

conservation methods

Task 4. Menu of Alternative Methods

Growth in the form of sprawl consumes large land areas with little regard for the different densities of the urban/rural framework. This pattern of growth has become evident throughout much of Florida as suburban densities of housing have spread further from the urban fringe deep into the rural landscape. Recently, Martin County has begun to experience this development pressure on agricultural, rural and environmentally sensitive lands. Sprawl affects local economies and the quality of life for its residents taking agricultural land out of production and diminishes available water supplies, wildlife habitats and recreation opportunities. It also frequently destroys the very quality of life many are seeking when they move to rural areas.

This chapter suggests a menu of alternative conservation methods, in some way counter balancing the methods described in the Residential land study for increasing density. This chapter focuses on alternative methods for conserving the rural landscape. It draws from policies that have already been introduced at the state level and new methods that could be implemented at the local level; it also looks at methods used across the country for conservation. The alternative methods focus on:

- Agricultural land protection (zoning, conservation subdivisions, purchasing development rights, urban growth boundaries, and federal programs)
- Conservation land protection (conservation subdivisions, mitigation ordinances and policies, transfer or purchasing of development rights, urban growth boundaries, and federal programs)
- Benefits to farmers (tax credits, right-to-farm ordinances, and federal programs)

Regardless of which methods are chosen, careful consideration should be given to Martin County's environmental constraints. You will find in

Appendix A of this chapter a list of Martin County's environmental resources and areas of particular concern. To further understand the local and state implication of these methods we also gained input from stakeholders at the state and local level to insight to alternative conservation methods and the planning environment of Martin County a summary of these interviews can be found in Appendix B).

State of Florida Methods

At the state level, Florida has enacted several policies to ensure the availability of agricultural and conservation lands. Several land acquisition programs, such as Preservation 2000 (P2000), Conservation and Recreational Lands (CARL) and Land Acquisition Trust Fund (LATF), have purchased over one million acres of environmentally sensitive lands since 1990. The Florida Statutes include several policies for land acquisition for natural resource protection (Chapter 186), coordinated state planning efforts and review of Developments of Regional Impact. Other measures to protect agricultural and conservation lands include:

- tax relief/greenbelt laws (Florida Statutes – Chapter 193) – tax on agricultural and rural lands based on agricultural use instead of assessment based on development or speculative value
- concurrency management (Florida Statutes – Chapter 163) – provision for infrastructure prior to development
- conservation easements (Florida Statutes – Chapter 193, 570, 704)
- comprehensive growth management (Florida Statutes – Chapter 163) – planning orderly growth
- revenue bonds (House Bill 17) – constitutional amendment that permanently gives authority to the state to issue revenue bonds for the acquisition of conservation lands
- right-to-farm laws (Florida Statutes – Chapter 823) – protection of agricultural activities from nuisance suits
- transfer of development rights (Florida Statutes – Chapter 163) – enabling law to establish program – no land bank efforts to date

In 2001, Florida's Growth Management Study Commission (*A Livable Florida for Today and Tomorrow*) examined processes for the development of detailed building blocks of a new, stronger, more effective growth management program. Overall, the Commission recommended the following actions:

1. Revise the State Comprehensive Plan to include a vision statement about sustainability
2. Develop a methodology for reviewing local land use decisions
3. Empower citizens to understand and participate in growth management process
4. Focus State resources and responsibilities on areas of compelling interest to the State
5. Design and implement regional cooperation agreements for developments
6. Require financial feasibility studies for public school facilities
7. Authorize incentives for an effective urban revitalization policy
8. Develop an incentive-based state rural policy restoring rural land values and protecting private property rights

In 2002, the Brookings Institution Center on Urban and Metropolitan Policy recognized Florida's conservation efforts, (*Open Space Protection: Conservation Meets Growth Management*) ranking Florida second in the U.S. behind California in total federal and state spending on the Land and Water Conservation Fund from 1965 to 1998.

Martin County Methods

Currently, Martin County's main focus on preventing and controlling the encroachment of urban and suburban development into agricultural, rural and environmentally sensitive lands is through the Comprehensive Growth Management Plan. The overall purpose of the Comprehensive Growth Management Plan is to guide growth in an orderly manner by setting goals and policies for future land use, conservation and open space, and infrastructure.

In addition to primary and secondary urban service district the county also protects environmentally sensitive wetlands. According to the Comprehensive Growth Management Plan, "all wetlands in Martin County shall be protected" and "a minimum of 25 percent of the existing upland native habitat in the County will be preserved." The wetlands protection policy requires that "no negative impacts shall be allowed in wetlands, within the wetland buffer, nor within the upland transition area surrounding the wetland." The upland native habitat preservation policy requires that "all development shall protect and preserve native upland habitat in place within the development."

Other methods that are being used to protect agricultural and conservation lands include:

- Lands For You Program – \$20 million bond approved by voters in 1989 for acquiring conservation and recreation lands
- Adequate public facility standards (Land Development Regulations Article 5) –provision to ensure that all development in unincorporated Martin County is served by adequate public facilities, that the requirement of fiscal conservancy and efficient delivery of service is met, and that development pays its share of the cost of new public facilities

Other Methods

The menu of alternatives listed below is compiled from strategies that have been used in other jurisdictions throughout the country to prevent the encroachment of development into agricultural, rural and environmentally sensitive lands. In each category, we have discussed the strategy in general, looked at how it might be applied to Martin County, then listed examples where the strategies have been implemented and sources of more information.

1. agricultural district

The agricultural district strategy sets aside lands for agricultural uses and provides benefits to landowners. The program, which is usually authorized at the state level but implemented at the local level, encourages and protects commercial farming. Benefits to farmers typically include tax relief in the form of tax credits, differential property taxation or property tax relief. Once established, the agricultural district can include a number of provisions. The most common provisions include limits on the use of eminent domain by governments, limits on non-agricultural development, and restrictions on the amount of state construction of infrastructure, such as roads and sewers, in agricultural districts.

Enrollment in agricultural districts is voluntary and the districts can be designed for local conditions. A major benefit is the encouragement of continued farming by protecting a critical mass of agriculturally viable lands.

Issues to consider with agricultural districts include: an often lengthy and complicated implementation process and lack of incentives sufficient to encourage enrollment in the district. In addition, the design of some agricultural districts does not limit all non-farm development. Non-farm development often disrupts agricultural practices with the expansion of water,

sewer and other services. Currently, Florida does not have any legislation with provisions for agricultural districts.

Although Martin County does have agricultural districts as part of the zoning code, the only provisions are policies regarding prohibited uses, permitted uses, and required lot areas.

Examples:

Minnesota (statewide and local programs)

Virginia (statewide and local programs)

Calvert County, Maryland

Sources:

American Farmland Trust

www.farmland.org

Environmental Protection Agency (Smart Growth Policy Database)

<http://cfpub.epa.gov/sgpdb/glossary.cfm>

Smart Growth in Maryland

<http://www.mdp.state.md.us/smartgrowth/index.html>

2. agricultural zoning

With agricultural zoning, activities other than agricultural production are restricted or discouraged. Several forms of agricultural zoning include exclusive agricultural zoning, large-minimum-lot-size zoning, area-based allowance zoning, fixed area-based allowance zoning, and sliding scale area-based allowance zoning. Area-based allowance zoning establishes a formula of non-farm dwellings permitted per acre. Fixed area-based allowance zoning specifies a certain number of dwelling units per acre, while sliding scale area-based allowance zoning allows parcels to be divided depending on the size of the tract. In addition, minimum lot sizes, determined by the implementing authority and right-to-farm provisions, are often included as part of agricultural zoning policies.

The agricultural zoning process is typically speedy, flexible and inexpensive for local governments to implement. This method also reduces conflicts between farmers and non-farmers and reduces infrastructure costs.

Drawbacks to agricultural zoning include difficulties in monitoring and enforcement and possible reductions in land values. In addition, agricultural

zoning may be only a temporary solution since land can still be annexed and re-zoned for other uses by adjoining municipalities.

Agricultural zoning is part of the Martin County Zoning Code. However, agricultural zoning codes for the county are not consistent with other case studies where agricultural and rural lands protection is a main goal. Most cases, where agricultural zoning is used as a land conservation tool, the codes include lot sizes that are generally at a minimum of 20 to 100 acres and allow fewer permitted uses that could potentially reduce the productivity of agricultural lands.

Examples:

California (rural counties)

Lancaster County, Pennsylvania

Virginia (rural counties)

Sources:

American Farmland Trust

www.farmland.org

Environmental Protection Agency (Smart Growth Policy Database)

<http://cfpub.epa.gov/sgpdb/glossary.cfm>

U.S. Department of Energy – Smart Communities Network

<http://www.sustainable.doe.gov/codes/agzon.shtml>

3. cluster zoning/conservation subdivision

Cluster zoning or conservation subdivision design allows compact residential development in areas that are zoned for large minimum lot sizes. The design reduces the perceived intensity of development, preserves desired rural character, and establishes distinct neighborhood identity. Conservation design achieves these benefits by maintaining existing residential density but clustering structures in the most buildable areas of the property in exchange for open space elsewhere on the site. To maintain the same number of lots as regular zoning districts, conservation layouts use flexible, and often smaller, lot dimensions to place homes in the buildable envelope. Roads may also be narrower within these communities.

This approach preserves farmland and maintains the regional agricultural economic base of rural areas. This design also accommodates the demand for additional residential growth without depleting open spaces or fragmenting natural habitats. Since the design is often flexible, it also allows for a greater a

variety of housing types for lower-income and elderly persons and creates open space amenities for its residents. Site development costs for conservation developments can also be 25 to 50 percent less than conventional projects. Other advantages of conservation design include providing buffers between residential development and farmland. However, care must be taken so that nuisance charges will not be brought against farmers because of residential proximity to the pesticides, odors or harvesting procedures associated with farming. (see menu item #6. right-to-farm ordinances)

Conservation design as a tool for preserving farmland may be most effective on available, large tracts of land. That means that even though conservation design is more context-sensitive than conventional approaches, it still places new growth in greenfield areas away from existing infrastructure systems.

In Martin County, a constraint to implementing cluster zoning is the Primary Urban Service District (PUSD). The PUSD restricts water and sewer extensions past the boundary; therefore, any higher-density residential development outside the PUSD would be impossible without the required infrastructure.

In 2001, the Florida Legislature provided for Rural Land Stewardship Area designations from the 1995 state law dealing with “innovative planning and development strategies” (Florida Statutes – Section 163.3177). This program allows the Florida Department of Community Affairs to test cluster zoning or cluster development in rural areas in conjunction with the purchase of development and density rights.

Examples:

Burnett County, Wisconsin

Connecticut River Valley

Lancaster County, Pennsylvania

Sources:

American Farmland Trust

www.farmland.org

Arendt, Randall. 1994. *Rural by Design*. Chicago: American Planning Association. Environmental Protection Agency (Smart Growth Policy Database)

<http://cfpub.epa.gov/sgpdb/glossary.cfm>

Pace Law School – Land Use Law Center

<http://www.pace.edu/lawschool/landuse/cluste.html>

University of Minnesota Extension Service

<http://www.extension.umn.edu/distribution/naturalresources/DD7059.html>

4. agricultural conservation easements

Agricultural conservation easements, also known as PACE or purchase of development rights (PDR), are the voluntary sale of development rights by private landowners to a government entity or nonprofit organization. Agricultural conservation easements limit the land use to agricultural practices or open space, and legally bind future landowners to the agreement.

Agricultural conservation easements are completely voluntary and often enacted at the state level and local level. Easements potentially lower income and property taxes for private landowners but can reduce the potential for disagreements over future land uses.

Drawbacks to conservation easements include requiring greater financial resources to administer and having established entities or agencies to monitor the program. Also in some cases if the easement is not permanent, they can be used as a way to lower costs for non-productive land until development potential is fiscally possible then easements are allowed to expire and development occurs.

At a state level, the Florida Rural and Family Lands Protection Act was approved in 2001 (Florida Statutes – Section 570.70 and 201.15) as a voluntary program that pays landowners for agricultural conservation easements. Although the program has been authorized for implementation by the Department of Agriculture and Consumer Services, it still lacks funding.

Although several land trusts operate in Martin County, such as the Land Preservation Trust of Palm Beach County and the Martin County Regional Land Trust, there are not any programs set up by Martin County to coordinate and oversee the process of agricultural conservation easements.

Examples:

Burlington County, New Jersey
 Montgomery County, Maryland
 Morristown, Vermont
 State of Colorado
 State of Connecticut

Sources:

1000 Friends of Minnesota

<http://www.1000fom.org/lctools4.htm>

American Farmland Trust

www.farmlandinfo.org

Environmental Protection Agency (Smart Growth Policy Database)

<http://cfpub.epa.gov/sgpdb/glossary.cfm>

Official Colorado State Website

<http://www.state.co.us/issues/smartgrowth.html>

State of Connecticut Website

<http://www.state.ct.us/governor/news/042202.htm>

Vermont Land Trust

<http://www.vlt.org/>

5. mitigation ordinances and policies

Mitigation ordinances and policies require developers of agricultural and rural lands to set aside a portion or percentage of the land as open space. Although this is a relatively new strategy, Davis, California has already implemented a “one-to-one measure” requiring developers to permanently protect one acre of farmland for every acre developed.

The advantages of mitigation ordinances are that either agricultural land is protected or developers must pay a fee to preserve open space elsewhere. Developers can also place an agricultural conservation easement on agricultural lands (in their ownership) in other parts of a jurisdiction to satisfy the ordinance requirements.

Some of the drawbacks of mitigation ordinances include developers choosing to just pay a fee, rather than protecting agricultural lands, with the fee often not offsetting the cost of purchasing the alternative agricultural land. In addition, local governments may not have the enabling authority to implement mitigation ordinances and policies.

In Martin County, the Growth Management Plan establishes a policy to preserve wetlands and native upland habitat within all development and does not focus specifically on agricultural land protection. To ensure the protection of wetlands, buffer zones are required for development. For native upland habitat protection, 25 percent native upland habitat area must be preserved for all development and 10 percent with agricultural development. This native

upland and wetlands preservation is a step in the right direction for conservation and protection of environmentally sensitive resources, this type of protection does not guarantee continuous corridors or segments of preservation.

Examples:

Davis, California

King County, Washington

Sources:

American Farmland Trust

www.farmland.org

U.S. Department of Energy – Smart Communities Network

<http://www.sustainable.doe.gov/codes/rightfarm.shtml>

6. right-to-farm ordinances

Right-to-farm ordinances and policies protect farmers from public and private nuisance suits. Ordinances can be established at the state and local level.

Typically, right-to-farm ordinances help farmers prevail in private nuisance lawsuits and establish farming as a desirable activity in the community. This is important when working farms begin to be surrounded by residential developments.

In San Luis Obispo, California, government officials have recognized that where non-agricultural land uses occur near agricultural uses, agricultural operations often become the subjects of nuisance complaints. As a result, farmers must often cease or curtail operations which can lead to lack of investment in farm improvement. In response to the need for agricultural operations to be a viable part of the San Luis Obispo economy, a right-to-farm ordinance was implemented stating that no agricultural activity, operation or facility can become a nuisance after it has been in operation for more than three years.

In Florida, right-to-farm laws protect agricultural activities that have been under operation for a certain period of time from nuisance law suits. Also, under the Florida Statutes on right-to-farm laws, “a local government may not adopt any ordinance, regulation, rule, or policy to prohibit, restrict, regulate, or otherwise limit an activity of a bona fide farm operation on land classified as agricultural land” (Florida State Statute – 823.14).

Examples:

Davis, California

San Luis Obispo, California

Sources:

San Luis Obispo County Code

<http://www.sloag.org/assets/rtf%20ordinance/rtf%20ordinance.pdf>

U.S. Department of Energy – Smart Communities Network

<http://www.sustainable.doe.gov/codes/rightfarm.shtml>

7. tax credits and tax relief programs

Tax credits and tax relief programs help the economic viability of farming. All states have some sort of program to reduce the property taxes paid by farmers. All states, except Michigan, have a differential assessment program where agricultural lands are assessed at the value of their current use, not potential use, in other words a farm is taxed on the income stream derived from its farm use, e.g. net sales from orange groves, not its future value as residential land. Some states have programs, known as circuit breakers, where farmers are allowed to claim state income tax credits to compensate for local property tax bills.

The benefits of tax credits and tax relief programs include lowering farmers' expenses to ensure that agricultural lands and farming practices are protected and the inequities in the tax system are balanced. Tax credits or differential assessment are public policy in support of farming as a local resource to be protected.

Issues to consider with tax credits and tax relief programs are the non-permanent nature of the credits or programs. Therefore, real estate speculators often receive subsidies to keep agricultural lands in agricultural production pending development. When it becomes more profitable to develop the land, the tax credit or tax relief is simply forgone and the land is developed.

In Florida, agricultural and rural lands are taxed based on agricultural use instead of assessment based on development or speculative value. Martin County does not offer any further tax relief programs than what is provided by the state.

Examples:

Delaware

Minnesota
New York
Ohio
Vermont

Sources:

American Farmland Trust
www.farmlandinfo.org

Ohio State University – Community Development
<http://ohioline.osu.edu/cd-fact/1267.html>

Sierra Club
<http://www.sierraclub.org/policy/conservation/agriculture.asp>

8. transfer of development rights

A transfer of development rights program, or a TDR program, allows landowners to transfer the right to develop one parcel of land to a different parcel of land. This transfer of rights allows higher densities than ordinarily permitted by base zoning.

A TDR program is completely voluntary and has several benefits that include protecting farmland permanently while maintaining private ownership, directing growth to areas with adequate infrastructure, and providing incentives for growth in developed areas.

The main drawbacks to a TDR program include the cost and effort in establishing the system and the possibility that no market exists for the transfers. Several factors must be determined to set up a working TDR program: determining the right mix of incentives, choosing where to transfer development rights, and choosing the densities at which development can occur. In determining the right mix of incentives, chosen incentives must be strong enough to encourage participation. In addition, the TDR program can often be complicated by lengthy processing times and implementation with appropriate zoning.

Although Florida has established a transfer of development rights program, it has never been implemented in the state. In Martin County, the only type of density transfer is established in the Growth Management Plan for wetland properties. For sites that contain wetlands, property owners are allowed to transfer the density rights from wetland areas to upland areas for development. However, this transfer of density is only allowed within one site.

Examples:

Boulder County, Colorado
Calvert County, Maryland
Montgomery County, Maryland

Sources:

1000 Friends of Minnesota
<http://www.1000fom.org/lctools5.htm>
American Farmland Trust
www.farmland.org
Environmental Protection Agency (Smart Growth Policy Database)
<http://cfpub.epa.gov/sgpdb/glossary.cfm>
Sprawl Guide: Solutions
http://www.plannersweb.com/sprawl/solutions_sub_tdr.html
Washington University School of Law
http://www.landuselaw.edu/tdr_boul.html

9. urban growth boundaries

An urban growth boundary (UGB) is a legally enforced limit within a designated compact urbanized core. The UGB is a line drawn around an urban area outside of which local governments prevent or strongly discourage development. Urban growth boundaries are typically usually long-term tools, established for a period of 15 to 20 years.

Advantages to UGBs include more efficient use of tax dollars towards public facilities and encouragement of compact development. Urban growth boundaries help stop communities from merging with one another thereby protecting community identity and allowing for a variety of densities to exist.

Drawbacks to UGBs are often found in the implementation process. Several factors such as determining the actual boundary and duration of the boundary, accurate population and economic forecasts, desired densities within urban areas, and responsibility of governments to provide needed levels of infrastructure are issues to consider.

Urban growth boundaries differ from the urban service district (USD), which is found in Martin County. The USD is similar to the UGB by placing geographical limitations on growth by limiting water and sewer infrastructure. However, the boundaries that distinguish urban from rural tend to be more

flexible under the USD than under a true UGB program. The USD is shorter term and emphasizes an orderly geographical sequencing of growth, rather than absolute restrictions on the level of growth. The USD seeks to limit growth to those areas where the provision of public infrastructure is most cost-effective. Urban growth boundaries, in contrast, place certain rural/conservation lands off limits to development regardless of public service efficiencies.

Examples:

Boulder, Colorado
 Dade County, Florida
 Lexington, Kentucky
 Orange County, Florida
 Portland, Oregon
 Sacramento, California
 San Diego, California
 San Jose, California

Sources:

1000 Friends of Oregon
<http://www.friends.org/resources/myths.html>
 City of San Jose
<http://www.ci.san-jose.ca.us/planning/sjplan/pdf/smartugb.pdf>
 Department of Land Conservation and Development
<http://www.lcd.state.or.us>
 Environmental Protection Agency (Smart Growth Policy Database)
<http://cfpub.epa.gov/sgpdb/glossary.cfm>
 Sprawl Watch
<http://www.sprawlwatch.org/ubg.html>

10. Farm Bill 2002

The Farm Security and Rural Investment Act of 2002, also known as Farm Bill 2002, is landmark legislation for agricultural and conservation protection funding. There is much debate about the bill but for our purposes, the conservation provisions were developed to assist farmers and ranchers in meeting environmental challenges on their land and provide a variety of subsidy for these agricultural uses. This legislation simplifies some existing programs and allows farmers and ranchers to participate in conservation programs. Relevant agricultural and conservation programs are listed below:

a. Wetlands Reserve Program (WRP)

The Wetlands Reserve Program is U.S. Department of Agriculture's premier wetland restoration program. It offers landowners an opportunity to obtain financial and technical assistance for restoring and protecting wetlands on their property. The Farm Bill increases overall acreage caps for the WRP from 975,000 to 2.275 million acres. Applications are available at local USDA service centers, NRCS field offices and conservation districts or on the web at (<http://www.sc.egov.usda.gov/>).

Although Martin County has not actively promoted individual participation in the WRP, approximately four residents in the county have participated in the program to date.

b. Conservation Reserve Program (CRP)

The Farm Bill reauthorizes the successful Conservation Reserve Program. The CRP provides technical and financial assistance to reduce soil erosion, protect the nation's ability to produce food, reduce sedimentation in streams and lakes, improve water quality, establish wildlife habitat and enhance forest and wetland resources. CRP encourages farmers to convert highly erodible cropland or other environmentally-sensitive acreage to vegetative cover. The Farm Bill increases overall acreage for the CRP from 36.4 to 39.2 million acres.

The Conservation Reserve Program was established in 1985 and provides farm owners or operators with an annual per-acre rental payment and half the cost of establishing permanent land cover, in exchange for retiring environmentally sensitive cropland from production for 10 to 15 years. The latest registering of land is known as *signup 20*.

The CRP approved an additional 2.46 million acres for *signup 20* (effective October 1, 2000) with benefits to farmers at an estimated \$52.75 per acre, which is above the historical average of \$50.00 per acre. For *signup 20*, Florida enrolled approximately 8,500 acres for a total of 88,450.50 acres in the Florida program.

In 1990, the USDA Economic Research Service (ERS) estimated that the net social benefits of the Conservation Reserve Program at \$4.2-\$9 billion in present value over the life of the program. Some of the social net benefits included net farm income, the value of future timber, preservation of soil productivity, and improved surface-water quality. More information can be

found on the web at (<http://www.fsa.usda.gov/crpstorpt/08approved/MEPEGGR1.HTM>).

c. Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program is part of the CRP. It is a voluntary program designed to address specific grassroots environmental issues related to agriculture. Through the CREP, farmers can receive annual rental payments and cost-share assistance to establish long-term, resource conserving covers on eligible land. The CREP combines the CRP with state programs to provide a framework allowing USDA to work in partnership with state government or local interests. Because the Farm Bill increases acreage caps for the CRP, it will provide more opportunities to create public partnership agreements. More information on the CRP and the CREP can be found on the web at (<http://www.fsa.usda.gov/dafp/cepd/default.htm>).

d. Conservation Security Program

The Farm Bill creates a new Conservation Security Program to financially recognize ongoing stewardship efforts and help producers address additional resource concerns on working agricultural lands. The Farm Bill establishes the program for fiscal years 2003 through 2007.

Payments to farmers are based on conservation practices and natural resource and environmental benefits. Payments will include three components: base payments for all acreage enrolled, cost-share payments for costs of adoption and maintenance of practices, and bonus payments for exceptional environmental benefits.

e. Farmland Protection Program (FPP)

The Farmland Protection Program helps protect prime farmland from conversion to nonagricultural uses. The Farm Bill reauthorizes this program and extends it to nongovernmental organizations, as well as states, tribes and local governments, to purchase conservation easements. It also expands the program to protection of farms and ranches that contain historical and archaeological sites. A request for proposals for \$50 million in funding was published in the Federal Register on May 30, 2002 and can be found on the web at (<http://www.nrcs.usda.gov/programs/farmland/2002/PubNotc.html>).

Conclusion

As agriculture becomes less profitable due to competition from other nations or pressures to conserve environmental resources, demands for alternative development will increase. In addition, as more people look for the rural lifestyle, demand for alternative development will increase. How this demand is addressed is especially important to Martin County, a county that has been in the forefront of conservation and growth management in Florida.

After considering this alternative menu of conservation methods and understanding the desire to reduce unrestrained growth in Martin as indicated in the Growth Management Plan, we suggest that the county look more closely at instituting or invigorating two of the methods, in particular:

- Transfer of development rights
The usual arguments against TDRs are cost and staff time. However, these can be overcome with policy direction from the citizens. The larger drawback is the incomplete market for the density transfers themselves. In other words, where within Martin is there a profitable market in transfers of development densities? Incentives to transfer the density must be big enough to create a complete market with both “buyers” and “sellers” of density transfers. On the other hand, by severely restricting development on rural lands, requiring large open space requirements and careful zoning restrictions on these lands pressure may increase on the transfer “seller” end of the transaction. Presumably the “buyer” end for density would increase as the perceived large quantity of developable land is restricted. Time and effort are a given in creating a workable TDR program. Carefully “pricing” incentives and disincentives of development in formerly rural areas, through strong and continued public policy and legislative actions will help create the market.
- Cluster zoning/conservation subdivision
Any residential development that occurs outside the primary urban service district surely and possibly the secondary urban service district, should first take into account wetland and upland preservation, as is currently required. However, an overlay outside of the primary and secondary USD should be created requiring conservation subdivision design setting aside a large portion of undivided open space to remain protected. Careful consideration should be given size, configuration of open space, connectivity of open space to surrounding areas, as well as ownership of open space.

APPENDIX - A

Environmental Resources

Martin County's environmental resources serve as habitats for rare plants and animals, recreation opportunities for the public, and recharge areas for the County's water supply. Several agencies partner to protect and manage these resources including the South Florida Water Management District and the Florida Fish and Wildlife Commission.

Many projects are funded through the State of Florida Department of Environmental Protection's Florida Forever program. The Florida Forever program funds projects which restore, maintain, develop and protect the State's environmental resources. Florida Forever replaces Preservation 2000, which was the largest program of its kind in the United States.

The following is a summary of the environmental resources of Martin County, as well as some projects and managed lands that preserve and protect the County's natural environment.

Rare Plants and Animals

The County is home to over 40 animal and plant species that have a protected status at either the state or federal level. (See table below).

Common Name	Global Rank	State Rank	Federal Status	State Status
American Alligator	G5	S4	Threatened	Species of Special Concern
Bald Eagle	G4	S3	Threatened	Threatened
Beach Jacquemontia	GS	S1	Endangered	Endangered
Black Skimmer	G5	S3	None	Species of Special Concern
Brown Pelican	G4	S3	None	Species of Special Concern
Celestial Lily	GS	S2	Mgmt Concern	Endangered
Crested Caracara	G5	S2	Threatened	Threatened
Eastern Indigo Snake	G4T3	S3	Threatened	Threatened
Florida Burrowing Owl	G4T3	S3	None	Species of Special Concern
Florida Mouse	G3	S3	None	Species of Special Concern
Florida Peperomia	G5	S2	None	Endangered
Florida Pine Snake	G4T3	S3	None	Species of Special Concern
Florida Sandhill Crane	G5T2T3	S2S3	Endangered	Threatened
Florida Scrub-Jay	G3	S3	Threatened	Threatened
Giant Orchid	G2	S2	Mgmt Concern	Threatened
Godfrey's Privet	G2	S2	None	Endangered
Gopher Tortoise	G3	S3	None	Species of Special Concern
Green Ladies'-Tresses	G4	S1S2	Mgmt Concern	Endangered
Green Turtle	G3	S2	Endangered	Endangered
Hawksbill Turtle	G3	S1	Endangered	Endangered
Johnson's Seagrass	G2	S2	Threatened	None
Kemp's Ridley	G1	S1	Endangered	Endangered
Least Tern	G4	S3	None	Threatened
Leatherback	G3	S2	Endangered	Endangered
Limpkin	G5	S3	None	Species of Special Concern
Little Blue Heron	G5	S4	None	Species of Special Concern
Loggerhead	G3	S3	Threatened	Threatened
Low Peperomia	G5	S2	None	Endangered
Manatee	GS	S2	Endangered	Endangered
Many-Flowered Grasspink	G3	S2S3	Mgmt Concern	Endangered
Osprey	G5	S3S4	None	Species of Special Concern
Pine Pinweed	G2	S2	None	Endangered
Piping Plover	G3	S2	Threatened	Threatened
Red-Cockaded Woodpecker	G3	S2	Endangered	Threatened

Common Name	Global Rank	State Rank	Federal Status	State Status
Reddish Egret	G4	S2	None	Species of Special Concern
Reindeer Lichen	G1	S1	Endangered	Endangered
Roseate Spoonbill	G5	S2	None	Species of Special Concern
Sherman's Fox Squirrel	G5T3	S3	None	Species of Special Concern
Snail Kite	G4G5T2	S2	Endangered	Endangered
Snowy Egret	G5	S3	None	Species of Special Concern
Southeastern American Kestrel	G5T4	S3	None	Threatened
Southeastern Beach Mouse	G5T1	S1	Threatened	Threatened
Swamp Plume Polypody	G5	S2	None	Endangered
Tiny Polygala	G1	S1	Endangered	Endangered
Toothed Lattice-vein Fern	G5	S2	None	FACW
Tricolored Heron	G5	S4	None	Species of Special Concern
White Ibis	G5	S4	None	Species of Special Concern
Wood Stork	G4	S2	Endangered	Endangered

Source: Florida Natural Areas Inventory 2000, 2001.

Online Field Guide to the Rare Plants and Animals of Florida, July 2001

<http://www.fnai.org/fieldguide/>

Notes:

G1 - Critically imperiled globally because of extreme rarity

G2 - Imperiled globally because of rarity

G3 - Either very rare and local throughout its range

G4 - Apparently secure globally (may be rare in parts of range)

G5 - Demonstrably secure globally

S1 - Critically imperiled in Florida because of extreme rarity

S2 - Imperiled in Florida because of rarity

S3 - Either very rare and local throughout its range

S4 - Apparently secure in Florida

S5 - Demonstrably secure in Florida

T* - Threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species

Allapattah Flats/Ranch

The Allapattah Flats cover over 36,000 acres in north central Martin County.

This area is on the 2002 Florida Forever List. The land consists of Bahia grass pastures, pine flatwoods and depression marshes along with forested wetlands. The Flats serve as an important habitat with several rare plants and animals living there.

Atlantic Ridge Ecosystem

This 12,300-acre upland/wetland system provides groundwater baseflow for the south fork of the St. Lucie River and the north fork of the Loxahatchee River. This land serves as a valuable aquifer recharge area and water supply to the coastal areas of the County. This project is also on the 2002 Florida Forever List.

Pal-Mar

Pal-Mar covers over 10,000 acres with projected future acquisitions totaling 125,000 acres. The vision is the creation of a greenbelt connecting the Dupuis Preserve across the Corbett WMA to Jonathon Dickinson State Park. The land consists mainly of pine flatwoods, wet prairie and depression marshes and is home to federally endangered bird species. Pal-Mar is identified for acquisition on the 2002 Florida Forever List.

Indian River Lagoon Blueway

This project extends 156 miles on the east coast from Ponce Inlet to Jupiter Inlet. These distinct areas are buffers for the Lagoon, which help reduce runoff pollution. This project will protect 9,000 acres, providing habitat to threatened species such as the manatee and is home to more than 700 fish species. This project will also receive funding from the Florida Forever program.

Dupuis Reserve

The Dupuis Reserve is located in southwestern Martin and northern Palm Beach counties and encompasses almost 22,000 acres. Managed by SFWMD and FFWC, the Reserve offers numerous recreation opportunities to the public. Habitats include prairies, flatwoods, and freshwater marshes and swamps.

Jonathon Dickinson State Park

Jonathon Dickinson State Park is located in the southeastern portion of the County and encompasses over 11,000 acres. The park offers hiking opportunities and consists mainly of pine scrub, pine flatwoods and cypress sloughs. Over 20 percent the park is considered a globally imperiled biological community.

APPENDIX - B

Questionnaires discussing the key issues of rural and agricultural lands protection in Martin County were sent out to gather input from various stakeholders and county commissioners. The questionnaire consisted of the following questions and summarized answers:

1. What are some of the key issues facing rural and agricultural lands?

The key issues facing rural and agricultural lands in Martin County are the need for agricultural lands to be economically viable and demand for twenty acre "ranchettes."

Martin County has continued to experience declining agriculture income. Although citrus prices are at the lowest in forty years, Martin County continues to remain attractive to citrus growers because of its water supply from the St. Lucie Canal.

The Martin County Comprehensive Plan allows twenty acre ranchettes outside of the primary urban service district (PUSD). Due to the increasing demand for twenty acre lots combined with the rising real estate values within the PUSD and the declining housing stock for sale along with an increasing demand for housing supply, development pressures for twenty acre ranchettes continues to increase.

2. What types of growth management strategies do you feel could be implemented that might better prepare Martin County for future development?

The most mentioned growth management strategies were the implementation of transfer of development rights, purchase of conservation and agricultural easements, density bonuses, and clustering.

Recommendations for the transfer of development rights include a system proposed by Collier County to implement "Stewardship Zones," which is an incentive based alternate to public purchase, allowing density transfers from sending areas to receiving areas.

Densities bonuses should be set up to actually award developers that preserve rural lands. One of the suggestions includes one unit per two acres preserved.

Clustering in the forms of urban villages, satellite communities, and new towns should be located along existing roadways and require one village area per a specified number of residential units.

3. What sort of obstacles, if any, might occur during the implementation of growth management strategies?

Several obstacles to growth management strategies that are discussed in the questionnaires include the local government's and public's attitude towards growth, the restrictions of the PUSD, and cost.

Martin County's attitude of development is one of no growth, while the public's attitude is one of unwillingness to accept new and innovative planning techniques.

The PUSD restricts water and sewer from being extended past the boundary. Therefore, any type of cluster development would be impossible without adequate facilities. Unable to extend utilities past the PUSD would also eliminate the use of a meaningful transfer of development rights program or Stewardship Program.

Factors of cost for growth management strategies are mostly analyzed looking at a transfer of development rights program. Currently, since agricultural lands are at one unit per twenty acres, at a minimum of \$5,000 per acre for development rights, the exchange would equal \$100,000 per unit. Development in Martin County has not reached those kinds of extremes.

4. What do you believe should be the main purpose of rural/agricultural conservation effort?

Although conservation is an important issue, stakeholders note that several programs are in place to accomplish conservation lands preservation and include the Comprehensive Everglades Restoration Plan and the Indian River Lagoon Protection Plan.

Also noted, is the economic viability of farmland. Some believe that market conditions would determine farmland protection, while others believe that agriculture is an important part of Martin County's economy and should be protected by other means than market conditions.

The largest issue discussed is responsible growth and the prevention of sprawl. Again, complaints about the twenty acre ranchettes that are allowed by the Comprehensive Plan are the focus. Twenty acre ranchettes are large enough to disrupt normal ecosystem functions and are a burden on tax payers. Examples of financial issues include the paving of roads outside of the PUSD to ranchettes using tax money from Urban Services District and ranchettes keeping agricultural exemptions on the land and not paying the full amount of taxes.