drafting policies, the City must take into account the effect of policies on other elements, demonstrated Figure III-1:

Figure III-1 Interconnectivity of Sustainability Categories



Additionally, in evaluating the comprehensive nature of sustainability and its relation to all elements of the Plan, the City will conduct the Element Review portion of the EAR from a sustainability perspective, and evaluate each policy for how it does or does not currently contribute towards sustainability goals. Evaluation of each Plan element from this perspective draws attention to sustainability principles and practices that are not currently addressed anywhere in the existing comprehensive plan. This evaluation will lead to suggestions for how to incorporate these principles and practices into the plan through EAR-based amendments.

After evaluating existing comprehensive plan policies and prior to drafting EAR-based amendments, the City should collect data relating to the City and potential sustainability policies. This data should include ascertaining statistics related to solar insolation, temperature, wind speeds, moisture rates, humidity levels, and ecosystems. This data will help position the City to draft more effective policies, particularly as related to energy efficiency and renewables, water and sewage, and natural resource protection.

Conducting a City-wide site inventory and analysis would also be beneficial. This analysis, modeled on the Greensburg, Kansas plan, evaluates incorrect uses of land and the most sustainable uses for land. Similarly, the Environmental Protection Agency's (EPA) Green Communities program also recommends conducting community assessments and trends analysis prior to creation of a plan. Examples of site analysis include avoiding development in regularly flooding areas and locating wildlife habitat areas in areas conducive to supporting that wildlife. It is a common-sense approach to development that should be conducted early in the EAR-based amendment process. Lastly, the City should determine its carbon footprint and calculate local greenhouse gas emission rates. These statistics will assist in formulating quantifiable reductions.

As part of the EAR-based amendment process, the existing Plan will likely need significant updating in order to adequately integrate sustainability policies. The City should utilize, where appropriate, identified sustainability concepts and strategies to support development of new goals, objectives, and policies within the Plan. Citizen input is also essential. The City must solicit community participation while drafting Plan policies regarding sustainability goals, and these policies should reflect the goals of the community. The EPA's Green Communities strategy provides a useful framework for involving the community in the planning process.

Community involvement, along with staff input, will assist in establishing priorities for sustainable practices within the community and identifying whether new plan elements are needed to address particular sustainable practices. Potential strategies for integrating sustainability into the City include, but are not limited to:

- Establish land use policies to address sprawl, increase energy efficiency, and reduce automobile usage;
- Explore low-impact development and sustainable construction policies;
- Create a waste management plan integrating recycling and reuse;
- Conduct pedestrian and bicycle needs assessment;
- Create transportation management plan incorporating various mobility types;
- Explore green local government designation and green operational standards;
- Evaluate residential intensification/density increases;
- Implement healthy/livable communities initiatives;
- Identify alternative energy opportunities;
- Establish sustainable economic initiatives, such as sustainable tourism and small business incubators;
- Increase water-efficient use strategies;
- Implement energy efficiency strategies;
- Plan for disaster preparedness and sustainable redevelopment;

- Identify priority land areas for conservation; and
- Address climate change effects such as sea-level rise.

Identified policies for inclusion in the plan may direct a variety of policy strategies such as regulations, future planning activities, voluntary programs, financial incentives, or expenditures. Where appropriate, policies included in comprehensive plan updates should include quantifiable goals in order to provide a tangible measure of their effectiveness. Additionally, the City should identify grant opportunities for implementation of community sustainability initiatives. Lastly, where feasible, the City should attempt to estimate costs of implementing sustainability initiatives and evaluate potential obstacles in applying sustainability practices.

Recommendations

- Evaluate existing Plan objectives and policies from sustainability perspective- (EAR Part IV);
- Collect City data needed to adequately draft sustainability objectives and policies;
- Update existing Plan to be written from sustainability perspective, and identify whether new Plan policies are needed to address particular sustainable strategies;
- Include the community in identifying and evaluating sustainability goals for inclusion in the Plan;
- Ensure sustainability policies are drafted to achieve quantifiable sustainability goals;
- Identify grant opportunities for implementing community sustainability initiatives;
- Estimate costs of implementing sustainability initiatives where feasible; and
- Evaluate obstacles to applying sustainability practices individually.



ISSUE 3: ANNEXATION PLAN BACKGROUND**Overview**

The basis for the addition of a goal to formulate a logical annexation plan within the Plan is best visualized by looking at the current City limits and potential future limits. Annexations have historically occurred through voluntary water and sewer agreements. Water and sewer lines are extended to unincorporated properties on the island when owners enter into such agreements consenting to annexation once the subject property becomes contiguous with the current city limits. The inclusion of an annexation plan will provide policies and objectives that identify unincorporated properties where voluntary water and sewer annexation agreements have been signed so the City can proceed with annexation of these properties once contiguous; identify and eliminate enclaves; identify and map the City's current water and sewer lines; consider the extension of City water and sewer lines; and provide direction to develop an education and incentive plan to encourage voluntary annexation. The annexation plan should direct a five (5) and ten (10) year annexation strategy to annex unincorporated properties, identify logical service delivery areas in the form of an Urban Services Boundary and ensure that the properties seeking utilities services are developed consistent with the City's policies and objectives.

Historically, annexation within the City has been initiated through voluntary annexation agreements when a property owner approaches the City to obtain water and sewer services. When the property is "contiguous" as defined by F.S. 171.031(11), then the voluntary annexation process will take place prior to extension of public facilities. Otherwise, the property owner is required to sign a voluntary annexation agreement that follows the property itself and states that annexation procedures will be initiated at a time when the property becomes contiguous to the municipal limits. This pattern of annexation has resulted in an illogical municipal boundary and has created a "doughnut hole" effect in the middle of the urbanized area. Navigating city/ county lines has made it increasingly difficult for Code Enforcement, Emergency and Public Safety Services to determine jurisdictional boundaries and responsibilities, affecting the delivery of services within both the City and County.

There have been two island wide annexation attempts within the City. The first attempt was initiated in the late 80's through the formation of a committee known as the "Island Annexation Committee." The committee prepared an economic/ taxation impact analysis report and presented it to the City Commission in June 1987. Their final recommendations included both long and short term policy strategies suggesting that voluntary annexation of selected areas be pursued until such time that the City can provide public utilities in a manner that would offset higher ad valorem tax increase to County residents. On June 7, 1988, the City Commission accepted the committee's report and voted to place an island-wide annexation referendum on the 1990 ballot.

In 1995, the City Commission passed Resolution 95-45 which provided for annexation to be placed on the November 1996 ballot. The following February, a task force was created by ordinance 96-24 to be a fact finding group. The ordinance established that the overall goal was to make a determination concerning the proposal for island-wide annexation. This group was known as the "Island Incorporation Task Force," at its first meeting in February 1996, the task force created four subcommittees: an Economic Subcommittee, a Political Subcommittee, an Infrastructure Subcommittee and a Public Information Subcommittee. These subcommittees met several months and developed preliminary reports on each of their areas. Additionally, City Staff worked to prepare an "Urban Services Plan" in preparation for a June Commission meeting. In August 1996, the City Commission adopted Ordinance 96-19 (annexing unincorporated middle territory of Amelia Island), Ordinance 96-20 (annexing unincorporated southern territory of Amelia Island) and Resolution 96-86 (adopting the Annexation Urban Services Plan)/ Resolution 96-120 (clarifying the Annexation Urban Services Plan). In November 1996, island wide annexation appeared on the ballot. The referendum was decisively defeated due to the increased tax millage rate that County residents would sustain.

More recently, the City considered an involuntary annexation of a piece of property near its southern most limits. In 2008, a group of condominium property owners approached the City requesting annexation of their property into the City. The primary intent of the property owners was to eliminate beach driving across their section of the beach, citing that it was in the best interest of beach goers and sea turtles. In Nassau County beach driving is permissible along portions of its shorelines; the City does not allow beach driving except for one specific location. The condominium was not contiguous with the City's existing boundary therefore, the annexation as requested would require that the properties in between be annexed as well. The Commission recognized the value in bringing in this development and requested that City Staff begin preparing the necessary documents for involuntary annexation. As public discussions concerning this annexation occurred at the City Commission level and as required materials were provided to Nassau County, the issue became politically charged. Affected property owners enlisted legal counsel, who questioned both the legitimacy of the City's proceedings as well as the intent of the annexation. Ultimately, the question of annexation became a question of beach driving, with the public focusing only on that aspect of the annexation. Before the City Commission had an opportunity to take any action on this annexation, the original applicants withdrew their request, recognizing the beach driving issue was an insurmountable political obstacle.

The City and its community are interested in formulating a logical plan for the extension of water and sewer services, identifying where extensions have already been completed and developing a comprehensive strategy for incorporating these properties. Additionally, there is concern about the character of development on properties where City services have been extended but are not within the jurisdictional boundaries for purposes of development review. Further, the community would like to see a plan in place that will provide the City with clearer goals for Capital Improvements Planning.

Issue Analysis

The appropriate place for Goals, Objectives and Policies relating to Annexation Strategies within the City's Comprehensive Plan (Plan) should be directed within its Future Land Use Element (FLUE), Public Facilities Element (PFE), Intergovernmental Coordination Element (ICE), and the Capital Improvements Element (CIE). A new objective and subsequent policies pertaining to annexation of land should be considered within the FLUE. Policy statements related to how a property owner can anticipate the assignment of a Future Land Use category and zoning designation should be included. The PFE should include a new objective to address the extension and timing of water and sewer services outside of the existing municipal limits. Lastly, the ICE should include a policy statement that directs an interlocal agreement with Nassau County for development review of all projects where City services have been extended but are not currently within the City limits. The ICE should also include a policy statement that suggests that the City and Nassau County enter into an inter-local service boundary agreement pursuant to Sections 171.20, et seq. Florida Statutes, in order to more efficiently and effectively provide services to properties on the island.

In order to fully develop a short-term and long-term annexation plan, the City must obtain a complete and functional data set of the locations of existing water and sewer lines both within the existing City Limits and where lines have been extended into the County. This data set is absolutely crucial in terms of mapping existing facilities, modeling the system's current functionality and providing a basis for capital improvement planning. In addition to mapping data, a complete database of all signed voluntary water/sewer agreements must be organized and maintained for purposes of developing a logical approach to bringing these properties into the City.

The City should consider developing a policy to upgrade and eliminate existing septic systems to ensure that wastewater is properly treated and not leached into the groundwater. In order to assess the feasibility of such a policy, the City will need to obtain records of all permitted septic systems within the existing

City limits and in the unincorporated County by obtaining records from the Nassau County Health Department. A policy of this nature would be in keeping with Florida law and with the City's extension of water and sewer services to effectively serve properties and protect the environment. At present, if sewer service is "available" as defined by Section 381.0065, Fla. Stats., a septic permit cannot be issued, and the property must connect to the sewer system. If no sewer system is available, septic permits can be issued. The City's Public Facilities Element policies 4.02.01 and 4.02.02 directs (in summary) that "on-site wastewater treatment systems shall be limited to areas currently using septic tanks...until such time as local service is made available to residents and requires that all new subdivisions connect to the central sewer system." These policies are further defined within the City's Land Development Code Sections 7.02.02 and 7.02.03. It is suggested that the City develop accurate datasets in order to target areas for central sewer connections.

In addition to reviewing where existing water and sewer lines have been extended, the City may consider an even more comprehensive approach to filling in the gaps rather than looking at annexations in a piecemeal fashion. A more comprehensive approach would be to consider an island-wide annexation referendum or the acquisition of strategic lands that create contiguity. Island-wide annexation on a large scale would require a majority of registered voters in the unincorporated areas of the island to consent to such an annexation followed by a majority vote at a referendum election.

Prior to a referendum on the ballot, the City would be required to follow all technical prerequisites of chapter 171, Florida Statutes, including providing a comprehensive ability to serve report to the County showing the City's ability to provide all municipal services throughout the proposed annexation area. Water and sewer services are just two of those municipal services. In order for the City to show it can provide such services, the City would work with the county in acquiring the county's water and sewer systems on the island. In addition, the County's water and sewer systems may require upgrading and expansion in order to service all of its customers.

The City may also consider upgrading its water and sewer treatment plants or acquiring or constructing new facilities to handle the increased capacity from added customers. Island-wide annexation would also require some expansion of other municipal services and infrastructure such as fire rescue, police, solid waste and recreation services and facilities. The City would include such expansion of services in its Capital Improvement Plan (CIP). The City would most likely have to borrow funds for such large-scale expansions with future ad valorem tax revenue pledged for repayment of these bonds. Due to the current condition of the local, state and national economies, a large-scale annexation approach may not be feasible for 3-5 years.

While developing and working toward the City's annexation goals, it is critical that the City involve and coordinate with the County. Establishing a relationship of mutual understanding about the City and County's expectations and goals will allow both jurisdictions to work in concert with their population and economic growth forecasts, developing future land use patterns, protecting and preserving natural resources and facilitating logical extensions of public facilities and services. Further, an agreed upon course of action and commitment to working together would afford both jurisdictions some alternative approaches to the large-scale annexation strategies as previously discussed, which so often can result in legal battles. Neither jurisdiction can afford to engage in lengthy legal battles every time an annexation is considered.

Currently, the County's Comprehensive Plan policy statements related to annexation are limited to one policy statement found within its Intergovernmental Coordination Element. Policy 8.04.03 directs that; "the County shall continue to coordinate with each municipality's annexation activities in accordance with established state laws and regulations." In the County's 2008 adopted EAR, this policy assessment recommended that improved coordination and record-keeping of annexations are required to meet the requirements of Chapter 171, F.S. and related the policy back to their major issue of "enhancing

intergovernmental coordination.” Through the County’s review of their identified major issue it was recommended that the County “explore the establishment of joint planning areas to address issues for future annexation areas between the County and its municipalities.”

Planning mechanisms such as Joint Planning Agreements (F.S. 163.3167), Interlocal Service Delivery Agreements (F.S. 171.203) or Municipal Incorporation Overlays (F.S. 163.3217) may be utilized in addition to or in coordination with any of the above strategies discussed. A joint planning agreement establishes an interlocal agreement between the City and County and directs that certain actions (as decided) will take place in the event of a possible voluntary and/or involuntary annexation situation. An interlocal service delivery agreement allows the governing body of a county and one or more municipalities within the county to enter into an interlocal service boundary agreement to address issues concerning delivery, fiscal responsibilities or boundary adjustment. Such an agreement between the City and County would provide a pre-established and schedule for annexation within the designated municipal service boundary consistent with FS 171.205.

Per F.S. 163.3217 a Municipal Incorporation Overlay can be established in order to assist in the planning for future municipal incorporation of a specific geographic area. This overlay would allow the County to adopt a municipal overlay as an amendment to its Comprehensive Plan and allow the County, in cooperation with the public, to address future municipal incorporations of specific areas and the impact of incorporation on the provision of public services. This approach requires that the County and the City authorize by resolution or local ordinance the development of a municipal overlay subject to FS 163.3217 (2)(b). The proposed overlay must be adopted as part of the County’s and City’s comprehensive Plan and must contain the following as required by statute:

- a. “Boundary options for the creation of the new municipality.
- b. A feasibility study as outlined in chapter 165.
- c. A map of existing and proposed land uses in the area by type and density.
- d. Population projections for the area.
- e. Data and analysis relating to the provision of public facilities for the area.
- f. Funding of the Municipal Overlay- The development of the municipal overlay must be funded by the county unless there is written agreement between the county and another entity to fund it.”

Regardless of the specific strategy or planning mechanism, the result should provide residents with predictable growth and land use patterns with financially feasible CIP’s for service delivery.

Recommendations

- Develop policy statements related to annexation planning within the Plan Elements: Future Land Use, Public Facilities, Capital Improvements Element and Intergovernmental Coordination;
- Direct completion of an accurate and functional data set of existing water and sewer facilities both in the City and service extensions, as well as County facilities (Amelia- Nassau Utilities);
- Create and maintain a database of all signed voluntary annexation agreements;
- Develop a dataset of all permitted septic tanks within the City;
- Consider strengthening existing policy statements to target and abolish septic tanks within the City;
- Create a policy directing that an updated economic and taxation assessment and functional capacity assessment for island-wide annexation be completed; and
- Evaluate the County’s and City’s Future Land Use Categories and Zoning Classifications to determine their appropriateness in unincorporated Amelia Island.0

ISSUE 4: WETLANDS REGULATION BACKGROUND**Overview**

Wetlands serve many valuable functions, including helping to regulate water levels in watersheds, providing erosion control, enhancing water quality, minimizing damage caused by floods and storms, and providing habitat for plants and animals. According to the St. John's River Water Management District (SJRWMD), wetlands once covered half of Florida, and more than fifty percent of those wetlands have been altered for agricultural, flood control or residential development purposes. As development pressure continues in the City of Fernandina Beach (City) and the unincorporated portions of Amelia Island, the protection of wetlands and other environmentally sensitive areas has become even more important.

In late 2007, the City faced a consistency challenge it was claimed that the Comprehensive Plan (Plan) and Land Development Code (LDC) were inconsistent regarding wetland protection policies. The dispute stemmed from the City's 2006 LDC update (Ordinance 2006-14) which made no allowance for wetland impacts. The challenge was filed by a property owner who intended to develop a hotel on a commercially zoned property located on Sadler Road. The subject property was nearly 70% wetlands. The owner was advised that a variance would be necessary to fill the wetlands but, rather than request a variance they filed a challenge which asserted:

1. that the definition of wetlands contained in the LDC is inconsistent with the Plan because the LDC exceeds the City's authority to regulate wetlands which are not included in the state definition of "wetlands;"
2. that the City's LDC wetland protection scheme is inconsistent with the Plan's wetland protection program; and
3. the LDC is inconsistent with the Future Land Use Map (FLUM) adopted as a component of the Plan.

The dispute claimed that the City's LDC Section 3.03.00 substantially affects a property owner's use of a particular property, prohibiting all economically viable uses of the property. The Department of Community Affairs (DCA) held an informal administrative review meeting on November 14th, 2007. In December, DCA issued a Consistency Determination finding that the City's definition of wetlands found in its LDC furthers the Plan's definition and is not in conflict. DCA also found that the City's LDC was consistent with its FLUM designations and that the protections further its Plan objective 5.12 and its subsections.

This consistency challenge furthered the community's awareness of the City's existing wetlands protection measures. During its Evaluation and Appraisal Report (EAR) major issue identification phase, both the community and planning staff encouraged additional review by designating wetlands regulation as a major issue. In the visioning exercise held in March 2008, the community strongly supported the identified issue and expressed an interest in seeing the City's Plan policies strengthened to further protect its wetland areas. Through the process of developing the EAR, the City intends to complete the following tasks: assess whether existing Plan policies preventing wetlands impacts should be amended, develop objectives and policies that will enable the City to better protect its wetlands, improve its identification of environmentally sensitive areas, and better educate the public about wetlands and other environmentally sensitive areas.

Future development pressures and a limited inventory of buildable land in the City could have impacts on wetlands areas. The Plan currently addresses the protection and preservation of wetlands in the Future Land Use Element, the Conservation and Coastal Management Element, the Recreation and Open Space Element, and the Intergovernmental Coordination Element. Through the EAR process, each of the objectives and policies pertaining to wetlands protection will be evaluated to determine whether wetlands in the City are adequately protected.

Issue Analysis

The Plan states that no development shall be permitted in wetlands and that the City shall protect wetlands from physical or hydrologic alterations. Language in the LDC enforces these policies, but property owners may apply for a variance to these requirements and may receive a variance which would allow alteration of, and permit development in wetlands. The Plan sets forth objectives and policies regarding the protection and regulation of wetlands, but it does not address mitigation of impacts other than to say that the impacts shall be mitigated according to the rules and regulations of the Florida Department of Environmental Protection (FDEP) and the St. Johns River Water Management District (SJRWMD). The SJRWMD and the FDEP jointly administer the Environmental Resource Permitting (ERP) program regulating activities that alter the landscape and disrupt water flow to wetlands and surface waters. Mitigation is typically encouraged to occur on-site or in close proximity to the impacted wetland; however, the mitigation of wetlands impacted within the City limits can be completed outside of the City limits, and may even occur in a different county. In the past five (5) years, the City has received four (4) applications requesting a variance to fill wetlands. Of these, two (2) were denied based on their natural function as a jurisdictional wetland and two (2) were approved because it was determined that they were isolated artificial wetlands that did not operate as part of an overall wetlands system.

Today, the City of Fernandina Beach contains a limited amount of vacant developable land, roughly 6% of its total land area. Of the remaining vacant developable lands, 444 acres contain wetlands and only 16 of these acres hold a Conservation land use category. With nearly 10% of the available vacant lands containing wetlands, it has become even more important that the City evaluate its wetland protection measures and decide if strengthened regulations are needed.

In previous decades the City has faced heightened development pressures. In order to protect its wetlands during this period of growth, the City implemented strategies that directed development away from its native wetland systems by purchasing its most environmentally sensitive properties. The community demonstrated its commitment in 2001 when it voted to support a bond referendum that included funding to finance purchases of environmentally sensitive properties along Egans Creek to create a greenway.

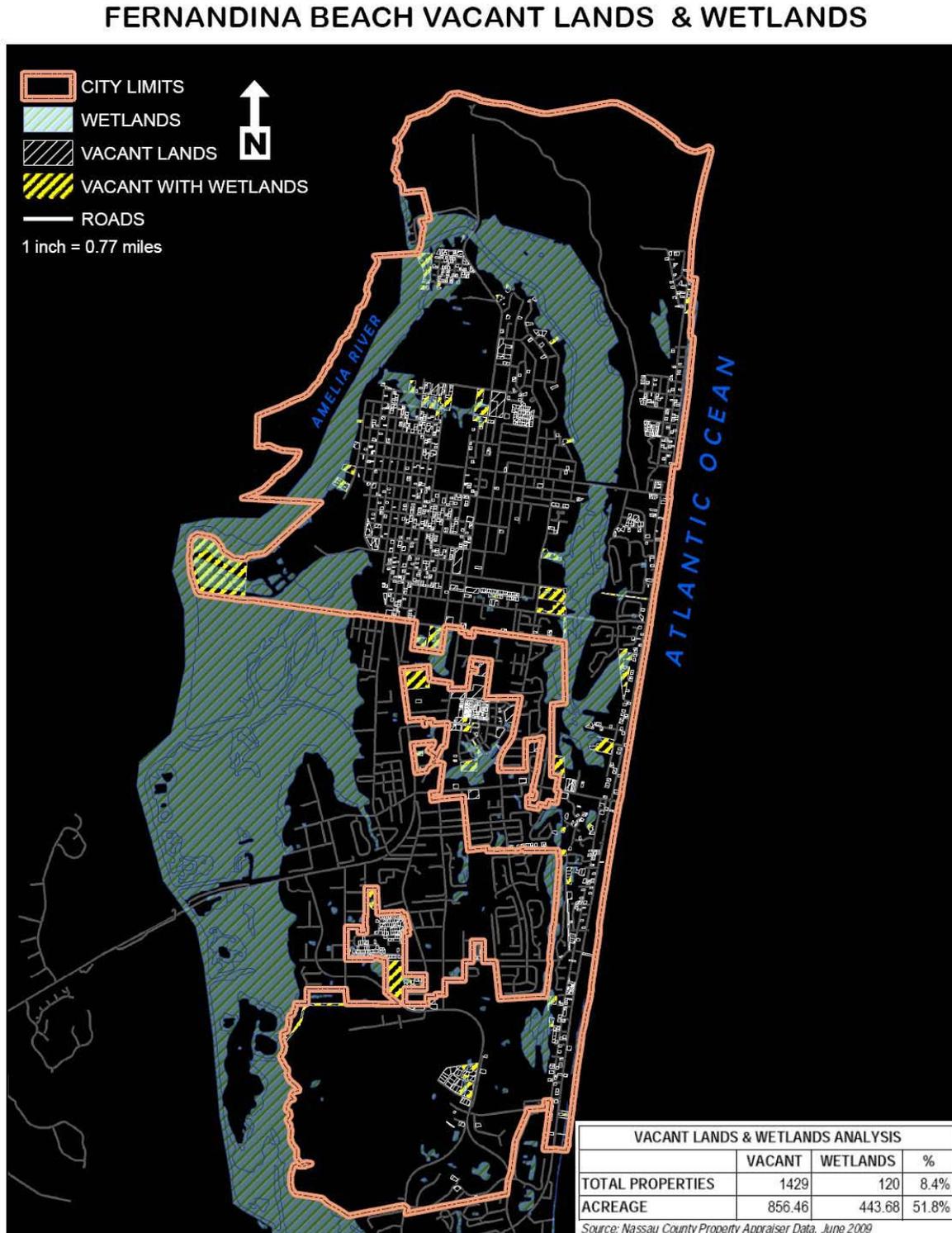
The City has further preserved and prevented impacts to existing wetlands through regulations contained in both the City's Plan and LDC. The Plan's Coastal and Conservation Element sets forth policies that outline how the City can preserve environmentally sensitive properties. Alternatives to land purchases, like transfer of development rights, conservation dedications, conservation easements and land donations, are all options that the City is encouraged to evaluate in order to determine their feasibility.

Wetlands identification, wetlands protection, and wetland impacts are all addressed under Issue Analysis. The table contained in Map 3-1 depicts the City's available vacant lands containing wetlands. The City obtains its wetlands mapping overlay through the National Wetlands Inventory (NWI). NWI data was published in 2002. It is maintained by the SJRWMD and serves as the City's "best available data" for purposes of identifying wetland areas. Wetlands and vegetation data mapping projects for this region started in 1984 and were completed for roughly 70% of the SJRWMD's area. The remaining areas were mapped and published in 2002. The NWI dataset is for general reference only and not for legal purposes. Accurate information related to on-site wetlands can only be obtained through wetland delineation as provided by a property owner on a survey.

In its GIS mapping of wetlands, the City also uses information obtained from the SJRWMD. The attribute data contained in the associated database requires field level site surveying to determine the accuracy of the data and extent of on-site wetlands. An option to strengthen the City's existing wetlands regulations may include the assignment of the Conservation Future Land Use category to them. There are potential consequences of incorporating this as a strategy that must be taken into consideration. One consequence is that this approach may significantly alter development potential on individual properties

containing wetlands. Another mapping option is using a floating designation to represent wetlands on the Future land Use Map. When field level site surveying isn't available to represent the exact location of wetlands, a floating wetlands designation would represent the general area in which wetlands are located.

Map III-1 Fernandina Beach Vacant Lands & Wetlands Analysis



Wetlands identification issues include the definition of wetlands as well as the mapping of wetlands. The existing Comprehensive Plan definition of wetlands is an abbreviated version of the definition of wetlands contained in the Florida Statutes (F.S. 373.019(25)). Some property owners have requested that the City consider creating a new definition of wetlands that distinguishes between natural and artificial wetlands with the intent that artificial wetlands would not be considered wetlands at all, or that they would have different and less rigorous regulations than natural wetlands. Neither the State of Florida nor the SJRWMD distinguishes between natural and artificial wetlands when implementing regulations associated with wetland impacts. It is recommended that the City investigate options related to the creation of a tiered wetlands definition to distinguish between natural and artificial wetlands or wetlands which demonstrate greater or lesser significance as part of the overall system.

The City's Future Land Use and Zoning Maps continue to direct higher intensity/density development away from its environmentally sensitive lands, where possible. Other incentives, such as clustering development should be considered when working to minimize wetlands impacts on developing sites. Further, protection of wetlands is facilitated through ongoing coordination with federal and state regulatory agencies. This heightened level of coordination ensures that proper permits have been filed and that their provisions are upheld.

The City should make an effort to create an inventory of environmentally sensitive properties for future conservation acquisition. Wetlands and other environmentally sensitive lands that are adjacent to or that overlap the City/County boundary should also be identified in an effort to coordinate with Nassau County to protect these natural resources. This inventory would support possible future measures to create a more aggressive land purchasing program for preservation of its environmentally sensitive lands. Policy 7.01.08 of the Comprehensive Plan suggests a formal agreement with Nassau County to ensure the protection and conservation of bays, harbors, estuaries, and coastal resources. At this time there is no agreement. If this policy is implemented, the City should include specifics for coordination between the City and the County regarding wetlands regulation and protection for the wetlands that are adjacent to or that overlap the City/County boundary.

Recommendations

- Evaluate Plan language in Objective 5.12, specifically policies 5.12.01 and 5.12.02 that require a wetlands delineation survey. Consider the establishment of the "conservation" designation on wetlands as revealed by the survey. Add language to the LDC to reflect the Plan requirements for a wetlands delineation survey;
- Update the City's FLUM to reflect the NWI mapping of wetlands so that property owners are advised of potential wetlands on their property and to comply with FAC 9J-5.005(1)(B)(4);
- Evaluate the possibility of using a "floating designation" to show wetlands areas on the FLUM;
- Work with the SJRWMD to update existing wetlands mapping and obtain a more recent dataset, as available;
- Establish a formal land purchasing program. Create an inventory of properties with wetlands and other environmentally sensitive areas that can be acquired. Prioritize this inventory, include acquisition of these properties in the CIP, and identify potential funding sources;
- Explore the option of providing incentives to minimize wetlands impacts on developing sites, such as clustering development. Clustering development encourages the placement of housing and other buildings of a development in a group to provide larger areas of open space;
- Continue to work cooperatively with permitting agencies and property owners to mitigate wetland impacts within the City limits;

- Identify wetlands and other environmentally sensitive areas that cross the City/County limits or are adjacent to the City/County limits. Pursue the adoption of an interlocal agreement regarding the regulation, acquisition, and/or preservation of wetlands that cross or, are adjacent to, the City/County limits in order to cooperatively work toward the preservation of these properties; and
- Research case law pertaining to wetlands impacts in Florida to determine how litigation will impact the application of additional wetlands regulations.

