The Collier County Rural Lands Stewardship Overlay

Presented to:

Collier County

Board of County Commissioners

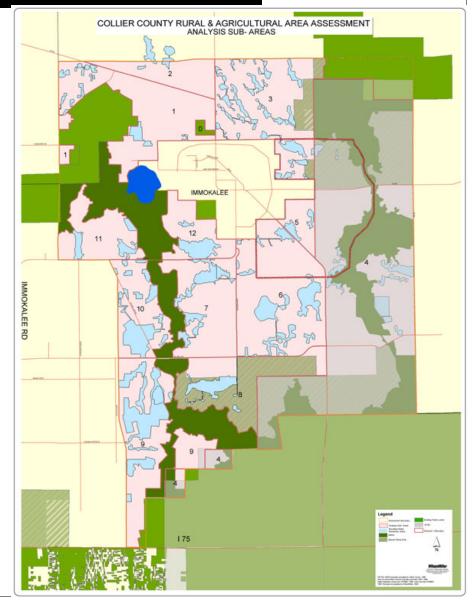
Presented by: Alan Reynolds, AICP President/CEO WilsonMiller,Inc. June 12, 2002

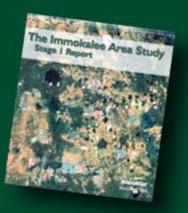
(Updated for presentation to RLSA Review Committee

December 4, 2007)

Overview of the Collier County – Immokalee Area Study

In the Fall of 1999, a three year strategic land planning process was started for 195,846± acres of rural agricultural land as a part of Collier County's **Rural Land Area** Assessment.





Immokalee Study Area

The 300 square mile Study Area is the home of Collier County's Agricultural industry.

One third of the Area is within the Big Cypress Area of Critical State Concern.

Includes two privately owned wetland flow ways, the Camp Keais Strand and Okaloacoochee Slough.



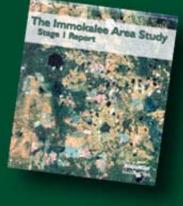




A balance of three essential goals is needed:

- Continued agricultural viability
- Environmental resource protection
- Long-term economic prosperity and diversification

Collier County Land Uses





2/3 of Collier County is currently preserved as Environmental Conservation Land

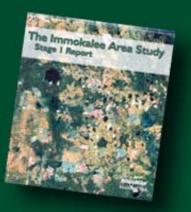
LAND USE	Approx. Acres	% of County
Conservation Lands	912,700	66.2%
Study Area	195,000	14.1%
Urban Areas	116,000	8.4%
Rural Fringe	93,600	6.8%
Golden Gate Estates	62,250	4.5%
Total Collier County	1,379,55	100%

Agriculture has been the economic mainstay of the Immokalee Study Area for more than a Century.

• Little has changed in many decades.

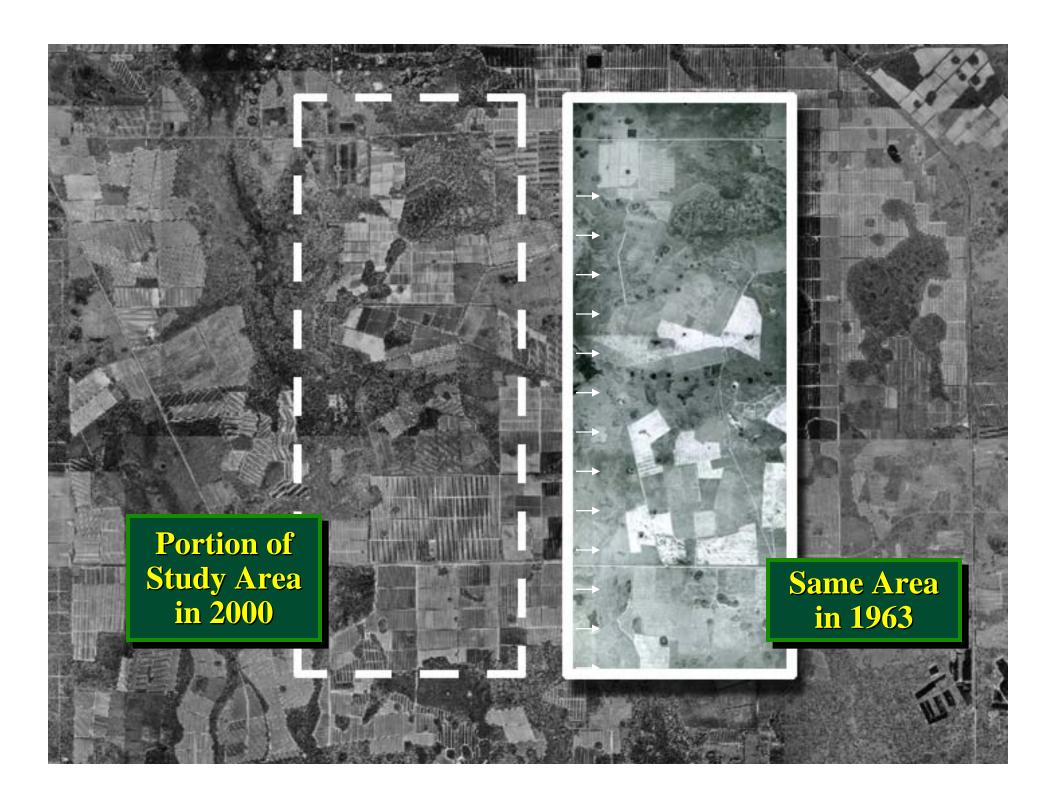
• Citrus, row crops and cattle are still the primary products.





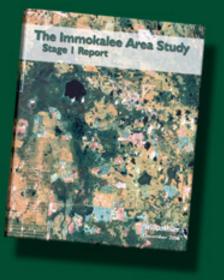






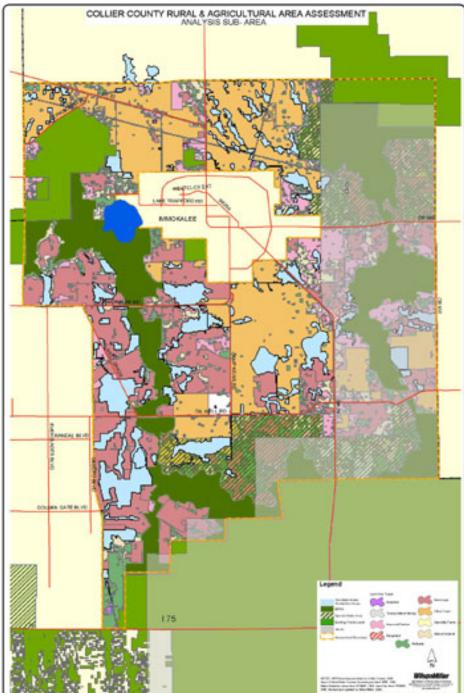
Citizen Oversight Committee

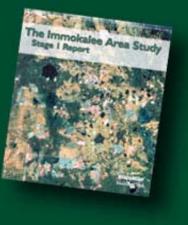
- 15 Citizens appointed by Board of County Commissioners
- 32 Public Meetings over 2.5 years.
- Established best available data and analysis in Stage One.
- Designed 3 alternative Scenarios in Stage Two.
- Tested and evaluated alternatives in Stage Three.
- Considered over 100 hours of expert testimony and public input.
- Decided that incentive based system was needed, not more regulations.
- Reached <u>unanimous consensus</u> on Growth Management Plan Amendments in Stage Four.



GIS Database

The Study produced Collier **County's first** integrated GIS land use and environmental database, and its most accurate large-scale resource mapping to date, through private funding.



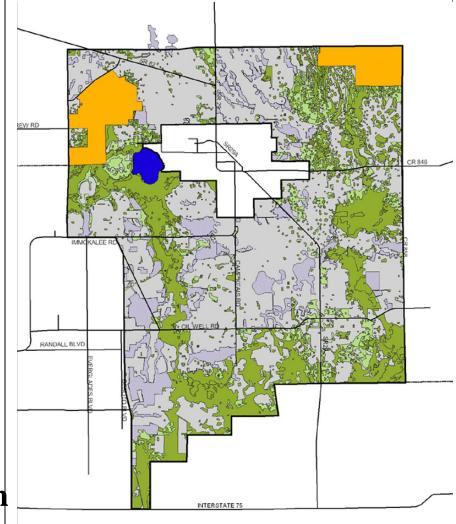


Natural Resource Mapping

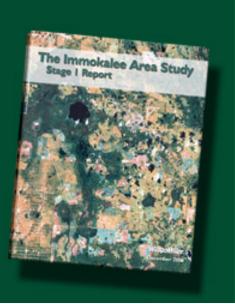
•Wetlands cover 38% of the study area, including those permitted for water retention.

•Natural vegetated uplands cover 10% of the study area, and are used as grazing land.

•6 federally listed species and 10 state listed species have been documented in the study area.







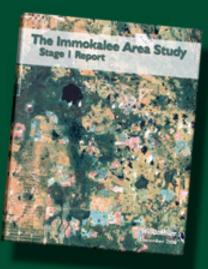
Agriculture

- Agriculture is the dominant land cover in the Study Area.
- Agriculture, including citrus, row crops, pastures and cattle grazing land and water retention encompass 91% of the total study area.
- Citrus increased substantially in the past two decades through conversion of other agriculture land

Sources: Landowner and County records and permits; Florida Agricultural Statistical Service, Commercial Citrus Inventory

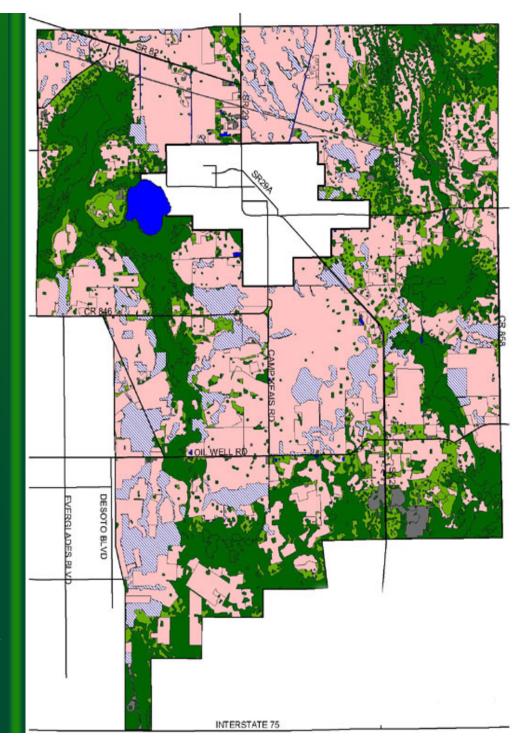
Land Cover Acreage Data

Total	195,080 acres
Agriculture*	112,996 ac.
Wetlands	55,752 ac.
Uplands	20,289 ac.
Other	4,028 ac.
Water	2,105 ac.



*Includes 19,155 acres of agricultural water retention areas

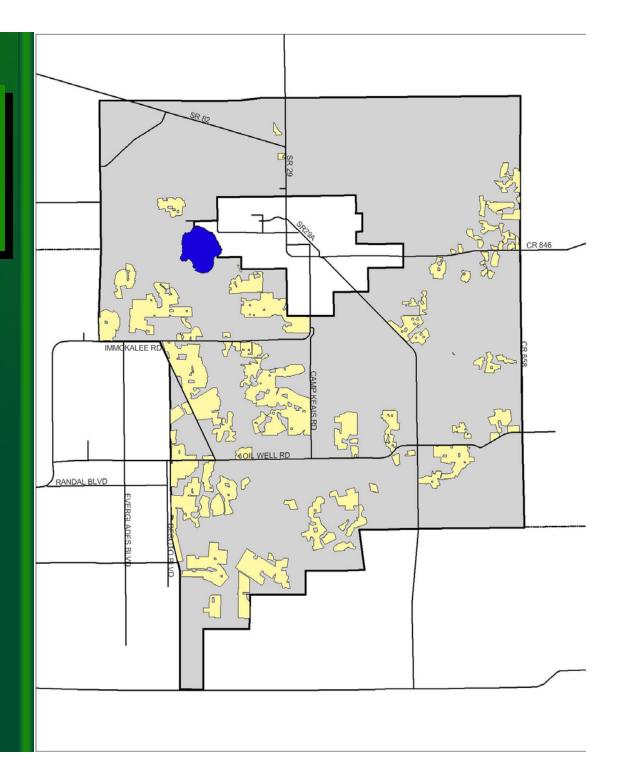
Source: Rural Lands Study Stage 1 Report



Breakdown of Agricultural Areas

Row Crop Areas

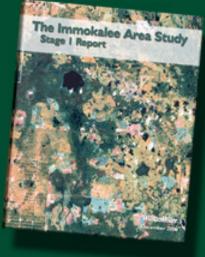
The Immokalee Area Study Stage I Report

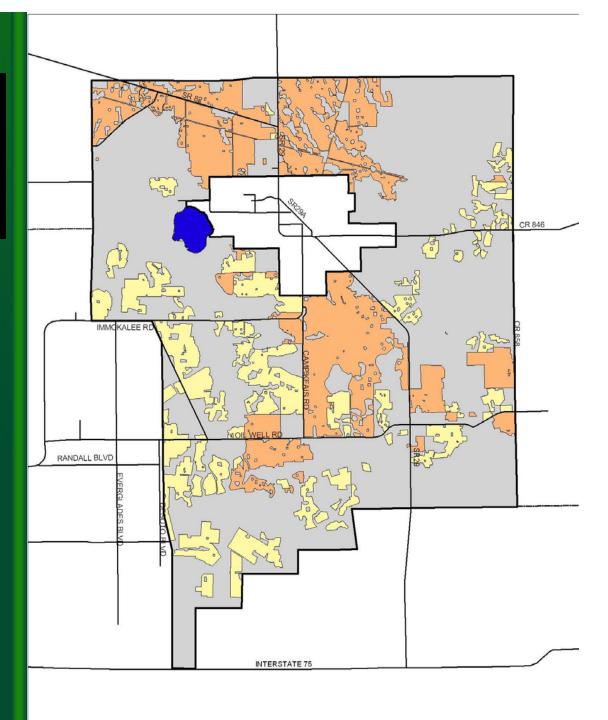


Breakdown of Agricultural Areas

Row Crop Areas

Citrus Areas





Breakdown of Agricultural Areas

Row Crop Areas

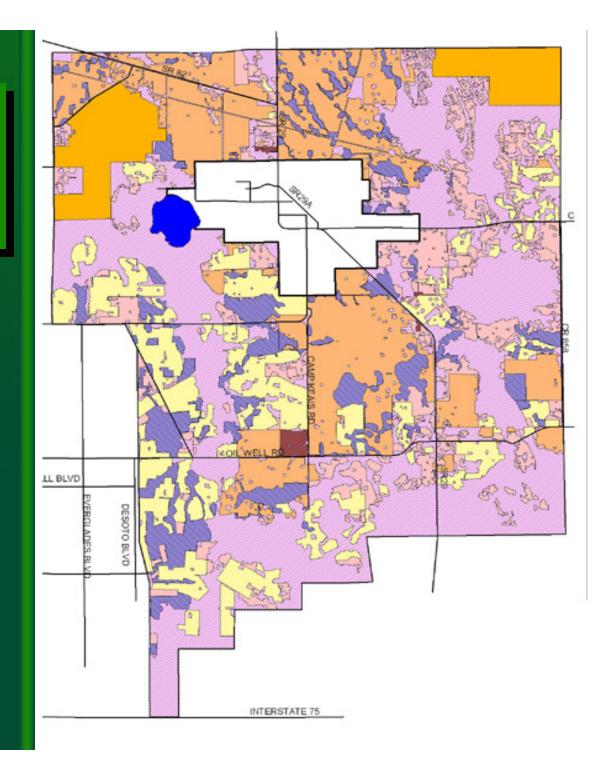
Citrus Areas

Specialty Farm Areas

Pasture Areas

Agricultural Grazing Leases and Water Retention Areas

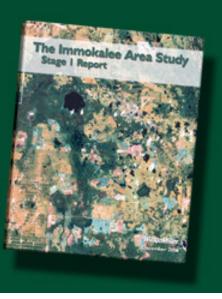




Summary of Stage 1 Findings



- No new subdivisions, major rezonings or significant population growth.
- Prior studies incorrectly indicate large scale conversion of natural areas to agriculture over past 15 years
- Conversion has been nominal less than 3% of the area approximately 5,000 acres.



Growth in Immokalee Study Area

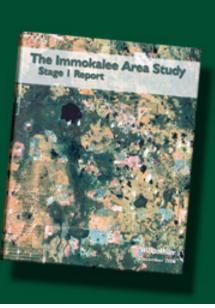
- <u>Immokalee Study Area has</u> <u>experienced minimal change or growth</u> <u>since 1985.</u>
- Rapid growth is occurring in Orange Tree and Golden Gate Estates areas.
- Immokalee Urban Area has experienced modest growth in the last decade.
- Of the total Immokalee Study Area of 195,000 acres, there are 138 parcels that are 40 acres or smaller in size.
- <u>To date, there has been no significant</u> <u>agricultural land converted to non-</u> <u>agricultural uses in the Immokalee</u> <u>Study Area</u>

Collier County Land Development Code Permitted and Conditional Uses in Rural Area - Agricultural District (A)

- Agricultural activities
- Single Family Residential (1 unit/5 acres)
- Sporting and recreational camps
- Oil and gas exploration
- Conservation uses
- Earth mining
- Schools
- Golf courses
- Others

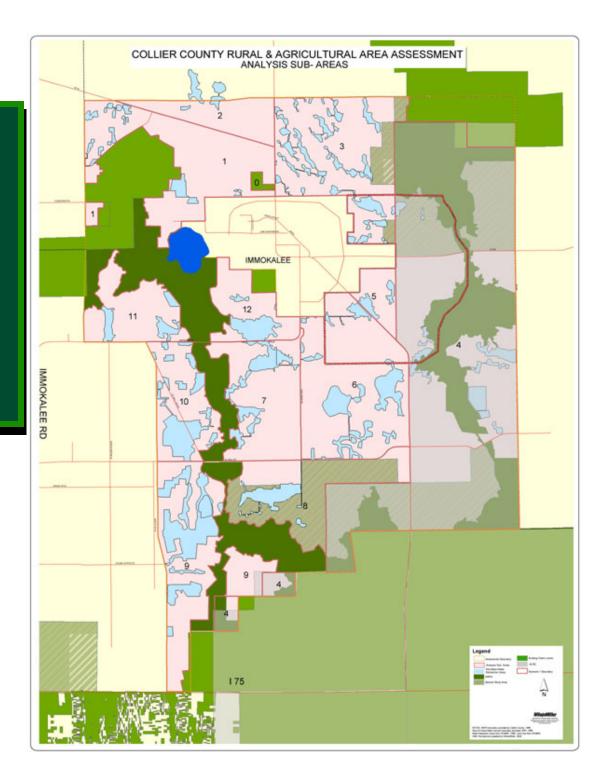






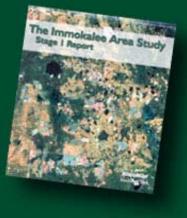
A Creative, Future- oriented Long-term Perspective is needed





Rural Stewardship Concept

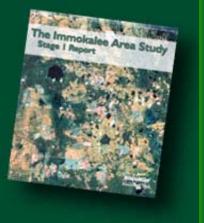
"The goal of Collier County's rural stewardship plan is to create an incentive-based system that encourages the voluntary preservation and private stewardship of natural resources, retention of rural uses and agriculture, and accommodates economic growth and diversification in a sustainable rural character."



Future Scenarios

All tested scenarios were designed to:

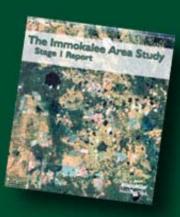
- Discourage urban sprawl
- Direct incompatible land uses away from critical habitat
- Encourage development that utilizes innovative planning techniques
- Achieve a dynamic balance of uses which contribute to a sustainable future.
- Create an innovative and incentive based system that is not dependent on more regulation.
- Not rely solely on limited public funds to accomplish environmental protection goals.



Building a Stewardship Toolbox

The Rural Lands Oversight Committee identified, tested and selected the best tools to implement the Stewardship Program

	Objecti	ves of the Fina	al Order
Primary Tools for Scenario One	Agricultural Viability	Protection of Natural Resources	Economic and Land Use Diversification
Big Cypress Area of Critical State Concern Regulations		x	
Transfer of rights through a credit overylay system	x	x	x
Sending area criteria	x	x	
Receiving area criteria	x	x	x
Natural Resource Protection Area (NRPA) guidelines		x	
Private ownership incentives	x	x	x
Clustering	x	x	x
Open space ratios		x	
Preservation techniques	x	x	
Environmental design		x	x
Conservation easements and incentives		x	
Economic incentives	x	x	x
Mixed uses			x
Best management practices	x	x	x
Wildlife corridors and flow ways		x	
Rural towns, villages and hamlets	x	x	x
Flexible regulations and creative community planning	x	x	x
Design guidelines		x	x
Economic diversification tools			x



Stewardship Sending Areas:

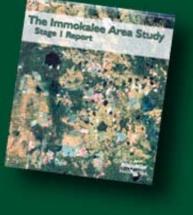
- Based on the natural resource value of the land.
- Three classifications:

Flow ways

Habitats

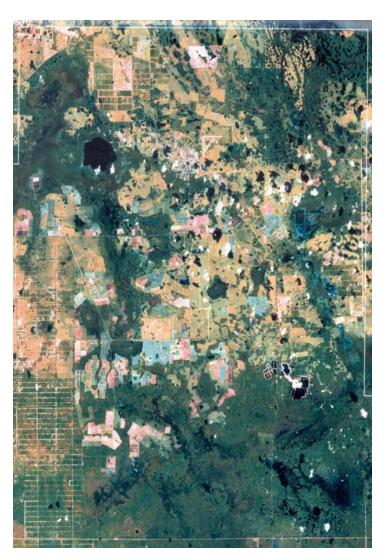
Water retention areas.

- Sending areas remain substantially in private ownership.
- Public funds can be used to accelerate acquisition of highest priority areas.



Flow way Stewardship Areas

- 31,000 acres of private land delineated as FSAs. (31,100 acres, as adopted)
- Includes Camp Keais Strand and Okaloacoochee Slough.
- Restoration credit at strategic locations to enhance wildlife corridors





Habitat Stewardship Areas

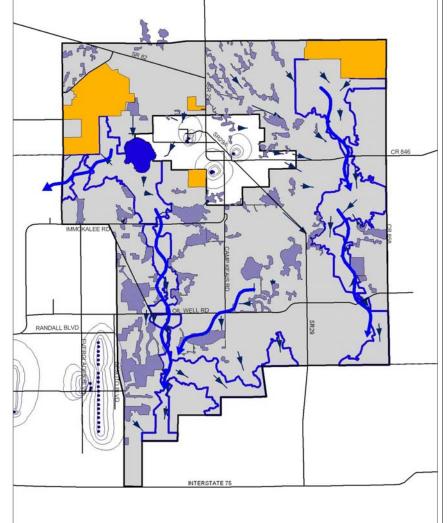


The Immolaties Area Study Suge I Report

- 36,000 acres of private land delineated as HSAs. (40,000 acres as adopted)
- 91% of Panther telemetry points are included in stewardship areas.
- Includes native uplands and farm fields not otherwise protected by regulation.

Water Retention Stewardship Areas

- 18,000 acres of private land delineated as WRAs. (18,200 acres, as adopted)
- Water retention, treatment, conveyance and habitat functions are maintained to serve both present and future needs.



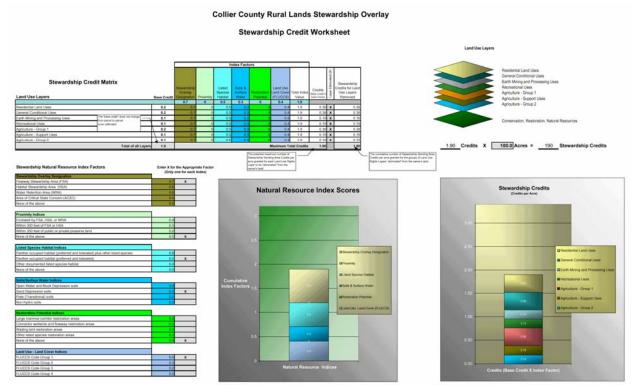
Natural Resource Protection



Perpetual easements and stewardship agreements work in conjunction with the incentive based stewardship credit system to protect, restore and maintain natural resources and habitats.

Stewardship Credit Worksheet

 The natural resource values of lands are calculated by measuring each acre of land against a set of valuation criteria



WORKSHEET INSTRUCTO

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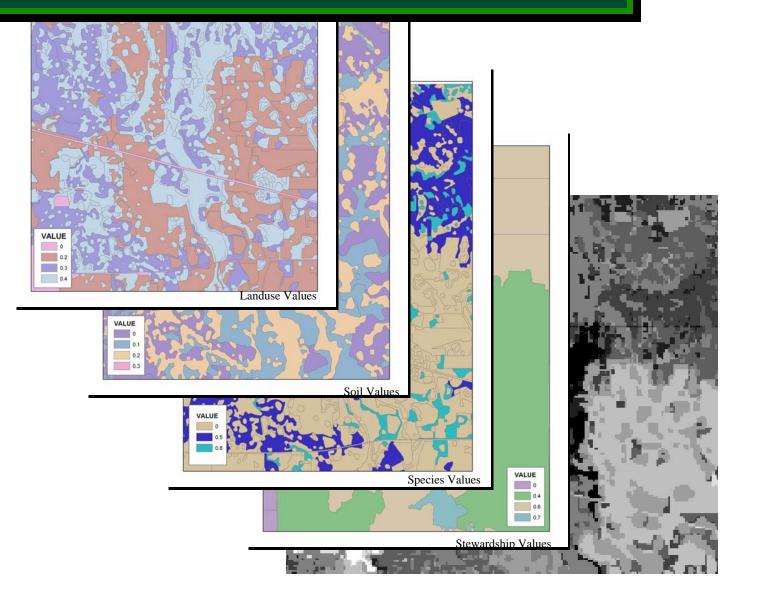
The Immokalee Area Study Stage I Report



Scored Input Data Layers

BMARKEN

ENGLY?



The Immokalee Area Study Stage I Report

Stewardship Natural Resource Index Factors

Enter X for the Appropriation (Only one for each li

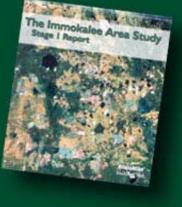
Stewardship Overlay Designation		
Flowway Stewardship Area (FSA)	0.7	х
Habitat Stewardship Area (HSA)	0.6	
Water Retention Area (WRA)	0.6	
Area of Critical State Concern (ACSC)	0.4	
None of the above	0.0	

Proximity Indices		
Enclosed by FSA, HSA, or WRA	0.4	
Within 300 feet of FSA or HSA	0.3	
Within 300 feet of public or private preserve land	0.2	
None of the above	0.0	х

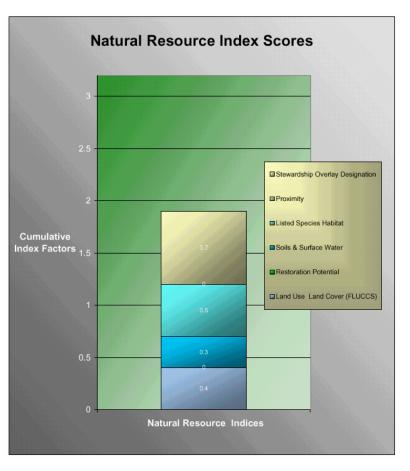
Listed Species Habitat Indices		
Panther occupied habitat (preferred and tolerated) plus other listed species	0.8	
Panther occupied habitat (preferred and tolerated)	0.5	х
Other documented listed species habitat	0.4	
None of the above	0.0	

FLUCCS Code Group 3	0.2	
FLUCCS Code Group 4	0.0	

Natural Resource Index Scale

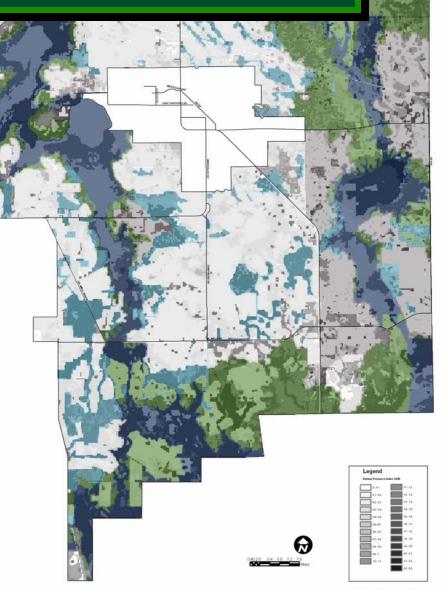


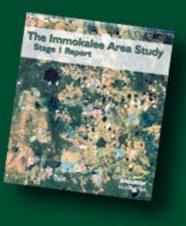
 The quality attributes of the natural resources accumulate to determine the index score value on a scaled basis.



Model Results

- Each 1 acre grid cell has a score value
- Value based on Natural Resource Indices
- Highest scoring areas defined
 Stewardship Areas





Entire Study Area

Land Use Layers

Stewardship Credit Matrix

Land Use Layers		Base Credi
Residential Land Uses		0.2
General Conditional Uses		0.2
Earth Mining and Processing Uses	The "base credit" does not change from parcel to parcel	-∖ 0.1
Recreational Uses	once calibrated	0.1
Agriculture - Group 1		\ 0.2
Agriculture - Support Uses		\ 0.1
Agriculture - Group 2		0.1
	Total of all Laye	ers 1.0

Sample
Stewardship
Credit
Calculation

Sample 1,000 acre SSA property: 700 acres of natural area/native range

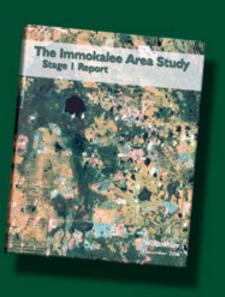
300 acres of improved cropland

Acres x NRI Value x Land Use Value	e = Credits
700 acres x 1.9 NRI x .9 LUV	= 1,197 Credits
300 acres x 1.0 NRI x .6 LUV	= 180 Credits
1,000 acres	= 1,377 Credits

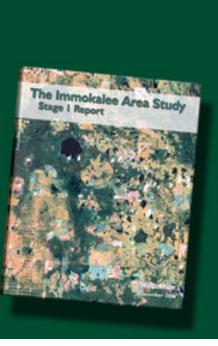
1,377 Credits @ 8 Credits per SRA acre = 172 SRA acres

Horizon Framework - Elements

- A Horizon year of 2025.
- The MPO 2025 projected road network & population
- Interim NRPA boundaries as adopted.
- The current boundary of the Immokalee Urban Area.
- The Big Cypress Area of Critical State Concern
- Existing public lands.
- The natural resource and land use inventory
- Employment estimates and demographic indexes
- Adopted level of service standards in the Collier County Growth Management Plan.



Baseline Reference Scenario

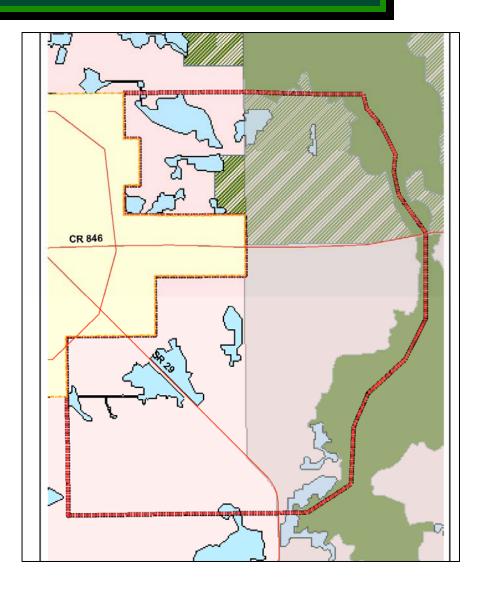


- The County's Growth Management Plan coupled with zoning and land development regulations in effect at the time the Final Order was adopted, applied to the Study area and projected forward establish a future <u>condition that results</u> from no change to the Plan.
- This baseline reference scenario is <u>used</u> for comparison to assess to what extent the application of various tools will achieve the results desired under the Final Order.

Horizon Framework – Sub-Area Testing

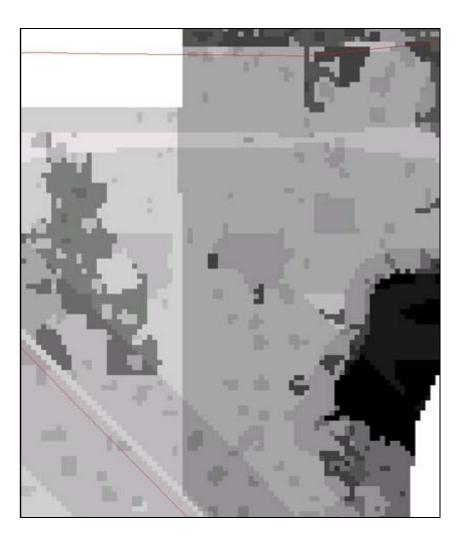


■ A 20,000 acre **Sub-Area of** the entire **Rural Lands Study Area** was selected for scenario testing that generally represents the common characteristics of the Horizon Framework.



Natural Resource Index GIS Analysis

- Resource value calculated for every acre in the Study Area
- Darker shading represents higher natural resource value
- Each of 195,000 acres is scored





Receiving Area Suitability Factors

 Suitability Factors locate and guide land uses to appropriate Receiving Areas

Receiving Area Suitability Factors

Excludes Public Lands, NRPA or Sending Area Innovative & flexible planning & development strategies Rural design guidelines specific to the Immokalee Stewardship Area Not less than 20 acres and 1/2 unit/acre Conceptual Master Plan for each SRA Incompatible land uses directed away from critical habitat Discourage urban sprawl Sufficient land to develop in an environmentally acceptable manner Land uses sited using natural resource indices Sufficient area for open space, lakes, & recreational lands Appropriate mix of commercial, recreational, & civic uses Adequate infrastructure to serve the proposed development Adequate access to County road system Incentives to encourage & support diversification & enhancement rural economy

Beneficial impact to tax base

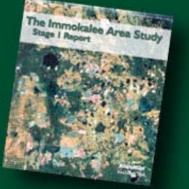


Receiving Area Characteristics

Towns, Villages and Hamlets are the preferred rural land use communities with characteristics appropriate to size and scale

Typical Characteristics	Town	Village	Hamlet	
Size/Area	1,000-4,000 acres	100-1,000 acres	20-100 acres	
Average Gross Density	1-3 DUs per gross acre	1-3 DUs per gross acre	<1 DU per gross acre	
Dwelling Units (DUs) per Acre	1,000-10,000 DUs	100-3,000 DUs	20-100 DUs	
	SF/MF	SF/MF	SF	
Residential Type	Large diversity of housing types, styles, lot sizes	Large diversity of housing types, styles, lot sizes	Minimum diversity	
Goods and Services	Community and Neighborhood Goods and Services	Neighborhood Goods and Services and Village Center	Convenience Goods and Services	
Employment Opportunities	Substantial - Moderate	Moderate - Limited	Limited - None	
Infrastructure				
(Central Utilities, Private Systems, etc.)	Full Central Services	Full Central Services	Private Systems	
	Town Square Community Parks	Village Green Neighborhood Parks	Green or square Green Spaces	
	Neighborhood Parks	Green Spaces	Green Spaces	
Recreation and Open Spaces	Green Spaces	Bike/Pedestrian System		
	Bike/Pedestrian System	Golf Course		
	Golf Courses	Lakes		
	Lakes			
Civic and Community Services				
(Churches, Government Facilities, Medical, etc.)	Wide Range of Services	Moderate to Limited Services	Limited Services	
Schools	Pre-K, K-5, 6-8, High School	Pre-K and K-5	Pre-K	
	Auto	Auto	Auto	
Transportation	Pedestrian Walkways	Pedestrian Walkways	Pedestrian Pathways	
	County Transit Access	Equestrian Trails	Equestrian Trails	
	Bicycle Pathways	County Transit Access		
		Bicycle Pathways		

Note: Typical Characteristics are shown as representative ranges and are not intended to be absolute minimums or maximums



Receiving Area Characteristics

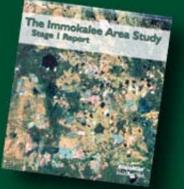
 Towns, Villages and Hamlets are the preferred rural land use communities with characteristics appropriate to size and scale
Change 1/2 - 2 1

(Changed to 1 - 1 DUs / Gross Acre)

Changed to 1/2 - 2 DUs / Gross, Acre

(Changed to 1/- 4 DUS / Gross Acre)					
Typical Characteristics	Town		Village	Hamlet	
Size/Area	1,000-4,000 acres		100-1,000 acres	20-100 acres	
Average Gross Density	1-3 DUs per gross acre		1-3 DUs per gross acre	<1 DU per gross acre	
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	SF/MF		SF/MF	SF	
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Goods and Services	Community and Neighborhood Goods and Services		Neighborhood Goods and Services and Village Center	Convenience Goods and Services	
Employment Opportunities	Substantial - Moderate		Moderate - Limited	Limited - None	
Infrastructure					
(Central Utilities, Private Systems, etc.)	Full Central Services		Full Central Services	Private Systems	
Recreation and Open Spaces	Town Square		Village Green	Green or square	
	Community Parks		Neighborhood Parks	Green Spaces	
	Neighborhood Parks		Green Spaces		
	Green Spaces		Bike/Pedestrian System		
	Bike/Pedestrian System		Golf Course		
	Golf Courses Lakes		Lakes		
Civic and Community Services					
(Churches, Government Facilities, Medical, etc.)	Wide Range of Services		Moderate to Limited Services	Limited Services	
Schools	Pre-K, K-5, 6-8, High School		Pre-K and K-5	Pre-K	
Transportation	Auto		Auto	Auto	
	Pedestrian Walkways		Pedestrian Walkways	Pedestrian Pathways	
	County Transit Access		Equestrian Trails	Equestrian Trails	
	Bicycle Pathways		County Transit Access		
			Bicycle Pathways		

Note: Typical Characteristics are shown as representative ranges and are not intended to be absolute minimums or maximums



Receiving Area Blend

Scenario One

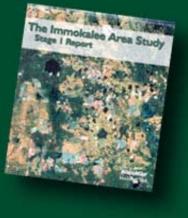
Sub-Area

1,614 DUs

A blend of rural land uses was assumed to test the viability of the system and calibrate the model

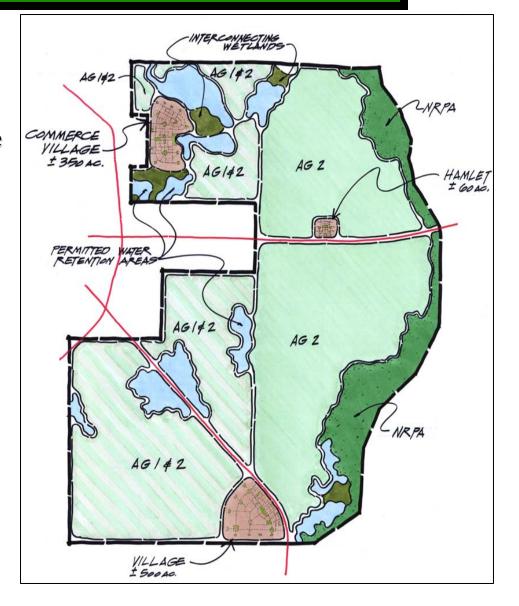
		.,•	
	Village		DUs 500 Acres
A blend of	Commerce Village Hamlet		DUs 350 Acres DUs 60 Acres
A DIEIIU UI			
rural land	Village @	500	acres (Net Usable)
I UI AI IAIIU			DUs @ 2.30 DUs per gross acre
11606 11/06			people GFA Village Center @ 40sq.ft./capita
uses was			acres for Village Center @ 10,000sq.ft./acre
accumed to			Village Center employment @ 15.5 emp./acre
assumed to			acres @ 2.5% for civic, cultural & government facilities
toot the			acre passive open space park/preserve acres @ 10% for public parks, preserves, open spaces, etc.
test the			acres @ 5% for roadways
			acres of non-residential
viability of the			net acres remaining for residential development DUs per net acre (average)
•		5.5	Dos per net acre (average)
system and	Commerce Village		acres (Net Usable)
			acres Commerce Center
calibrate the			GFA Commerce Center @ 10,000 sq.ft./acre Commerce Center employment @ 15.87 emp./acre
			acres for Village Center @ 10,000sq.ft./acre
model			Village Center @ 40sq.ft./capita
			Village Center employment @ 15.5 emp./acre
			acres (net) Residential Neighborhood DUs @ 5.2 DUs per net acre
More compact			people @ 2.5 persons per DU
-			acres @ 5% for utility & support facilities
forms use			acres @ 20% for parks, preserves, openspaces, etc. acres @ 0.05 for roadways
		17.5	acies e 0.05 ioi ioauways
substantially	Hamlet @	60	acres (Net Usable)
Substantiany			DUS @ 0.8 DUs per gross acre
less land			people GFA Hamlet Convenience Center @ 40sq.ft./capita
iess iunu			acres for Hamlet Convenience Center @ 10,000sq.ft./acre
			Hamlet Convenience Center employment @ 15.5 emp./acre
			acres @ 2.5% for civic, cultural & government facilities acres @ 3% for roadways
			acres @ 3% for roadways acres of non-residential
			net acres remaining for residential development
		1.0	DUs per net acre

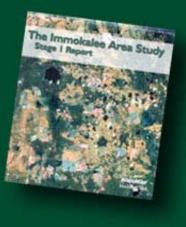
910 Acres



Analysis of Scenarios

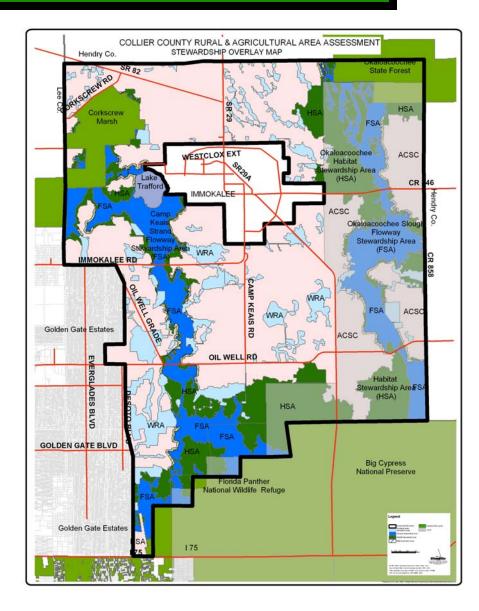
- Alternative scenarios were compared to a baseline condition
- Strategies are selected that fulfill requirements of "Final Order"

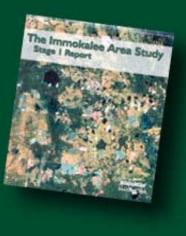




Proposed Stewardship Overlay Map

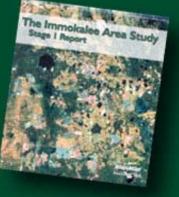
Stewardship Areas establish a conservation framework for both natural resources and agriculture .





Stewardship Benefits the Environment

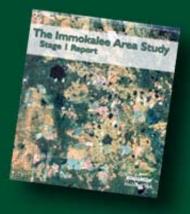




- Includes 90% of all native wetlands and uplands in Sending Areas.
- Reduces impacts to the environment compared to baseline scenario.
- Protects environment without cost to taxpayers.
- Protects environment without destroying private property rights

Stewardship Benefits Agriculture





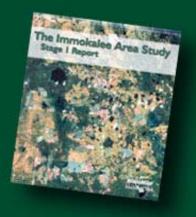
•Stewardship provides economic incentive to retain agriculture.

•Agriculture maintained while accommodating forecasted population growth.

•Stewardship converts less than 8% of agriculture in sub area, baseline converts more than 50%.

Stewardship Benefits Economy





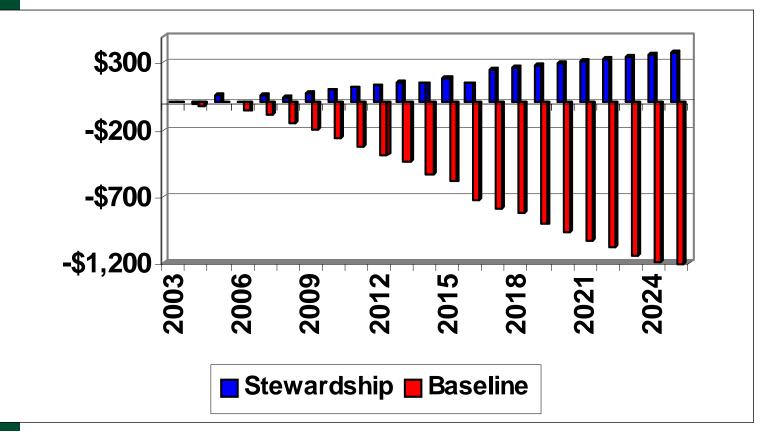
•Stewardship produces higher residential values than baseline.

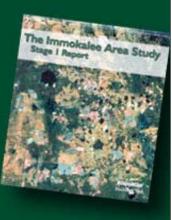
• Stewardship enables mixed use commerce center to serve rural residents.

•Stewardship promotes self-sufficient communities.

Net Fiscal Impact to Collier County

Stewardship generates a substantial surplus in revenues over costs, unlike the baseline scenario.





The Collier County Rural Stewardship Overlay creates a sustainable future for rural Collier County



- Sustainable incentive based protection of natural resources.
- Continued viability of agricultural production.
- Enhancement and diversification of rural economic base.
- Compact, mixed use, rural character development.
- Efficient and proximate public facilities and services for rural residents.

Goals, Objectives and Policies of the Rural Stewardship Overlay

OVERALL GOAL:

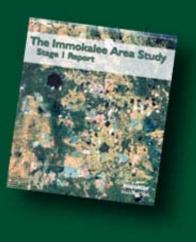
- Meet the long-term needs of residents.
- Protect agricultural activities.
- Prevent premature conversion of agricultural land to non-agricultural uses.
- Direct incompatible uses away from wetlands and upland habitat.
- Enable the conversion of rural land to other uses in appropriate locations
- Discourage urban sprawl.
- Encourage development that utilizes creative land use planning techniques.

Growth Management Plan Objectives

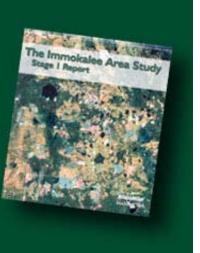
- Create an incentive based land use overlay system based on the principals of rural land stewardship as defined in Chapter 163.3177(11), F.S.
- The Policies are set forth in groups.
 - Group 1 policies describe the structure and organization of the Rural Stewardship Overlay.
 - Group 2 policies relate to agriculture,
 - Group 3 policies relate to natural resource protection,
 - Group 4 policies relate to conversion of land to other uses and economic diversification.
 - Group 5 are regulatory policies that ensure that land that is not voluntarily included in the Overlay shall nonetheless meet the minimum requirements of the Final Order.

Growth Management Plan Policies

- 68 separate policies will guide the creation and implementation of the Collier County Rural Lands Stewardship Overlay.
- Policies are carefully written to meet the criteria of the Final Order, Growth Management laws, and Florida's new stewardship legislation, and to be internally consistent with the overall program.



Changes and Enhancements During Adoption

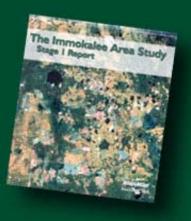


- Quantify Early Entry Bonus
- Added FSA, HSA, WRA Acreage
- Restoration Credits expanded
- GOPs revised to address DCA comments

Stewardship Sending Areas

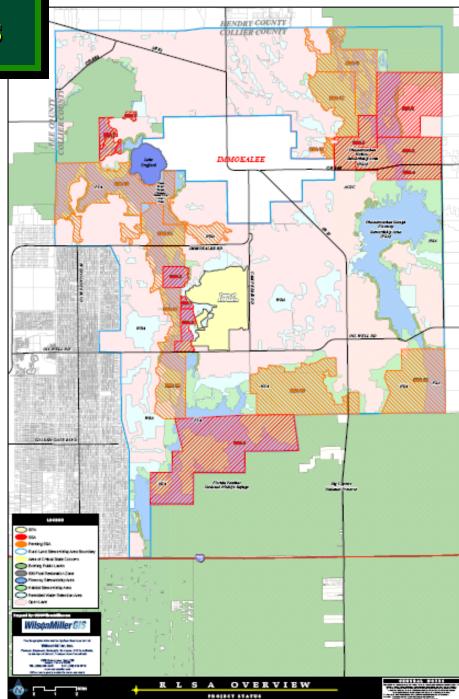
SSAs 1-9 Approved: 24,124 acres (59, 453 Credits)

SSAs 10-16 under review or in preapplication process: 31,926 acres



Total as of December 2007:

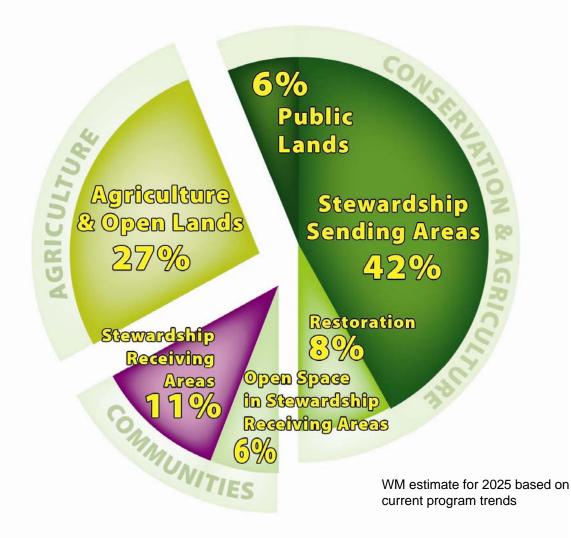
56,050 Acres



Horizon Year land Use Mix

The Immolalee Area Study Stage I Report





The Collier County Rural Lands Stewardship Overlay – A Potential Statewide Model?

- The Collier County Stewardship Plan has been presented to numerous organizations around the State.
- In each case, the plan was favorably received and hailed as an innovative approach to rural land planning and conservation.
- I have been invited to serve on Florida's Rural Lands Stewardship Council, includes the DCA Secretary and representatives of many state planning and environmental organizations.
- The Stewardship Council is planning to use this program as a model for other communities to encourage participation in Florida's Stewardship initiative.

The Collier County Rural Lands Stewardship Overlay

The Immokalee Area Study Stage I Report



Questions from The Board of County Commissioners