



Photo Courtesy of Joanne Davis, 1000 Friends of Florida

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The Florida Wildlife-Friendly Toolbox

The comprehensive plan is the community’s legal instrument which provides the foundation for developing programs, actions and specific land development regulations needed to protect sensitive resources. The comprehensive plan contains interrelated “elements” that deal with issues such as intergovernmental coordination, future land use, conservation, recreation and open space, sanitary sewer, potable water, stormwater management, natural ground water aquifer recharge, and capital improvements.

Many Florida-specific planning tools are available to assist with developing green infrastructure which support wildlife-friendly communities. First and foremost, each municipality and county government in Florida is required to develop a local comprehensive plan to guide the way the community grows and develops. There are numerous opportunities to integrate wildlife-friendly concepts into this fundamental planning tool. Additionally, there are other opportunities afforded by such Florida planning initiatives as developments of regional impact, rural land stewardship areas, sector plans, and other programs. This chapter provides an overview of these major planning approaches unique to Florida.

THE LOCAL COMPREHENSIVE PLAN

Local governments in Florida have abundant authority to protect and sustain wildlife habitats by virtue of home rule powers and planning authorities under Chapter 163 Part II, Florida Statutes – the Growth Policy; County and Municipal Planning; Land Development Regulation Act. The local comprehensive plan is intended to:

...provide means to preserve, promote, protect, and improve the public health, safety, comfort, good order, appearance, convenience, ... prevent the overcrowding of land and avoid undue concentration of population; facilitate the adequate and efficient provision of transportation, water, sewer, schools, parks and recreational facilities, housing, and other requirements and services; and conserve, develop, utilize, and protect natural resources within their jurisdictions. (Chapter 163, Part II F.S.)

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space, sanitary sewer, potable water, stormwater management, natural ground water aquifer recharge, and capital improvements. These elements include specific goals, objectives and policies that outline how the local government will pursue its goals. Each local government must also adopt a future land use map that shows the “proposed distribution, location and extent of the various categories of land” included in its local comprehensive plan.

Under the law, local government land use decisions must be consistent with the adopted comprehensive plan and future land use map. The comprehensive plan provides the basis for developing and adopting specific land development regulations, programs, best management practices and land stewardship arrangements.

Rule 9J-5 of the Florida Administrative Code provides more detailed interpretation of the planning requirements found in Chapter 163, Florida Statutes. Both Chapter 163 and Rule 9J-5 emphasize the importance of planning for natural living assets and environmentally sensitive features. Required plan elements such as the Future Land Use, Conservation, Coastal and Recreation and Open Space underscore the importance of planning toward sustaining habitat, wildlife and environmentally sensitive features. Further, Florida’s land planning agency, the Department of Community Affairs, is directed to take into consideration the existence of natural resource features of the local area when assisting local governments and applying Rule 9J-5 in specific situations.

Following are two ways to use the local comprehensive plan to better protect wildlife habitat.

Minimum 9J-5 Requirements with a Wildlife Focus – Rule 9J-5 requirements related to wildlife are dispersed through multiple plan elements. Those elements that emphasize wildlife to the greatest degree are the Future Land Use and Conservation Elements, and also the Coastal Management Element in coastal counties.





Cow-Nosed Rays Photo Courtesy of Jeffrey Pennington



Manatees Photo Courtesy of Carrie Wengert and the Florida Wildlife Federation

Top: Cow-Nosed Rays in St. Joseph Bay.; Bottom: Manatees in the Homosassa Springs area.

As an example, the Conservation Element promotes conservation, use and protection of natural resources, requiring that the following natural resources be identified and analyzed:

- Rivers, lakes, wetlands including estuarine marshes, and ground water and air including the quality of the resource.
- Floodplains.
- Areas known to have experienced soil erosion problems.
- Areas that are the location of recreationally or commercially important fish or shellfish, wildlife, marine habitats and vegetative communities including forests; indicating dominant species present and species listed as endangered, threatened or of special concern.

For each of these resources “the potential for conservation, use or protection shall also be identified.” Rule 9J-5 also requires that every plan include and adopt specific Goals, Objectives and Policies (GOPs) to establish the long-term conservation programs and activities addressing the conservation, appropriate use and protection of native vegetative communities including forests, fisheries, wildlife, wildlife habitat and marine habitat, describing actions to protect these resources.

(Appendix I provides sample goals, objectives and policies that can help frame various community’s habitat and wildlife actions.)

Following the prescribed 9J-5 mapping and GOPs requirements, the community planning focus is multifold:

- Identify and map existing wildlife habitats and vegetative communities indicating species present (or likely to present) including common as well as species listed as endangered, threatened or of special concern (look within and beyond jurisdictional bounds).

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Educate the various city/county departments regarding conservation and enhancement of local green infrastructure (including habitat and wildlife) and provide cross-departmental training, process linkages and discussion opportunities.

- Develop and link a plan of conservation and enhancement (essentially a jurisdictional green infrastructure plan) to the mapped and identified wildlife and habitat resources.
- Educate the various city/county departments regarding conservation and enhancement of local green infrastructure (including habitat and wildlife) and provide cross-departmental training, process linkages and discussion opportunities (e.g., ensure that the stormwater, roads, parks and recreation departments understand and are “on board” with the conservation and enhancement objectives for the community’s green infrastructure network, and ensure that development land planning and development review processes factor in habitat issues).
- Involve citizens and landowners in the community and adjacent communities, and tap the resources and expertise of wildlife and resource agencies, local schools and universities.

A “Green Infrastructure” Element or Sub-Element –

Rather than following a minimum 9J-5 approach, a community can follow a more innovative approach to being wildlife friendly. A community can choose to prepare and adopt a “Green Infrastructure” element, either as a stand-alone element or as a sub-element of an existing element such as Conservation or Infrastructure. Rule 9J-5.001 recognizes and supports the development of such optional elements within, or in addition to, the required elements. This approach specifies the means to ensure these natural system services and benefits are considered in planning and development review processes and “memorialize,” a community’s green infrastructure components.

Critical startup efforts involve gathering data on local habitats, the mix of species they are likely to support (see Chapter 4, Data and Analyses Development) and the variety of ecosystem service benefits received. Further startup work might include: establishing a citizens committee to help identify opportunities and develop background materials; holding local workshops and seminars on habitats and the mix of species supported (or which could be supported); and, drafting preliminary sketches

regarding what comprises or could comprise a habitat network.

With a little initial funding, guidance and technical support from local planning staff and the volunteer efforts of a few local citizens, a beginning framework for a community’s green infrastructure can be drafted for public consideration. The larger and more obvious components emerge from these efforts such as anchoring local habitat areas [e.g., existing regional, local and neighborhood parks, streams, rivers, bays, sloughs, bayous, wetlands]. With these beginning actions a community can initiate a green infrastructure planning effort and then seek support for a more serious and sustained approach.

DEVELOPMENTS OF REGIONAL IMPACT

In order to protect natural resources while facilitating orderly and well planned development, the State of Florida created the Development of Regional Impact (DRI) process. The DRI program establishes criteria and procedures to ensure that local development decisions address the regional impacts of proposed large-scale developments.

A DRI is defined as a development which because of its character, magnitude, or location, results in a substantial effect on the health, safety, or welfare of citizens of more than one county (Section 380.06, F.S.). The DRI is to:

- Identify issues early in the planning process.
- Provide extra-jurisdictional approach.
- Allow for state and regional agency expertise and technical assistance.
- Assess and mitigates project impacts to state and regional resources and facilities.
- Result in a specific development order (DO) that runs with the land and is considered more difficult to alter than a basic comprehensive land amendment.





Photo Courtesy of Greg Gulgowski, Director of the Harmony Institute.

Pictured here are the master site plan and an aerial picture of the Harmony DRI in Central Florida. The developers of this site worked with the natural features of the land from the start. Two large lakes with substantial surrounding vegetated buffers and the large wetlands strands that pass through the site were kept intact. Development was clustered and a variety of common public areas were put in place to allow residents to enjoy nature without major dissecting and fragmenting the natural areas.

A DRI review is processed in accordance with the procedures contained in Chapter 380, F.S., and implementing regulations in Chapter 9J-2, F.A.C.

The DRI process provides a useful tool for inclusion wildlife and habitat conservation objectives as the development of an area proceeds. In addition to addressing particular listed species concerns, careful use of the DRI process can foster important wildlife conservation objectives such as maintaining or enhancing habitat connectedness, variety, shape and size.

Like many large parcel planning tools, the DRI process anticipates careful natural resource planning and the consideration of habitat and wildlife protection needs. Agreed upon habitat conservation areas, buffers, set-asides, management needs, mitigation areas and costs can be addressed through the process and the adopted DO and appended wildlife and habitat conservation management plans. Once adopted, the DO governs use of the land irrespective of new or number of owners. Substantial modifications to DO specified management directives occurs through amendments to the DO involving local as well as regional and state agency review.

When using the DRI process for wildlife and habitat planning, important aspects need to be followed:

- Maintain or enhance the variety, connectedness and size of vegetation and water related features (wildlife habitats) where the greater the variety, size and connectedness of habitat areas, the more useful and sustained they will be to wildlife.
- Manage for specific wildlife by knowing the habitat requirements of the species and its needs for cover, food, water, space and acceptable level of disturbance and the arrangement of these factors.
- Plan in the “big picture,” maintaining or enhancing natural landscape linkages by working with adjacent property owners.
- Plan internally to incorporate and appropriately buffer existing

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Important to any DRI development order implementation is the need to provide a long-term habitat and wildlife management plan with realistic actions, expectations and management responsibilities. So often, developments are approved with specific habitat features included, but with little-to-no direction on long-term management actions and responsibilities.

wildlife habitat by shifting unit density and intensity within the footprint of development, keeping sensitive habitat and topographic features undeveloped.

- Look for opportunities to restore and enhance degraded areas and maintain or improve natural hydrological connections.
- Include long-term management actions and responsibilities and avoid “cookie cutter” habitat/landscape management responsibilities to multiple future property owners.

Planning for wildlife and habitat conservation needs to occur early in the process, during the pre-application meetings and certainly during the first sufficiency reviews of the Application for Development Approval (ADA). At the ADA stage, plans of development have not been legally established and there are opportunities to shift proposed developmental footprints, densities and intensities, roads and other infrastructure locations to benefit wildlife.

The affected local government(s) should sit with the applicant, resource agency experts and others to identify important landscape and habitat features on and near the project. The planning objective at this early stage is to look for opportunities to keep or restore natural landscape linkages and habitats within the development area, and to sustain, restore and enhance habitat linkages to adjacent parcels. Off-site corridor linkages along rivers, lakes, wetlands, streams or uplands can be identified, buffered and crafted into the overall plan of development.

Establish Long-term Management Responsibilities – Important to any DRI development order implementation is the need to provide a long-term habitat and wildlife management plan with realistic actions, expectations and management responsibilities. So often, developments are approved with specific habitat features included, but with little-to-no direction on long-term management actions and responsibilities. Future land managers within the DRIs (e.g., golf course operators,



Graphic by Benjamin Pennington

Through DRI and other large parcel land development tools, restoration of disturbed habitat areas, such as the mosquito ditched wetlands on the right side of this graphic, can be negotiated. Designated conservation areas can be sized and structured to retain both core and edge habitats benefiting multiple species.

landscapers, the homeowners and their associations) are often unaware of specific agreements and actions in their approved development orders. The DO should address these long-term conservation management expectations. Further, through the DO, third party agreements can be set into motion with local land trusts or conservation organization to help monitor implementation of development order agreements conditions relative to wildlife, habitat management plans and other natural resource concerns within a DRI.

The Listed Plant and Wildlife Resources Uniform Standard Rule, 9J-2.041 – In addition to promoting logical landscape level planning, the DRI process through Rule 9J-2 establishes a means to address specific impacts of development on listed plant and wildlife species. Through the DRI develop-



ment review process, a development order is drafted that must contain the applicable preservation and mitigation actions for the protection of listed plant and wildlife species and wildlife species habitats.

As in most all natural resource planning, avoidance of impacts is emphasized as the most desirable option. However, at times, impacts affecting listed plant and wildlife resources will be unavoidable and will need to be addressed through appropriate mitigation. Often (though not always), onsite mitigation and management is preferable to off site mitigation. Latitude is available so that the onsite, off-site or a combination approach can be used that will best assure long-term species and habitat protection. For plants and habitat areas, avoidance or mitigation of significant impact to an onsite population consists of the preservation of species population habitat coupled with the development of a management plan that avoids the adverse impacts of development. The DO should specifically identify the location and size of the onsite land to be preserved, restrictions of uses or impacts applicable the preserved habitat, acceptable onsite management practices and the fiscal resources necessary to preserve the habitat area.

Offsite mitigation for specific species impacts must be biologically viable, manageable and appropriate for the listed plant and wildlife species requiring mitigation. Offsite mitigation must minimally be type-for-type and acre-for-acre habitat acquisition or preservation or other acquisition or preservation of habitat of comparable biological value for the listed species requiring mitigation.

Linkage to the Comprehensive Plan – For the local community, it is valuable that all onsite preservation land arising from the development order be shown on the local government’s Future Land Use Map series as conservation/preservation land use. The conservation land use designation and associated site specific protection goals, objectives and policies should be

adopted as part of the local comprehensive plan within one year of the issuance of the DO, and prior to the commencement of any development onsite that would significantly impact listed species or their habitat, (except when a subsection 380.032(3) or 380.06(8), Florida Statutes, development agreement is used).

Further, within the overall context of a community’s green infrastructure, the landowner and the local government should use the DRI planning opportunity to link (on and off site) upland habitat to sustain future wildlife populations that use and rely on these areas. To maximize habitat and wildlife benefits, local governments should recognize that DRIs represent large blocks of the community wherein the coordinated use of a mix of land planning tools such as upland protection ordinances, conservation easements and acquisition can be used to lay the foundation for an integrated green infrastructure.

SECTOR PLANS

In 1998, the Florida Legislature authorized optional sector planning. As a “demonstration project,” up to five local governments were authorized to adopt sector plans. Initially, through an agreement with the Department of Community Affairs, four local governments were selected: Orange County Horizons West, Clay County Brannon Field, Palm Beach County, and Bay County West Bay Area. The applicable Regional Planning Council was involved in this initial phase of selection and conducted scoping meetings to initiate the development of the sector plan. Clay County’s effort was rescinded and Palm Beach County withdrew its sector plan. Since then, Escambia County and the City of Bartow have initiated sector planning.

The sector plan process was established as an alternative to the Development of Regional Impact (DRI) process, pursuant to Section 163.3245, F.S. Sector plans are approved through comprehensive plan amendments and initiated by the local government in agreement with the DCA. A sector plan has two

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The conceptual long-term build-out overlay includes a conceptual framework map and identifies public facilities, natural resources and includes principles and guidelines that address urban form and interrelationships of anticipated future land uses including procedures for intergovernmental coordination. The detailed specific area plans represents sub-units of the long-term build-out overlay.

levels, a conceptual long-term build-out overlay and detailed specific area plans (DSAPs). Additionally, sector plans strive to combine the purposes of chapters 380 and 163, Florida Statutes and require public participation throughout the process, emphasizing urban form and the protection of regional resources.

A sector plan consists of:

- The Agreement authorizing preparation of the optional sector plan.
- Delineated geographic area.
- Planning issues that will be emphasized (e.g., wildlife corridors, significant habitat area, unique issues).
- Requirements for intergovernmental coordination to address extra-jurisdictional impacts.
- Supporting data and analyses.
- Procedures for public participation.

The conceptual long-term build-out overlay includes a conceptual framework map and identifies public facilities, natural resources and includes principles and guidelines that address urban form and interrelationships of anticipated future land uses including procedures for intergovernmental coordination. The detailed specific area plans represents sub-units of the long-term build-out overlay. It must encompass at least 1,000 acres, identify and analyze the distribution, extent and location of future uses, identify public facilities, including those outside of the jurisdiction, and identify public facilities necessary for the short term.

Once the agreement is executed, the local government and the landowner negotiate a conceptual long-term build out overlay for the area. The overlay map identifies anticipated areas of land use and includes more specific direction for development within the area regarding the protection of natural resources and

the provision of infrastructure. The specific area plans identify objectives and policies in the comprehensive plan to address infrastructure needs, natural resource protection and mitigation, and extra-jurisdictional impacts of development. Once the specific area plan is adopted, the requirements for DRI review are waived.

From the outset of the sector planning process, wildlife and habitat conservation, biodiversity linkages, enhancement, restoration and other natural resource protection issues are legitimate areas of focus. Each sector plan begins with a scoping meeting conducted by the regional planning council to identify relevant planning issues and to establish an agreement with the DCA to authorize development of an optional sector plan. State, regional and local agencies with jurisdiction over planning and permitting within the boundaries of the optional sector plan attend the scoping meeting. Prior to execution of an agreement, the regional planning council makes a recommendation as to whether a sector plan is appropriate.

At a minimum, regionally significant wildlife and habitat resources must be addressed as they would under the DRI Rule 9J-2 of the Florida Administrative Code. Resources to be reviewed for significant impacts under the rule include: endangered, threatened, and special concern plant and animal species; populations and habitats, unique or rare natural communities, significant archaeological and historical resources; floodplains, wetlands, estuaries, beaches, dunes, aquifer and recharge areas; and air and water resources. At the applicant's option, the long-range portion of the sector plan may address restoring key ecosystems, achieving a cleaner, healthier environment, limiting urban sprawl, protecting wildlife and natural areas, advancing the efficient use of land and other resources. Local governments, affected parties and citizens must negotiate and leverage specific wildlife and natural resource requirements.

THE WEST BAY SECTOR PLAN

West Bay is a natural bay and sub-basin of the greater St. Andrews ecosystem near Panama City in Bay County. Due to its long-term single ownership by The St. Joe Company, the land has remained relatively undeveloped and in good biological shape, with the land primarily in silviculture. When an international airport and major development were proposed for the area, the Bay County Board of County Commissioners, the local airport authority, and The St. Joe Company agreed to use the sector planning process for this land.

As a result, about 41,000 acres of the West Bay Sector Plan area's 75,000 acres will be designated for preservation purposes. This includes 33 miles of bay frontage and 44 miles of creek and tributary frontage, or an area twice the size of Manhattan. From an upland habitat perspective, the sector planning process helped avoid piecemeal habitat fragmentation and cumulative development impacts on the area. It has the potential to accomplish a level of ecosystem conservation and connectivity that cannot be easily accomplished through other planning techniques.

On another parcel just west of the sector plan parcel, The St. Joe Company cooperated with the U.S. Army Corps of Engineers in developing a Regional General Permit, and worked with the Florida Department of Environmental Protection to develop an Ecosystem Management Permit for the area extending from Highway 79 westward into Walton County. These regulatory permits emphasize the ecosystem approach and place under conservation easement an additional 7,200 acres of connected land in southwestern Bay County.



West Bay Sector Plan map showing conservation areas in green and the Regional General Permit also shown in green.

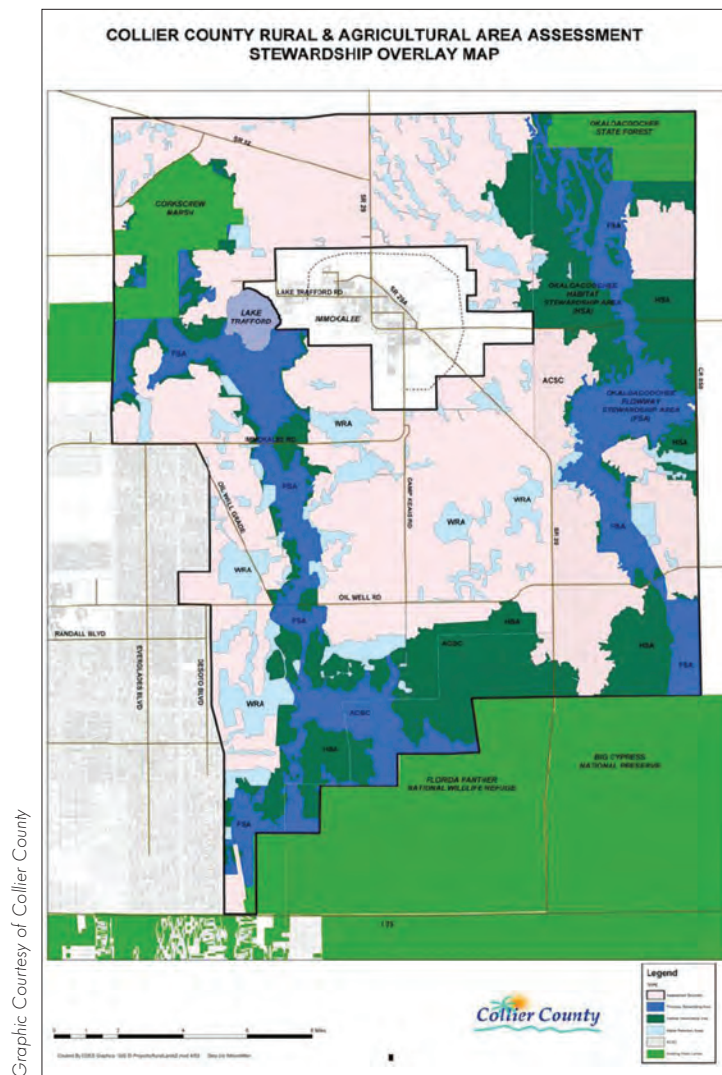
Graphics courtesy of the St. Joe Company

West Bay is a natural bay and sub-basin of the greater St. Andrews by ecosystem near Panama City in Bay County. Due to its long-term single ownership by The St. Joe Company, the land has remained relatively undeveloped and in good biological shape, with the land primarily in silviculture. When an international airport and major development were proposed for the area, the Bay County Board of County Commissioners, the local airport authority, and The St. Joe Company agreed to use the sector planning process for this land.

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The intent of the Florida Legislature was that rural land stewardship areas be used to further the following broad principles of rural sustainability: restoration and maintenance of the economic value of rural land; control of urban sprawl; identification and protection of ecosystems, habitats, and natural resources; promotion of rural economic activity; maintenance of the viability of Florida's agricultural economy; and protection of the character of rural areas of Florida.



Graphic Courtesy of Collier County

The Collier County RLSA.

RURAL LAND STEWARDSHIP AREAS

Section 163.3177(11)(d), F.S. establishes the Rural Land Stewardship Areas program, or RLSA. This is an incentive-based large parcel(s) development process that encourages the voluntary preservation and private stewardship of natural resources and retention of rural uses and agriculture that strives to accommodate economic growth and diversification while at the same time sustainable rural character. Participation in this program is entirely voluntary to landowners within a delineated overlay zone. Rural land stewardship areas may be multi-county, must consist of an area of at least 10,000 acres, and must "be located outside of municipalities and established urban growth boundaries." They are designated by plan amendment.

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Through incentives, the program provides landowners with a means of obtaining this value from market place transactions in return for protecting natural or community resources. This is accomplished by transferring certain rights to another parcel of property where development can suitably take place. These actions are accomplished by assigning transferable land use credits whereby private landowners are provided commensurate equity for their natural, agricultural or community resources. Some of the public value features that could be protected as a result include wetlands, wildlife habitats, recharge areas for underground aquifers, open space and active agricultural lands.

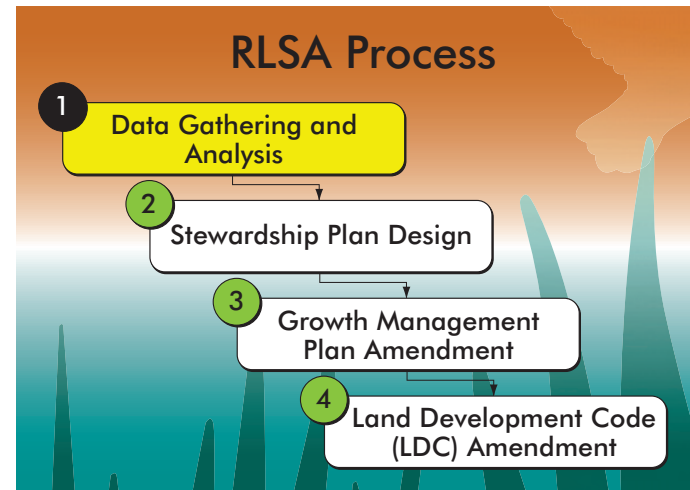
Private landowners and affected communities work cooperatively to develop an agreed upon plan, complete with necessary infrastructure and services, and developed within an overall

setting of private agricultural and conserved natural resources areas. For wildlife and habitats, the RLSA approach can promote development and conservation planning together across large landscapes. This can allow for the wildlife corridors and decreased fragmentation of habitats.

The RLSA program is a relatively new tool. Local governments need to carefully address a host of related land planning issues such as minimum developmental density, intensity and required mix of land uses, size and percentage of public open space, affordable housing, street layout, school location and transportation. For a truly rural pattern to be maintained, the use of this tool may need to carefully control the spacing and distance between development areas. The goal should be to achieve rural and agriculture land protection, conserve habitat, and new community development with appropriate transportation and other infrastructures without inducing sprawling or leap-frogging patterns.

The Mechanics of RLSAs – The tool is different from “Transfer of Development Rights” (TDR) or conservation easement programs, which only give value for one land use layer – the residential layer. RLSAs set up a limited trading program within the designated stewardship area that provides landowners within Stewardship Sending Areas (SSAs). These valuable credits are for defined resources in exchange for giving up specific uses of the land and placing a perpetual conservation or agricultural easement on the land. In order to build under the RLSA, landowners must petition to have a given area designated as a Stewardship Receiving Area (SRA) and purchase a specific number of credits per unit from SSA landowners. This allows multiple owners of natural amenities to participate in the economic development of the land. In fact, the more valuable the natural system resource is, the more the owner of that land can participate in the economic benefits of development within the buildable SSAs.

Assigning Values and Designating Stewardship Sending and Receiving Areas – A stakeholder consensus-based process is used to assign and apportion natural, agricul-



Steps of the Rural Land Stewardship Area Process.

Graphic Courtesy of Wilson Miller, Inc.

tural or identified community resource values within a RLSA. Land within the designated RLSP overlay zone is carefully analyzed through remotely-sensed imagery, field work and research. The resultant data are then assimilated into a Geographic Information System-based matrix and index system. Through a series of analyses, all land within the RLSA is scored (often on a per acre basis) with a value that is based on natural, agricultural or community resources indices representing the magnitude of resources present. Then modeling is used to determine which areas score higher or lower in overall resource values. Based on this analysis, those areas with higher resource scores are likely more suitable areas for sending areas and those areas with lower natural resource scores are likely more suitable for receiving areas.

By design, the program relies on development market rewards as incentives to protect sensitive lands. This is at very little or no cost to taxpayers and does not tap into public land acquisition and management funds. In theory, property lines are erased in the analysis phase, so that developments can be situated in the least environmentally damaging locations, and assets from multiple landowners can be pooled.

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PART I – NATURAL RESOURCE INDEX (NRI) FACTORS		
Step 1: The parcel of land within a potential Sending Area is scored on each of the following four NRI factors.		
Step 2: Sum the scores and enter the cumulative total.		
Land Use / Land Cover	Value	Score
Scrub	1.0	
Hydric and Native	0.8	
Non-Hydric and Native	0.6	
Plantations/Ranching	0.4	
Cropland/Groves	0.3	
Exotics / Others	0.0	
Soils / Surface Water	Value	Score
Xeric (knoll) soils	1.0	
Everglades peat	0.9	
Muck depressions	0.8	
Sand depressions	0.7	
Flats soils	0.5	
Flatwoods soils	0.4	
Water, urban, made lands, or not coded	0.0	
Listed Species	Value	Score
Panther and Federal and State Listed Species	1.0	
Panther and Federal Listed Species	0.9	
Panther and State Listed Species	0.8	
Panther	0.6	
Federal Listed Species and State Listed Species	0.5	
Federal Listed Species	0.4	
State Listed Species	0.3	
None of the above	0.0	
Overlay Designation	Value	Score
Flow way stewardship area (FSA)	1.0	
Habitat stewardship area (HSA)	0.9	
Water retention area (WRA)	0.6	
Not otherwise designated	0.0	
SUBTOTAL =		X.X
PART II – ACREAGE		
Step 1: Enter the total acreage of the subject parcel of land to be designated as SSA:		
SUBTOTAL =		X.X
PART III – INCENTIVE CREDITS		
Step 1: Enter any additional "Incentive Credits" in accordance with County GOP policies:		
SUBTOTAL =		X.X
PART IV – STEWARDSHIP CREDIT FORMULA		
Step 1: Stewardship Credits are calculated using the following formula:		
Stewardship Credits for the subject parcel = subtotal of Part I x subtotal of Part II + subtotal of Part III.		
GRAND TOTAL		X.X

This is a sample acreage credit scoring sheet. There are no set standards or values. Wilson Miller, Inc.

Environment and Wildlife – The RLSA program has the potential to accommodate significant community development while protecting large un-fragmented natural and rural resources. This is achieved by directing development into discreet, clustered settlement patterns away from environmentally sensitive lands, farms and open space. The program has the potential to extend protection over entire regions, rather than protecting land on a piecemeal, parcel-by-parcel basis, and could be useful in large animal protection strategies for both the Florida panther and black bear. Under a RLSA program, environmental and regulatory liabilities (from a land developer’s perspective), such as the presence of wetlands or an endangered species, are turned into assets that actually multiply the market value of a property. Further, RLSAs have the potential to foster maintenance, or even restoration, of local or regional wildlife habitat patches and corridors and to sustain

rural working landscapes without drawing significantly on funds from public land acquisition or management programs.

Nevertheless, if applied inappropriately the RLSA program could also induce sprawling, leap-frogging and strip development patterns harmful to affected habitats and wildlife species. Essentially, through indiscriminate use of this tool, islands of unbalanced development could be approved beyond existing urban service areas, producing satellite urban/suburban areas without sufficient internal economies and services. Such unbalanced development would result in residents driving back and forth to larger, more established urban areas for work and leisure. This could stimulate strip and suburban development in the intervening areas. Careful planning and growth management at the regional and inter-jurisdictional levels should be a part of RLSA use, in order to limit potential negative impacts.

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WILDLIFE CONSIDERATE BRIDGING

Prefabricated bridges that can easily be used to accommodate wildlife passage are manufactured by a number of companies. They are generally inexpensive and can be set in place with minimal difficulty and used in many differing circumstances. Wildlife considerate bridging over waterways, wetlands, ravines and sloughs can be accomplished by developers of DRIs, sector plans, RLSA projects or used by local governments. They require minimal bridge design efforts and construction budgets. Versions exist for golf carts and trail bridges.



Graphic Courtesy of URS Southern

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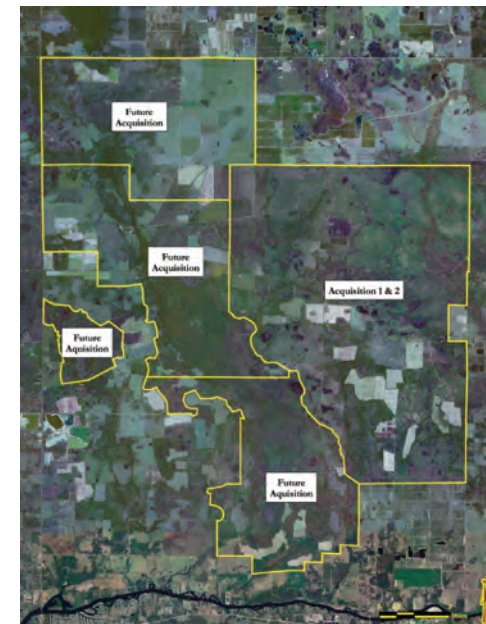
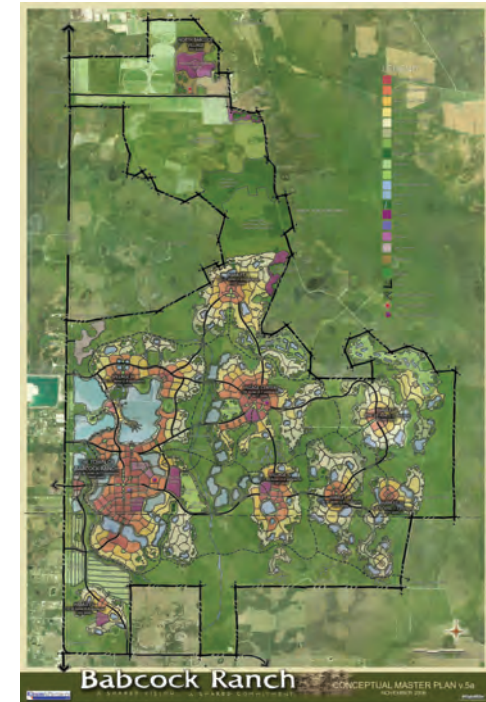
Babcock Ranch is home to the Florida panther, Florida black bear and other threatened and endangered wildlife such as the crested caracara. The ranch includes large, well managed areas of pine and scrubby flatwoods along with a highly functional freshwater swamp system known as Telegraph Swamp. Acquisition of the Babcock Ranch completed a massive natural land corridor from Lake Okeechobee to the Gulf of Mexico.

SPECIAL LARGE PROPERTY OPPORTUNITIES

Occasionally unique opportunities occur to protect large parcels of wildlife habitat that do not necessarily follow existing tools or patterns. These parcels are important in their own right but often also form pieces of larger conservation plans and opportunities. Below are a few examples to consider.

Babcock Ranch – Straddling the border between Charlotte and Lee counties, the 91,000- acre Babcock Ranch was one of the largest remaining undeveloped tracts of privately-owned land in Florida. As part of its continuing commitment to preserve habitats, Florida bought 74,000 acres (staged over several years) of land in Babcock Ranch for 3 hundred million dollars under an agreement that was linked to approval of new town development on the remaining 17,000 acres. Babcock Ranch is home to the Florida panther, Florida black bear and other threatened and endangered wildlife such as the crested caracara. The ranch includes large, well managed areas of pine and scrubby flatwoods along with a highly functional freshwater swamp system known as Telegraph Swamp. Acquisition of the Babcock Ranch completed a massive natural land corridor from Lake Okeechobee to the Gulf of Mexico.

On the top is the proposed master plan for the Babcock Ranch community (17,000 acres) and on the bottom is the adjoining conservation lands bought by the State (74,000 acres). Note that even within the proposed developed area, large open space corridors are being left between development pods. These can be designed to support wildlife.



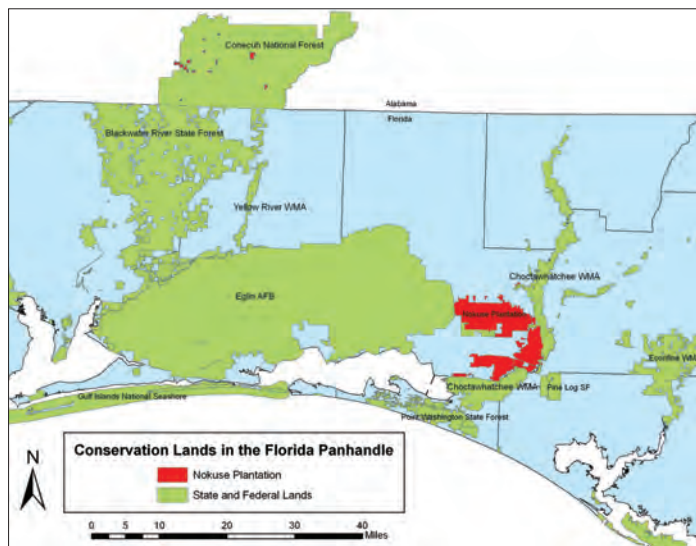
Graphic Courtesy of Collier County (left) and Florida Department of Environmental Protection (right)

Nokuse Plantation pronounced “nō-gō-see”, this 48,000-acre, private conservation initiative is in the Florida Panhandle. It is designed to be both a model and a catalyst for future landscape level conservation projects. The effort actively engages the private sector in the implementation of large scale conservation, preservation and restoration projects using both private funds and federal and state grants. Nokuse is focusing on securing a vital corridor between existing federal and state lands in the Florida Panhandle that will serve as the first link in a biodiversity chain. Part of the effort has included establishment of the E.O. Wilson Biophilia Center. Wilson used the term “biophilia” to describe the human propensity to affiliate with other forms of life. The Center’s goal is to inspire a new generation of stewards by providing students an opportunity to learn and fall in love with life.

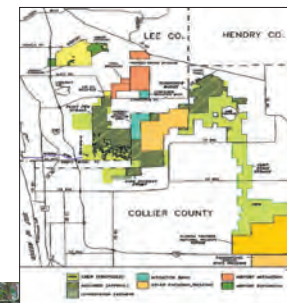
Corkscrew Swamp Sanctuary –

Located northeast of Naples, Corkscrew Swamp Sanctuary is owned and operated by the National Audubon Society and was established in 1952. The Sanctuary’s 11,000 acres are within the Big Cypress Swamp and the Corkscrew Regional Ecosystem Watershed (CREW) planning area. A two-mile long boardwalk passes through the sanctuary and through distinct environmental areas including pinelands, freshwater marshes and wet prairie, cypress swamps and hardwood hammocks. The Sanctuary is one of the largest remaining breeding ground for the endangered wood stork. Low, winter water levels in the Sanctuary provides water holes laden with fish and signals the storks to begin nesting. Unfortunately, if water management practices delay the winter drying season, the storks begin nesting later and when the spring rains disperse the fish from the water holes, the storks prematurely abandon their nests and young.

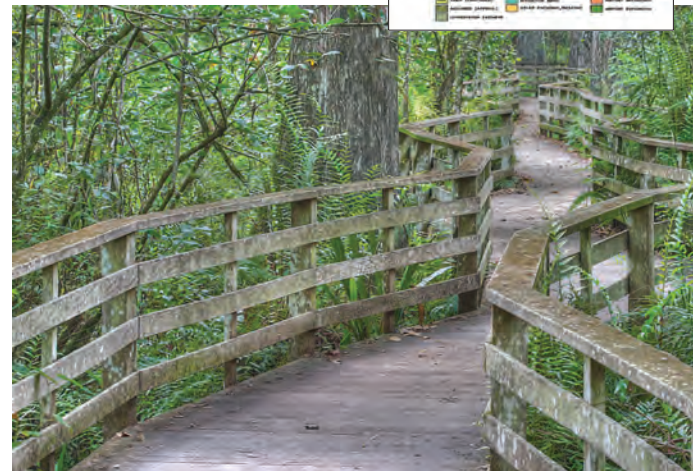
Nokuse Plantation lands (red) are strategic links to the larger Eglin Air Force Base lands, the Choctawhatchee River Conservation lands of the Northwest Florida Water Management District, and The Nature Conservancy’s Delta Preserve. Neighboring conservation areas of Point Washington and Pine Log State Forests offer potential for possible future corridor connections.



Graphic Courtesy of Matt Aresco, Nokuse Plantation



Corkscrew Swamp Sanctuary (Orange) is located in the center of this map, forming a linkage between the east and west conservation planning area known as Corkscrew Regional Ecosystem Watershed.



Courtesy of Matthew Paulson and the Florida Wildlife Federation

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The Florida Wildlife-Friendly Toolbox

Archbold Biological Station – This independent, non-profit research facility is devoted to long-term ecological research and conservation. The Station owns and manages a 5,200-acre, globally significant natural preserve. The Station also manages the MacArthur Agro-ecology Research Center (10,300 acres) at Buck Island Ranch. Archbold Expeditions also manages the Reserve (3,648 acres) adjacent to the Station. The Station has been instrumental in developing a major plan for a network of biological preserves to protect the endangered habitats of the Lake Wales Ridge ecosystem. This plan includes the first National Wildlife Refuge in the United States to be designed around protection of endangered plants.



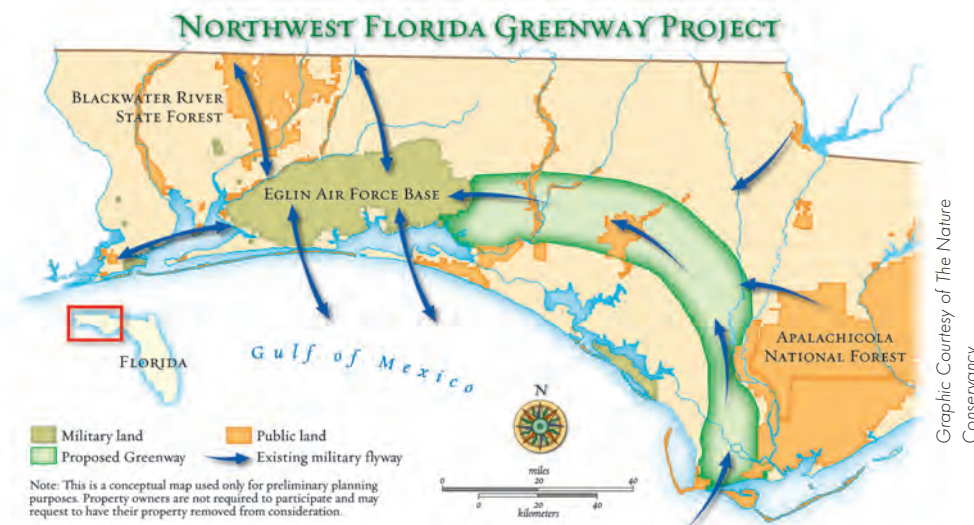
Graphic Courtesy of Archbold Biological Station

Archbold Biological Station is a 5,200 acre protected site at the south end of Lake Wales Ridge which is a hotspot for many species endemic to Florida. The Lake Wales Ridge has been heavily impacted over the years from citrus groves and suburban development each of which also favor the well-drained sandy soils.

Eglin Air Force Base and The Gulf Coastal Plain Ecosystem Partnership (GCPEP) – The Gulf Coastal Plain Ecosystem Partnership (GCPEP) is a unique collaboration among Eglin AFB, The Nature Conservancy (TNC), Champion International Corporation, Blackwater River State Forest, Northwest Florida Water Management District and National Forests in Alabama and Florida (Cooperation under the auspices of a 1996 multi-party Memorandum of Understanding). The partners manage more than 840,000 acres in one of the most important conservation landscapes in the Southeast. Eglin Air Force Base alone spans 463,742 acres across three counties in Northwest Florida, and over 130,000 square miles of military operating airspace in the eastern Gulf of Mexico. The base was created out of the Choctawhatchee National Forest in the World War II era. Eglin’s mission acknowledges responsible stewardship of the area’s natural resources using integrated natural resources management employing principles of ecosystem

management. This allows compatible, multiple use of ranges and ensures ecosystem viability while protecting and conserving biological diversity. Ecosystem management, biodiversity conservation and adaptive management are the foundations of Eglin’s conservation programs. Ecosystem principles and guidelines are implemented through an adaptive management approach.

The Eglin landscape contains almost half of the 83 natural community types recognized in Florida. These natural communities vary in size from hundreds to thousands of acres. Thirty-four are the premiere remaining examples of high-quality natural communities in the world. They provide critical habitat for rare and endangered plants and animals. Eglin’s noteworthy community types include: the largest remaining contiguous acreage of old-growth longleaf pine forests; twenty miles of pristine barrier islands; and the best remaining global examples of steephead creeks.



Graphic Courtesy of The Nature Conservancy

Eglin AFB and the proposed Northwest Florida Greenway would serve the dual purposes of protecting military mission capabilities of air training and testing routes from the Gulf of Mexico and provide habitat and wildlife conservation areas linking the Apalachicola National Forest, Eglin and Blackwater State Forest. Coordinated land planning across multiple jurisdictions and properties is required.