



# ALACHUA COUNTY COMPREHENSIVE PLAN: 2011-2030 EVALUATION AND APPRAISAL ISSUE SUMMARY

April 3, 2018

## Green Infrastructure – Land Conservation

### STATEMENT OF ISSUE

- Re-evaluate/update conservation lands data sources
- Update Critical Ecological Corridors Map for consistency with Future Land Use Map
- Protect “Priority 3” conservation corridors to reduce potential for sprawl
- Provide direction on land conservation and an urban defining greenbelt
- Address land uses and their offsite impacts to adjacent conservation lands

### INTRODUCTION

Open space and greenspace are general terms that can describe a range of land uses, from urban parks to nature preserves. Such areas can be either publically or privately owned. As the terms suggest, these lands share the basic characteristic of an emphasis on the open, green, pervious, and natural as opposed to the built, impervious, and manmade. But more than just lands having similar characteristics, when these green and open spaces are managed as a system they can provide benefits on a larger scale. Just as built infrastructure is understood as components such as roads and power grids that are planned and constructed to systematically provide essential services to society, “green infrastructure” is a strategically planned and managed network of open space, parks, greenways, conservation easements, working lands with conservation value, and wilderness that provide essential services. These services include supporting native species, maintaining natural ecological processes, sustaining air and water resources, and contributing to health and quality of life. However, at the larger scale, green infrastructure, unlike built infrastructure, is rarely practical to recreate; we can only protect what remains. Green infrastructure is an ecological framework essential for environmental and economic sustainability, and a key to preserving quality of life.

### ANALYSIS RELATING TO ISSUES

#### **BACKGROUND**

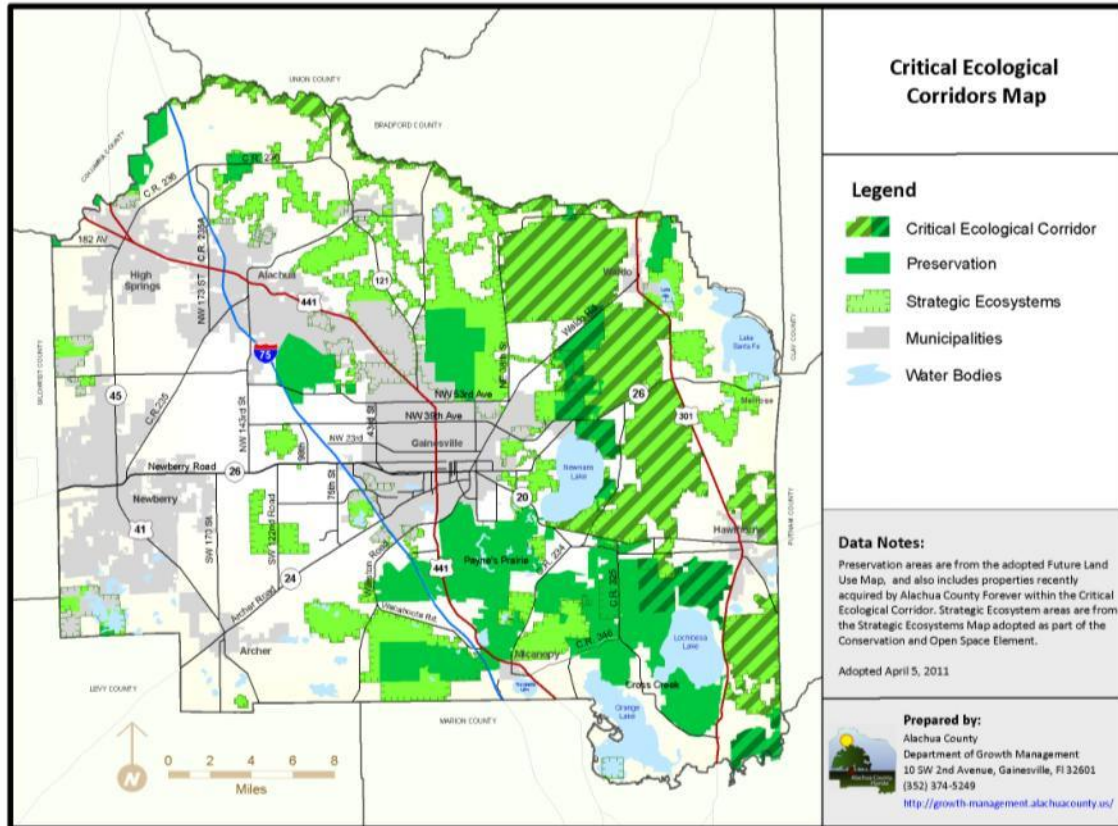
For the last 30 years, Alachua County has addressed the strategic protection of its green infrastructure through various means. In 1987, a Comprehensive Inventory of Natural and Ecological Communities in Alachua County was prepared for the County by KBN Engineering and Applied Sciences, Inc. Specific policies were adopted in the 1991-2011 Comprehensive Plan for protection of significant natural uplands. A follow-up, more comprehensive study was completed for the County by KBN/Golder Associates in 1996, providing an Ecological Inventory of significant upland habitats in private ownership that were deemed worthy of protection either through acquisition, management,

or regulatory processes. This study also recognized the importance of connectivity, and identified additional sites to connect larger areas, providing corridors for wildlife species and surface water connections. In 2002, the areas identified in the KBN/Golder Study were adopted as Strategic Ecosystems in the 2001-2020 Alachua County Comprehensive Plan, which also included policies to protect them and promote the development of a linked open space network. This linked open space network or “greenways system” was envisioned to not only protect natural systems but also provide “unique opportunities for recreation, multi-modal transportation, and economic development” (2011-2030 Alachua County Comprehensive Plan, Conservation and Open Space Element (COSE) 6.3).

The KBN Study provided an impetus for the creation of the local land conservation program, Alachua County Forever. This Program began in November of 2000 as a citizen initiated voter approved referendum to acquire improve and manage environmentally significant lands to protect water resources, wildlife habitats, and natural areas suitable for resource-based recreation through a 29 million dollar bond. Since 2000, over 24,000 acres were protected through acquisition, conservation easements, land donations and partnerships. Specific objectives and policies relating to the Alachua County Forever Program were adopted in the 2001-2020 Alachua County Comprehensive Plan COSE Section 6.

COSE 6.2.4 states that “Lands shall be selected for acquisition under the Alachua County Forever Program based on an evaluation of environmental, social and management criteria as adopted by the Alachua County Board of County Commissioners (BoCC).” The BoCC adopted the most recent version of this selection criteria, known as the Land Conservation Decision Matrix (Matrix) via Resolution 15-106. Alachua County staff use a wide variety of resources to evaluate the selection criteria in the Matrix. Resources are updated periodically and new resources are added as they become available.

The Critical Ecological Corridors Map, adopted in COSE Policy 6.3.2, is one of the resources that help prioritize the selection of lands for acquisition. The policy states that the “County shall prioritize maintenance of ecologically functional linkages between ecological corridor core areas as shown on the Critical Ecological Corridors Map through various programs and activities, including: (a) implementation of development review, special area planning for Strategic Ecosystems, land acquisition programs and associated management plans, and the Transfer of Development Rights program (see Future Land Use Element Section 9.0); (b) various intergovernmental coordination efforts with municipalities, adjacent counties, regional entities, state and federal agencies to promote maintenance of linkages of ecological core areas; and (c) outreach programs to promote the value of conserving linked ecosystems/corridors and support tax incentives that promote the preservation of mapped ecological core areas.” The information used to create this map changes over time. These changes include the inclusion of new properties in the County’s Preservation Future Land Use category, new managed conservation lands, and new information from state and county critical lands and ecological corridors analyses.

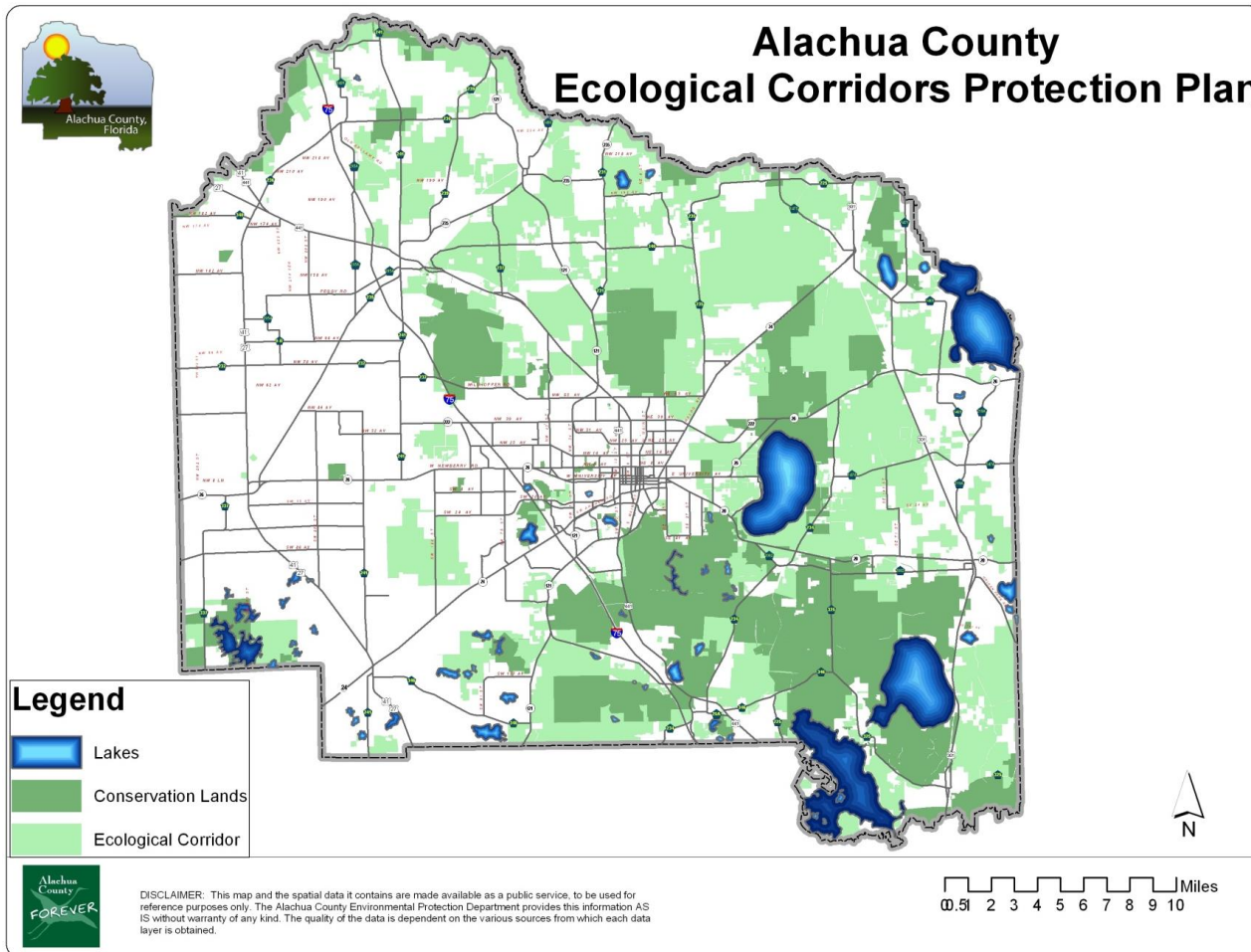


*Critical Ecological Corridors Map from COSE 6.3.2 (2011)*

In 1991, the Florida Department of Environmental Protection established a Statewide Greenways Program to achieve greater connectivity among the state’s large ecologically significant lands. The Florida Ecological Greenways Network (FEGN) is a component of this Program. “The goal of the FEGN database is to identify and prioritize a functionally connected statewide ecological network of public and private conservation lands”, <http://conservation.dcp.ufl.edu/FEGN.html>. FEGN updates occur periodically, with the most recent update in 2016; primary goals included addressing potential sea level rise impacts on FEGN priorities, elevating the priority of FEGN corridors that could functionally link Florida conservation lands to other states, consolidating FEGN priority levels from eight levels down to six, and conducting boundary edits and data updates, <http://conservation.dcp.ufl.edu/FEGN.html>. Data from the FEGN, that is no longer the most current available data, contributed to the development of the Critical Ecological Corridors map (COSE 6.3.2).

Alachua County proposed an intergovernmental land conservation initiative to establish the “Emerald Necklace”, a publicly accessible, connected and protected network of trails, greenways, open space, and waterfronts surrounding the Gainesville urban area in 2001 through a federal grant. In 2009, the County created the Alachua County Ecological Corridors Protection Plan. The objective of the Plan is to implement Comprehensive Plan policies that conserve land and create a linked ecological corridor system – The Emerald Necklace – that can be managed to support the protection, enhancement and restoration of functional and connected natural systems while providing unique opportunities for resource-based recreation through voluntary land acquisition, conservation

easements or covenants, and education and partnerships to change landowner practices. The BoCC adopted the Alachua County Ecological Corridors Protection Plan through Resolution 09-33 also known as “the Emerald Necklace”, to help guide Alachua County Forever acquisitions and leverage funds from Florida Communities Trust.



*Alachua County Ecological Corridors Protection Plan Map (2009)*

### Potential Strategies for Addressing the Issues

- Re-evaluating/updating conservation lands data sources is not a Comprehensive Plan issue, and is handled as an Alachua County Forever Program procedure.
- Staff will review the existing Critical Ecological Corridors Map and investigate updating the map to include the current Florida Ecological Greenways Network Priority 3 areas and those Priority 4 and 5 areas that are adjacent to the existing Critical Ecological Corridor, investigate updating the Preservation Future Land Use layer, and including a Managed Natural Areas layer.
- Staff will review existing policies in Objective 6.3 – Linked Open Space Network and recommend language establishing an urban defining greenbelt, if necessary.

- The Comprehensive Plan provides general language in COSE Objective 3.6 and associated policies that require that parcels adjacent to conservation and preservation areas shall be sited and designed to minimize impacts on conservation and preservation lands. The Unified Land Development Code (ULDC) provides the specific requirements and standards. Staff finds the current Comprehensive Plan language in COSE Obj. 3.6 and associated policies adequate and does not recommend making any changes.

## **COMPREHENSIVE PLAN POLICIES RELATING TO ISSUE**

### **CONSERVATION AND OPEN SPACE ELEMENT (COSE)**

#### **OBJECTIVE 3.6 - RESOURCE PROTECTION STANDARDS**

Protect natural resources by requiring that all development activities be conducted in accordance with at least minimum resource protection standards.

**Policy 3.6.2** The County shall coordinate with adjacent counties and WMDs to conserve, appropriately use, or protect unique natural resources located within more than one local jurisdiction.

**Policy 3.6.3** Parcels that include or are adjacent to conservation or preservation areas shall not receive planning and zoning designations that are higher in density or intensity than the currently adopted designations unless adequate natural resources protection is ensured.

**Policy 3.6.5** Development on land that includes conservation areas shall be sited and designed according to the following standards and consistent with policies under Objective 6.2 of the Future Land Use Element in the rural area:

(a) The preservation of conservation areas shall be required on all development sites to the greatest extent possible, consistent with standards which are outlined subsequently in this Element.

(b) Density or intensity shall be transferred from conservation areas to non-conservation portions of the property, to adjoining property under common ownership or management and within a unified development, or to other development receivership areas, at a rate consistent with that of the underlying zoning district, but not to exceed the maximum density allowed by the land use designation.

(c) When there are no non-conservation areas to which density or intensity may be transferred, the development shall be clustered in the portion of the site that will result in least environmental impact.

(d) When connection to central sewer is not required, septic wastes shall be disposed of according to the Comprehensive Plan, land development regulations, and health department standards, and without adversely affecting ecosystem health.

(e) Existing landscape connections to other conservation areas shall be maintained so that fragmentation is avoided.

**Policy 3.6.6** Development on land that includes or is adjacent to conservation or preservation areas shall exhibit best environmental management practices with the emphasis on designing with nature, e.g. in the context of the natural features of the landscape, such as topographic and stormwater features, vegetative edges, and soil types, to avoid and minimize adverse environmental and visual

impacts. The major criterion for approval shall be the continued functioning, with minimum disturbance, of the ecosystem which the development is impacting.

**Policy 3.6.7** Development shall not be allowed at the maximum densities and intensities of the underlying zoning district, if those densities would be harmful to natural resources.

**Policy 3.6.10** The intensity of development on land adjacent to conservation and preservation areas shall be determined based on the unique characteristics of the conservation area. Land use shall be consistent with natural resource protection.

## **4.0 NATURAL RESOURCES**

### **OBJECTIVE 4.9 - BIODIVERSITY**

Maintain and enhance plant and animal species diversity and distribution within Alachua County by protecting significant plant and wildlife habitats, providing for habitat corridors, and preventing habitat fragmentation.

**Policy 4.9.1** A critical portion of each significant plant and wildlife habitat type in Alachua County shall be protected. Protection shall be accomplished using all available methods, including land acquisition, incentives and requirements for the provision of conservation or preservation areas, habitat corridors, greenways, and common open space.

**Policy 4.9.11** The County shall establish and preserve habitat corridors that connect significant plant and wildlife habitats throughout the County. The County shall perform an objective analysis to determine the appropriateness of habitat corridors, how extensive they should be the location of potential corridors, what fiscal resources are available for implementation, and economic incentives for property owners to voluntarily participate in formation of a habitat corridor program.

### **OBJECTIVE 4.10 - STRATEGIC ECOSYSTEMS**

Protect, conserve, enhance, and manage the ecological integrity of strategic ecosystems in Alachua County.

**Policy 4.10.1** Conserve strategic ecosystems that are determined through ground-truthing using the KBN/Golder report as a guide to maintain or enhance biodiversity based on an overall assessment of the following characteristics:

Natural ecological communities that exhibit:

Native biodiversity within or across natural ecological communities.

Ecological integrity.

Rarity.

Functional connectedness.

Plant and animal species habitat that is:

Documented for listed species.

Documented for species with large home ranges.

Documented as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering.

High vegetation quality and species diversity.

Low in non-native invasive species.

Size, shape, and landscape features that allow the ecosystem to be restored to or maintained in good condition with regular management activities, such as prescribed burning, removal of exotic vegetation, or hydrological restoration.

## **6.0 LAND CONSERVATION PROGRAM**

### **OBJECTIVE 6.1 - PROGRAM OVERVIEW**

Establish and maintain a land conservation program for the purchase, preservation, and management of natural areas and open space to complement the regulatory approaches identified in other sections of this element.

**Policy 6.1.1** A land conservation master plan shall be developed to detail the vision, goals, and organizational framework for a county-wide system of natural areas and trails for wildlife and people.

**Policy 6.1.2** The land conservation master plan shall identify the components of the land conservation program, including but not limited to:

- (a) The Alachua County Forever program.
- (b) Open space and greenways programs.
- (c) Coordination with other land acquisition and management programs.
- (d) Private donations and dedications.
- (e) Regulatory mechanisms.
- (f) Taxation policies, such as agricultural and bluebelt assessments.
- (g) Purchase of agricultural conservation easements (PACE) and purchase of development rights (PDR) for agricultural areas.

**Policy 6.1.3** The County shall coordinate the efforts of various components of the land conservation program in order to maximize opportunities to acquire lands for appropriate conservation and recreation purposes.

### **OBJECTIVE 6.2 - ALACHUA COUNTY FOREVER**

Implement the Alachua County Forever program.

**Policy 6.2.1** The County shall establish and maintain the Alachua County Forever program to acquire and manage environmentally significant lands for the protection of water resources, wildlife habitat, and natural areas suitable for resource-based recreation.



**Policy 6.2.2** Alachua County Forever shall be funded for a minimum of 20 years, as approved by voter referendum on November 7, 2000.

**Policy 6.2.3** The emphasis of Alachua County Forever shall be to increase the acreage of environmentally significant lands managed in perpetuity for conservation purposes.

**Policy 6.2.4** Lands shall be selected for acquisition under the Alachua County Forever program based on an evaluation of environmental, social, and management criteria as adopted by the Alachua County Board of County Commissioners.

**Policy 6.2.5** During the acquisition of environmentally significant lands, the County shall give priority to acquiring the optimal acreage needed to maintain the integrity of the natural plant communities or ecological units involved.

**Policy 6.2.6** All acquisitions under the Alachua County Forever program shall be based on voluntary participation by a willing property owner.

**Policy 6.2.7** Resource-based recreation may be considered on and adjacent to land acquired through Alachua County Forever provided the associated activities do not have significant adverse impacts on the ecological integrity or ecological or historical values of the resources in these areas.

### **OBJECTIVE 6.3 - LINKED OPEN SPACE NETWORK**

Develop a linked open space network, or greenways system, that can be managed to support the protection, enhancement and restoration of functional and connected natural systems while providing unique opportunities for recreation, multi-modal transportation, and economic development.

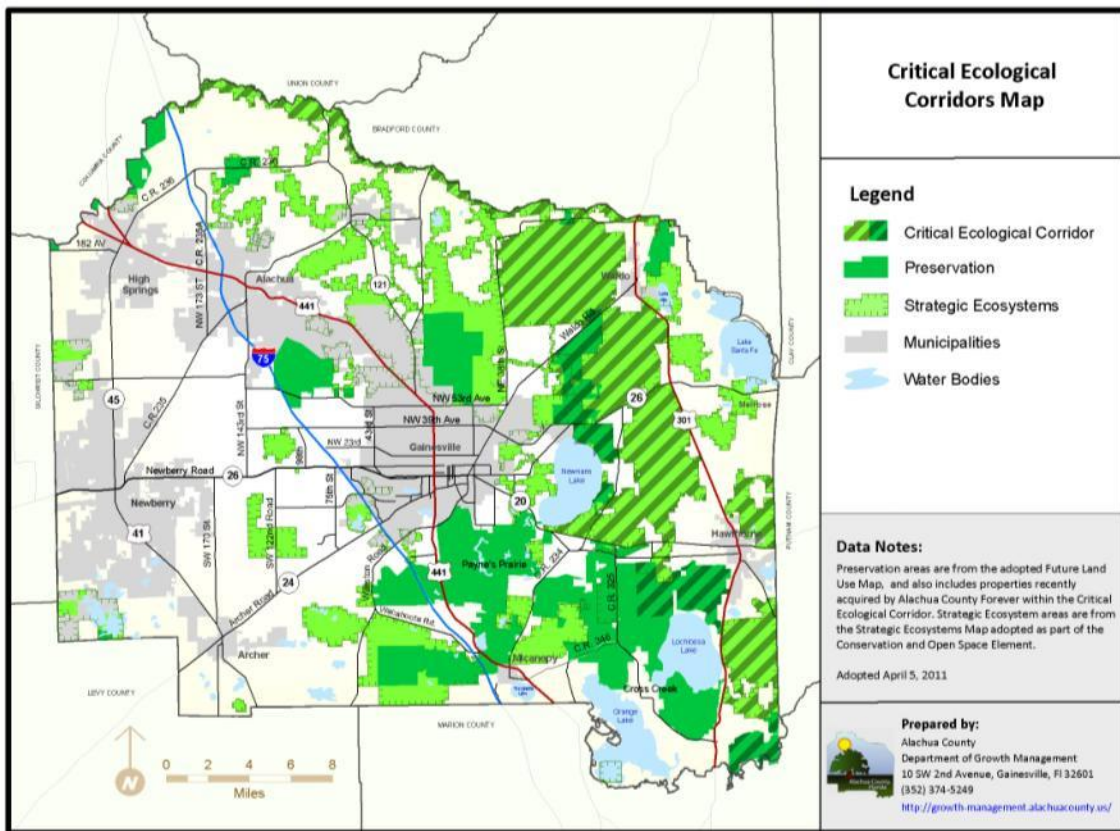
**Policy 6.3.1** The County shall develop planning strategies for a greenways system that includes but is not limited to consideration of the following components:

- (a) Conservation and preservation areas
- (b) Environmentally sensitive lands
- (c) Open space areas
- (d) Parks and recreational facilities
- (e) Commercial recreation areas
- (f) Surface water systems
- (g) Bikeways and trails
- (h) Utility corridors
- (i) Stormwater management systems
- (j) Habitat corridors
- (k) Historic resources



(l) Scenic corridors

**Policy 6.3.2** The County shall prioritize maintenance of ecologically functional linkages between ecological corridor core areas as shown on the Critical Ecological Corridors Map through various programs and activities, including: (a) implementation of development review, special area planning for Strategic Ecosystems, land acquisition programs and associated management plans, and the Transfer of Development Rights program (see Future Land Use Element Section 9.0); (b) various intergovernmental coordination efforts with municipalities, adjacent counties, regional entities, state and federal agencies to promote maintenance of linkages of ecological core areas; and (c) outreach programs to promote the value of conserving linked ecosystems/corridors and support tax incentives that promote the preservation of mapped ecological core areas.



**Policy 6.3.3** Where necessary to connect publicly owned recreation and conservation lands to develop the greenways system, the County shall encourage public acquisition of land and other means of voluntary landowner participation.

**Policy 6.3.4** The County shall develop a strategy for identifying and providing for publicly accessible open spaces of native flora and fauna in or near neighborhood settings. Resource-based recreation such as picnicking and hiking shall be encouraged.

**Policy 6.3.5** To protect sensitive ecosystems and habitat corridors, the County shall locate and design greenway facilities in an environmentally sensitive manner, including limiting or prohibiting public access where necessary to protect such resources.

**Policy 6.3.6** The County shall approve a master management plan for the greenways system, and specific plans for lands acquired, preserved, or otherwise included in the greenways system. The management plans shall address natural resources protection, public access, recreation, education, and opportunities for economic development that is complementary to maintaining the system. The management plans shall identify anticipated costs and departments responsible for implementation of the plans.

**Policy 6.3.7** The County shall coordinate with local municipalities in order to include appropriate incorporated properties as part of the greenways system.

#### **OBJECTIVE 6.4 - OTHER ACQUISITION PROGRAMS**

Coordinate with other programs for the acquisition and management of natural areas and open space for recreational, open space and conservation purposes.

**Policy 6.4.3** The County shall pursue Florida Communities Trust funds, and support the municipalities in submitting applications, for acquisition projects that maximize environmental and social considerations, including but not limited to:

...

(d) Enhancing greenways or recreational trails.

#### **OBJECTIVE 6.5 - ACQUISITION TOOLBOX**

Encourage the use of multiple, diverse land acquisition strategies.

**Policy 6.5.1** The County shall use and promote a variety of tools for acquiring and protecting natural areas and open space. Acquisition tools shall include, at a minimum, fee simple purchase, conservation easements, conservation trusts, land donations and dedications, transfer or purchase of development rights, long-term leases, and tax incentives.

### **INTERGOVERNMENTAL COORDINATION ELEMENT**

#### **OBJECTIVE 8.1**

Coordinate the protection of the environment.

**Policy 8.1.1** Alachua County shall coordinate the environmental protection of land, air, and water with the appropriate agencies and jurisdictions for the benefit of people, wildlife, and plants.

(a) The County shall coordinate with the Countywide Visioning and Planning

Committee or similar entity, Non-governmental organizations, State, federal municipal and adjacent counties to extend ecologically functional linkages between ecological core areas on the Critical Ecological Corridors Map in accordance with Policy 6.3.2 of the Conservation and Open Space Element.

(b) The County shall pursue development of an interdisciplinary team to address protection of strategic ecosystems and other natural resources within each city's reserve area.

(c) The County shall encourage establishing a subcommittee of the Countywide Visioning and Planning Committee (CVPC) or similar entity to implement relevant guiding principles and action strategies in the CVPC Conceptual Plan Objectives to protect natural resources countywide. Such a subcommittee shall consider inclusion of environmental analysis and environmental protection standards/requirements in the Boundary Adjustment Act (BAA) or related interlocal agreements.

## **RECREATION ELEMENT**

**Policy 1.3.2** The County shall coordinate efforts with the State and the municipalities to establish a network of recreational trails and public access that would connect natural and cultural features of the County and provide educational and recreational value to Alachua County citizens. Such a network should be developed in a sustainable manner and include:

(a) Appropriate access to geological, archaeological, historical, environmental and recreational features.

(b) Trail linkages such as creekside boardwalks, nature trails through hammocks and along prairies, canals and canoe trails, and connections to nature centers, parks and exhibits.

(c) Rail to trails for connective access between recreational sites and activity centers.