



Rural Lands Stewardship Area Overlay Restudy White Paper

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Community Planning Section Staff

May 21, 2019



Rural Lands Stewardship Area Overlay Restudy
White Paper

Table of Contents

	<u>Page</u>
Table of Contents.....	i-iii
Definitions (LDC Section 4.08.01).....	iv-v
Section A. Introduction.....	1
Section B. Data Update (Acreage and Credits).....	12
Section C. Water Resources.....	25
Section D. Agricultural Protection.....	35
Section E. Environmental Protection.....	42
Section F. Towns Villages and Other Development.....	63
Section G. Credit System.....	77
Section H. Consistency with Other Planning Areas.....	83
List of Staff Recommendations.....	85
Appendix A. Public Outreach – Meeting Summaries	

List of Tables

	<u>Page</u>
Table A-1: Major Bonus Credit Changes from Transmittal to Adoption.....	7
Table B-1: Summary of Stewardship Designations within Approved Sending Areas Rounded to nearest acre.....	14
Table B-2: Summary of RLSA Designations within Sending Areas Pending.....	14
Table B-3: SSAs and Land Use Levels Remaining.....	15-16
Table B-4: SRA Acreage.....	16

	<u>Page</u>
Table B-5: SRA Acreage Pending*.....	18
Table B-6: Stewardship Credit Summary.....	19
Table B-7: Summary of Credits Transferred and Utilized for the Town of Ave Maria and Credits Remaining for Future Use.....	20
Table B-8: Stewardship Sending Areas Pending in Application Status.....	20
Table B-9: Stewardship Sending Areas with Amendments Pending.....	21
Table B-10: 2002/2012 Agricultural Type Comparison.....	21
Table B-11: 2002 Ave Maria Agricultural Uses.....	22
Table B-12: Amount and Types of Restoration in SSAs.....	23-24
Table B-13: Restoration Acres Dedicated by Type (R-1).....	24
Table E-1: Tiered Restoration Credits, 5-year Review.....	50
Table F-1: CIGM Population Projections GMP Districts East of CR 951 Rounded to nearest 1,000 Est. Oct. 2018.....	65

List of Figures

	<u>Page</u>
Figure A-1: Stewardship Overlay Map.....	7
Figure B-1: RLSA Adoption Map.....	13
Figure B-2: Ave Maria TDR Transactions Credits.....	17
Figure C-1: Adopted RLSA Overlay Features.....	26
Figure C-2: RLSA Elevations.....	27
Figure C-3: RLSA Surface Drainage.....	27
Figure C-4: Collier County Hydrology.....	31
Figure D-1: 2012 FLUCCS Land Use – Agriculture Land.....	36
Figure D-2: Agriculture Economic Impact to Collier County.....	37
Figure D-3: Economic Considerations for Growers.....	38

	<u>Page</u>
Figure E-1: RLSA Status Map, March 2019.....	44
Figure E-2: Proposed SSA 17 and SRAs.....	45
Figure E-3: HCP Exhibit Covered Activities.....	58
Figure E-4: HCP Exhibit Primary/Secondary Panther Habitat, SW Florida.....	58
Figure E-5: HCP Exhibit Panther Telemetry Since 1981.....	59
Figure E-6: Panther Collision Hotspots.....	61
Figure F-1: Town Transect.....	66
Figure F-2: Vehicle/Panther Collisions.....	75



Rural Lands Stewardship Area Overlay White Paper Definitions (LDC Section 4.08.01)

ACSC. Area of Critical State Concern

Agricultural Group 1 Uses (4.08.06 B4). Generally higher intensity agricultural uses including: row crops, citrus, nurseries, and related support uses.

Agricultural Group 2 Uses (4.08.06 B4). Generally lower intensity agricultural uses including: pasture, forestry, hunting cabins, cultural and recreational facilities, and related support uses.

Early Entry Bonus Credits (FLUE RLSA Policy 1.21). The bonus shall be in the form of one additional Stewardship Credit per acre of land designated as SSA in an HSA located outside of the ACSC and one-half Stewardship Credit per acre of land designated as SSA in an HSA located inside the ACSC. The early entry bonus expired for SSAs created after 2009.

Fallow. Farmland that is not currently being farmed but has been in the past and could be in the future.

FSA - Flowway Stewardship Area. Lands delineated on the RLSA Overlay Map, which primarily include privately owned wetlands that are located within the Camp Keais Strand and Okaloacoochee Slough. FSAs form the primary wetland flow way systems in the RLSA District.

Future Land Use Map (FLUE). Map of the adopted and amended areas within the RLSA..

HSA - Habitat Stewardship Area. Lands delineated on the RLSA Overlay Map, which include both areas with natural characteristics that make them suitable habitat for listed species and areas without these characteristics. These latter areas are included because they are located contiguous to habitat with natural characteristics, thus forming a continuum of landscape that can augment habitat values.

Land Use Layer. Permitted and conditional land uses within the Baseline Standards that are of similar type or intensity and that are grouped together in the same column on the Land Use Matrix, "Attachment B". Layers are removed in order from higher to lower intensity and include: Residential Land Uses, General Conditional Uses, Earth Mining and Processing Uses, Recreational Uses, Agriculture - Group 1, Agriculture – Support Uses, Agriculture - Group 2, Conservation.

Land Use Matrix (Matrix). The tabulation of the permitted and conditional land uses within the Baseline Standards set forth in "Attachment B", with each Land Use Layer displayed as a single column.

Natural Resource Index (Index). A measurement system that establishes the relative natural resource value of each acre of land by objectively measuring six different characteristics of land and assigning an index factor based on each characteristic. The sum of these six factors is the Index value for the land. The six characteristics measured are: Stewardship Overlay Delineation, Proximity to Sending Area (HSA, FSA, WRA), Listed Species Habitat, Soils/Surface Water, Restoration Potential, and Land Use/Land Cover.

Open Lands. Areas in the HSA, FSA, WRA or 500' restoration zone.

Restoration Zone. Privately owned lands delineated on the RLSA Overlay Map that are located within 500 feet of an FSA, but are not otherwise included in an HSA or WRA.

R-1. (Policy 3.1). Lands are designated by the property owner for restoration activities. The actual implementation of restoration improvements is not required for the owner to receive credits.

R-2. Lands are designated and undertaken by the landowner for restoration activities. Credits are assigned but not available for transfer until the restoration activities have met applicable success criteria.

SRA - Stewardship Receiving Area. A designated area within the RLSA District that has been approved for development as a Hamlet, Village, Town or CRD and that requires the consumption of Stewardship Credits.

SSA - Stewardship Sending Area. A designated area within the RLSA District that has been approved for the generation of Stewardship Credits in exchange for the elimination of one or more Land Use Layers.

Stewardship Credit (Credit). A transferable unit of measure generated by an SSA and consumed by an SRA. Eight credits are transferred to an SRA in exchange for the development of one acre of land as provided in Section 4.08.06 B.

Stewardship Credit System. A system that creates incentives to protect and preserve natural resources and agricultural areas in exchange for the generating and use of credits to entitle compact forms of rural development. The greater the value of the natural resources being preserved and the higher the degree of preservation, the greater the number of credits that can be generated. Credits are generated through the designation of SSAs and consumed through the designation of SRAs.

WRA - Water Retention Area. Privately owned lands delineated on the RLSA Overlay Map, that have been permitted by the SFWMD to function as agricultural water retention areas and that provide surface water quality and other natural resource value.



Rural Lands Stewardship Area Overlay White Paper

A. Introduction

Restudy Background and Purpose

This White Paper provides a framework to address improvements to the Rural Lands Stewardship Area, an overlay within the Future Land Use Element of the Growth Management Plan. The White Paper is an intermediate step in the RLSA restudy process, a process that began in January 2018. The formal transmittal and adoption hearing processes will begin as directed by the Board of County Commissioners (Board).

The RLSA restudy is one of four restudies focused on eastern Collier County, as directed by the Board on February 10, 2015. Focus areas of all four restudies include complementary land uses, transportation and mobility, environmental stewardship, and economic vitality. As remarked by Board members, only 10% of County land remains available for new development. This is the last chance to “get it right” in terms of development form. These restudies are conducted with that perspective in mind.

The basic format of the introduction includes the history and status of the RLSA and the public planning process. Following, staff will present data on RLSA activity updated to March 2019 (Section B). Sections C-G follow, providing staff analysis of program subject areas leading to staff recommendations, and a list of sources. A full list of staff recommendations will conclude the White Paper, prior to Appendix A.

We often refer to these as preliminary recommendations for a number of reasons. First, public input was valuable in identifying areas for potential improvements, but not always accompanied by solutions. Second, the Outreach phase uncovered significant differences in opinion on many topics. Staff makes recommendations herein based on its view of data and analysis, fully cognizant of the fact that other outcomes may be preferred by decision-makers, and aware that further dialogue through the public hearing process may yield other solutions to the identified areas for improvement.

As to the scope of the restudy, staff became aware through the course of public outreach that the terminology of an “area restudy” could have been improved at the outset- perhaps as “area update.” Many individuals assumed that the County could achieve a complete reformulation of this study area without regard to the system currently in place. As will be discussed, the RLSA Overlay Comprehensive Plan language, together with the LDC zoning overlay, provide certain rights to landowners that cannot be simply discarded or ignored.

History and Importance of the RLSA Overlay

The Rural Lands Stewardship Area (RLSA) Overlay is the Future Land Use Element Sub-District which was adopted in 2002 through Ordinance 02-54, as a result of Final Order – ACC-99-002. ACC-99-002 was issued by the State due to the County's GMP being found to lack regulatory protection for environmentally sensitive property, not adequately discouraging urban sprawl and preventing the premature conversion of agricultural land. The Final Order required the following modifications to the GMP to address the issues within three specified areas:

1. Identify and propose measures to protect prime agricultural areas
2. Direct incompatible uses away from wetlands and upland habitat in order to protect water quality and quantity and maintain the natural water regime as well as to protect listed animal species and their habitats.
3. Assess the growth potential of the Area by assessing the potential conversion of rural lands to other uses, in appropriate locations, while discouraging urban sprawl, directing incompatible land uses away from critical habitat and encouraging development that utilizes creative land use planning techniques including, but not limited to, public and private schools, urban villages, new towns, satellite communities, area-based allocations, clustering and open space provisions and mixed use development.

The RLSA Overlay, as expressed in the Future Land Use Element, contains one goal and one objective, which are furthered by policy groups. This Overlay implemented the mandates of the State's Final Order.

The goal of the RLSA is: Collier County seeks to address the long-term needs of residents and property owners within the Immokalee Area Study boundary of the Collier County Rural and Agricultural Area Assessment. Collier County's goal is to protect agricultural activities, to prevent the premature conversion of agricultural land to non-agricultural uses, to direct incompatible uses away from wetlands and upland habitat, to enable the conversion of rural land to other uses in appropriate locations, to discourage urban sprawl, and to encourage development that utilizes creative land use planning techniques.

The objective of the RLSA is: To meet the Goal described above, Collier County's objective is to create an incentive-based land use overlay system, herein referred to as the Collier County Rural Lands Stewardship Area Overlay, based on the principles of rural land stewardship as defined in Chapter 163.3177(11), F.S. The Policies that will implement this Goal and Objective are set forth below in groups relating to each aspect of the Goal. Group 1 policies describe the structure and organization of the Collier County Rural Lands Stewardship Area Overlay. Group 2 policies relate to agriculture, Group 3 policies relate to natural resource protection, and 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 by its owners shall nonetheless meet the minimum requirements of the Final Order pertaining to natural resource protection.

To meet the requirements of the Final Order, the County appointed the Rural Lands Assessment Area Oversight Committee. That committee was comprised of a wide variety of business and civic leaders as well as environmental, agricultural and academic members. The Committee was coordinated through the firm of Wilson Miller, an engineering and planning consultant. The work was further supplemented by a Technical Advisory Committee made up of state and federal subject matter experts.

The initial RLSA study established a methodology and set of parameters to test different scenarios within the study area. These parameters included the use of the MPO 2025 projected population, and the base density allowed at the time of the study, 1 unit per 5 acres. The study methodology and findings within the Report concluded, "Zoning entitlement of 1 unit per 5 acres determines the number of units currently allowed – 36,466. Using an average gross density for compact rural development of 2.17 units per acre, only 16,805 acres would need to be set aside for the buildout density in compact rural development. The credit calculation process results in an exchange rate of 8 Sending Area credits per acre of Receiving Area land. The process yields the assumed number of rural development acres that are eligible to become designated Receiving Areas.

The Report also recommended additional credits for Restoration activities on a "case by case" basis. There were no direct statements indicating how much these additional credits would potentially expand the baseline-equivalent footprint of 16,805 acres. Given the recommended basis for exchange, Sending to Receiving, at 8 credits per acre, it follows that bonus credits would necessarily expand the development footprint beyond 16,805 acres at maximum program participation.

The RLSA study was included in the Comprehensive Plan Amendment transmittal documents, and the same population and density parameters were used to describe the plan structure in the Transmittal Hearing staff report. The language in the proposed Growth Management Plan amendment (GMPA) incorporating the new RLSA overlay did not specifically limit the development footprint at build-out. In addition, the Plan language contained the recommendation for a "case by case" bonus credit allocation for restoration activities, as well as bonus credits for early entry Stewardship Sending Area designation.

The Florida Department of Community Affairs (DCA), in their Objections, Recommendations and Comments (ORC) report recommended changes to policy 1.21 and 3.11 to further define early entry bonus credits and restoration credits.

In response to the recommendation, the subject credits were further defined, resulting in a change to the original credit system. Policy 1.21 reduced early entry bonus credits: from one half credit per acre of FSA, HSA or WRA, to one credit per acre for HSA outside of ASCA, and one-half credit per acre for HSA inside the ACSC. A maximum was added of 27,000 early entry bonus credits. Policy 3.11 changed restoration credits. Originally described as "case by case," these were now quantified on a per acre basis as requested by DCA. Within Camp Keais Strand FSA or HSA, 4 credits per acre were added for dedicated lands and 4 credits per acre for

completion as defined by a permitting agency. In all other areas, an additional 2 credits per acre were added for dedication, and 4 credits per acre for completion as defined by a permitting agency. Policy 3.12 changed the index score of lands within 500 feet of major sloughs from 0.5 to 0.6.

The table below summarizes the major bonus credit changes from transmittal to adoption.

Table A-1
Summary of Major Bonus Credit Changes from Transmittal to Adoption

	Transmittal*	Adoption**
Early entry bonus credits	42,382	27,000
Base credits	127,151	128,000
Restoration credits	TBD on a case by case basis	160,000
Total credits	169,533 + restoration	315,000

*source RLSA Study, Appendix J, prepared by WilsonMiller, dated May 2002

**source WilsonMiller memo to Tom Greenwood, dated Dec 5, 2008

While the credits changed from the transmittal to the adoption versions as noted above (estimate made in 2008) the calibration for 8 credits per acre of SRA remained unchanged. This resulted in the potential for far greater SRA development acreage, as compared to SRA acreage without bonus credit provisions. These modifications were supported by environmental policy considerations, not the least of which was the encouragement of restoration activities at the expense of the large landowners rather than taxpayers.

On December 10, 2002, DCA issued its Notice of Intent to find the RLSA GMPAs in compliance with Chapter 163 and the Final Order.

The Five-Year Review

A policy within the existing RLSA Growth Management Plan includes the requirement to review the Plan provisions upon the 5-year anniversary of its adoption. Like the original assessment committee, this committee was made up of a broad base of business, civic, and environmental leaders.

It was not until the 5-year Review that a thorough assessment of program credits was undertaken, both existing (previously issued) and potential. At the same time, the Committee believed that additional program elements, using the credit system, should be applied to better protect agriculture, incentivize panther corridors, restructure the restoration credits and balance the credit system overall.

In its assessment of existing and potential credits under the existing Plan, including Base credits, Early Entry credits and Restoration credits, the Review Committee estimated that 315,000 credits could be earned at 100% participation. This equates to an SRA development footprint of 39,375 acres. The Committee also recognized that credits are not required for

“public benefit” uses (schools, regional parks, and some governmental facilities). Based on an estimate that 10% of land area within a Town or Village could be public benefit uses, the footprint created through credits could, in fact, be 43,312 acres when public benefits are added.

The important substantive recommendations from the Committee were structured in a way that required incentives in the form of additional credits. These included Agricultural Land credits within the “Open” areas of the RLSA, in order to place up to 43,700 acres of non-SRA (Town/Village, etc.) acres under agricultural easements, thus eliminating their potential conversion into “5-acre ranchettes”, a baseline land use right under existing agricultural zoning.

Additional credits for Agricultural protection: 89,000 credits

Panther Corridor credits within the “Open” areas of the RLSA, to assure connectivity contemplated by the Panther Protection Plan 23,000 credits

Restructuring the Restoration Credit system to better reflect value by type of restoration, resulting in a small decrease in total potential (6,000 credit reduction)

The sum of all potential credits under the existing Plan and the recommended changes totaled 463,104 credits, enough to allow the possibility of 57,888 acres of SRA development at build-out. In its recommendation to retain the bonus credits, and to extend bonus credit treatment for these new recommendations, the Committee proposed the following provisions to contract the development footprint outcome:

Permanently eliminate the potential for any extension of Early Entry bonus credits

Revise the restoration credit system

Increase the number of credits required per acre for development, from 8 to 10, derived from future approved SSAs.

Institute a cap on development acres or on total credits

Thus, the total credits under the above recommendations would result in a reduction of the total theoretical development footprint from 57,888 acres to 47,120 acres. Then applying a cap on acres, the Committee recommended no greater than 45,000 acres of SRA footprint. The Committee noted that the footprint includes both public benefit uses (10%) and open space within each development (35%).

At the Public Hearing, Board of County Commissioners, April 21, 2009, there was considerable debate as to whether a credit cap or an acreage cap would be the most effective limitation for development. Otherwise, the public and stakeholders found substantial consensus with the recommendations made. During that hearing, consensus was reached among stakeholders to limit both acres (45,000) and credits (404,000) under the program. Consensus included Florida

Wildlife Federation, Audubon of Florida, Conservancy, the Eastern Collier Property Owners group (ECPO) and the Board of County Commissioners.

Following consensus at that hearing, the Growth Management Plan was not later amended, apparently due to some contention as to who should pay for the cost of the GMP amendments, how the cost would be calculated, the fact that the economic downturn continued to appear intractable, and other factors.

The work completed by the 5-year Review Committee was extensive. Approximately 28 public meetings were held by the Committee in examining the many facets of the RLSA program. Following that work, at least 5 public hearings were held before the Environmental Advisory Committee (EAC) and the Collier County Planning Commission (CCPC), before the recommendations were heard by the Board. The findings and recommendations of the 5-year Review Committee should be respected and closely considered in the course of the current restudy.

Today

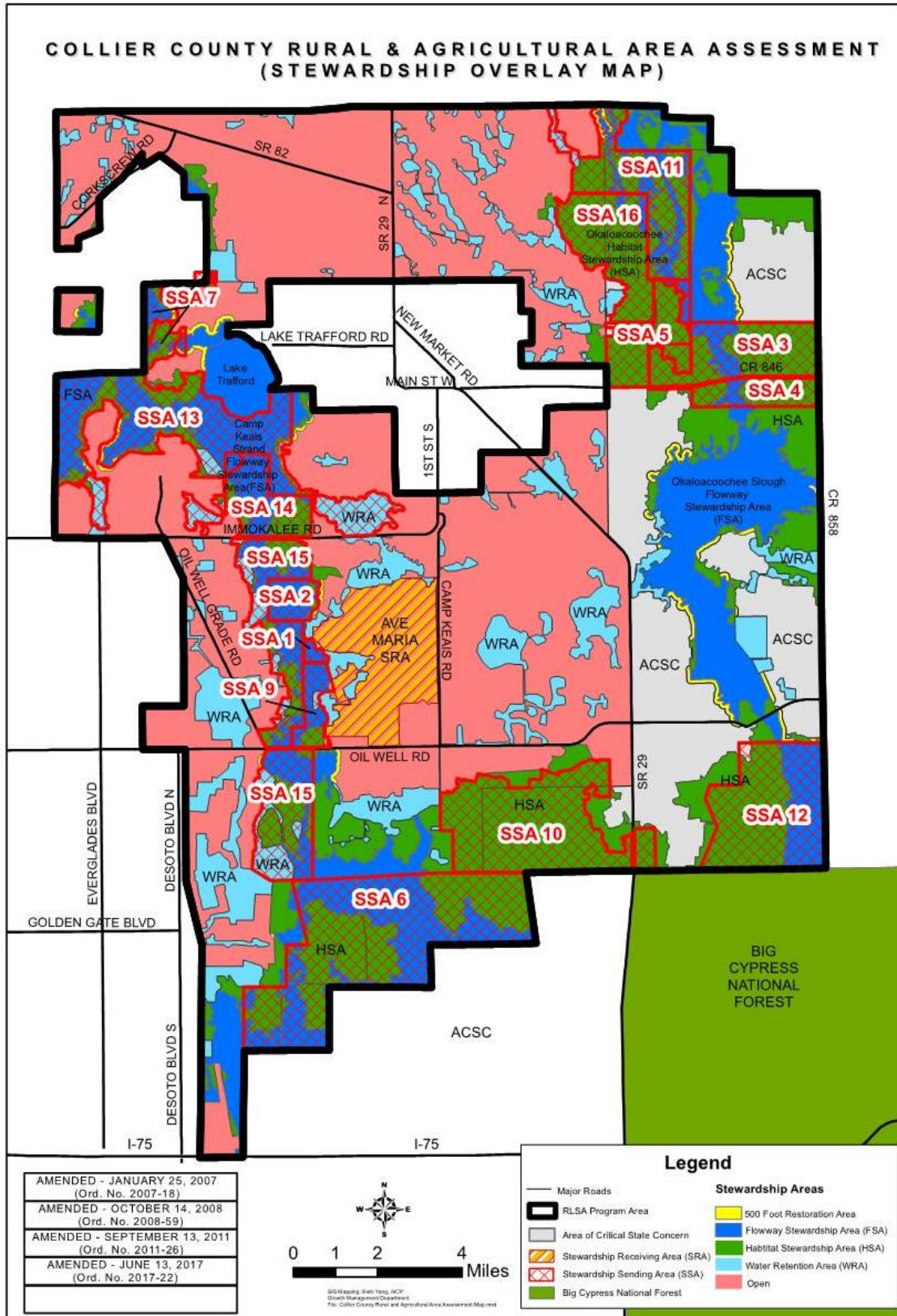
Presently, the Growth Management Plan elements adopted in 2002 remain in place with little alteration. The credits issued through the creation of the SSAs as of January 2018, total 129,987, equivalent to 16,987 acres of SRA development footprint. These credits were derived from 15 approved SSAs, providing easements over 50,431 acres, primarily Habitat Stewardship Areas (HSAs) (28,233 acres), Flowway Stewardship Areas (FSAs) (17,905 acres) and Water Retention Areas (WRAs) (3,071 acres). The County's Stewardship Sending Log can be found at: <https://www.colliercountyfl.gov/your-government/divisions-a-e/comprehensive-planning/rural-land-stewardship-area-rlsa-overlay-program/towns-hamlets-rural-lands-stewardship-area-overl/-fsiteid-1>.

The approved SSA's cover approximately 55% of the HSAs, FSAs, and WRAs, leaving 45% as targeted environmental easement protection areas. Less than 1% of the Open areas are protected by easement. Open areas not developed as Stewardship Receiving Areas (SRAs) and not protected by easements remain under baseline agricultural zoning rules, allowing agricultural uses, potential conditional uses, and residential development at 1 unit per 5 acres.

The RLSA Overlay, as adopted (and amended) in the County's Comprehensive Plan, can be seen in Figure A-1, below. The text of the current RLSA provisions in the Growth Management Plan can be found at the following link, including Group 1 through 5 Policies, Attachment A- Stewardship Credit Worksheet, Attachment B- Land Use Matrix and Attachment C- Stewardship Area Characteristics:

<https://www.colliercountyfl.gov/your-government/divisions-a-e/comprehensive-planning/rural-land-stewardship-area-rlsa-overlay-program/-fsiteid-1>.

Figure A-1



As a final introductory note, it is important to consider the narrative that accompanied the directives in the Final Order: “This assessment shall recognize the substantial advantages of innovative approaches to development which may better serve to protect environmentally sensitive areas, maintain the economic viability of predominantly agricultural and other predominantly rural land uses, and provide for the cost-effective delivery of public facilities and services”. To this end, the stewardship system does far more than transfer density from one location to another. It pays for the protection of natural areas and listed species habitats that necessarily require significant care and maintenance- in a word, “stewardship”. It has been estimated that an endowment covering the ultimate obligations of this system would approach \$1 billion or more. Regardless of the methodology or final number, the benefit to the environment and the public welfare of these perpetual commitments is enormous.

Public Planning Process

“I strongly favor smarter growth principles that will save tax dollars and natural resources in eastern Collier County...”

- Citizen comment, February 2019

The public planning process elicited comments, both general and specific. General comments, such as that above, reflect a broad consensus among citizens and stakeholders. As we look at comments that are more specific in nature, we see a divergence in how we view smart growth principles, how we measure public and private expenditures, and how we best protect the natural resources, both agricultural and natural, in the RLSA area.



The public outreach effort began with an advertised public workshop on January 25, 2018, followed by public workshops almost every month for over 1 year. In all, 12 workshops were conducted, alternately at the North Collier Regional Park and the South County Library. Topics

progressed from an overview of perspectives and general structure of the Overlay to agriculture, natural resources, infrastructure, water, development patterns, specific public areas of interest, and finally consensus. Most workshops were captured on video (found at County main web page, video archive, RLSA Restudy) and broadcast on Facebook live.

A compilation of Meeting Summaries can be found in Appendix A. Materials associated with each public workshop, including agendas, presentation materials, and recordings can be found on-line at the site below. This site also contains links to comment cards and correspondence to staff: <https://www.colliercountyfl.gov/your-government/divisions-s-z/zoning-division/community-planning-section/rural-lands-stewardship-area-restudy/rural-lands-stewardship-area-restudy-pub>.

The public was urged to consult the resources and material gathered as important background information for the RLSA restudy. Many participants were helpful in providing additional sources for review at this location. The RLSA Restudy Library contains a section on program creation, a section on the 5-year Review effort and a link to the current program status of approved SSAs and SRAs with associated documents. It also contains a number of documents created since 2009 that further inform the restudy. It can be found at this location: <https://www.colliercountyfl.gov/your-government/divisions-s-z/zoning-division/community-planning-section/rural-lands-stewardship-area-restudy/library-rural-lands-stewardship-area-res>.



One important item that came up during the public Workshops involved the specific data sets that were used to create the composite Natural Resource Index (NRI) scores for each acre within the RLSA. The composite NRI scores were used to calibrate the stewardship credit system, and Collier County retains these composite NRI scores. These composites are also

used as a foundation for County review of SSA and SRA applications that include updated NRI scores.

The County was never provided with each sub-composite “factor” making the NRI composite score for each acre. This data was not a part of the transmittal to the State as data and analysis. This data is not needed today by the County for any discernable purpose. These factors were developed by the firm of Wilson Miller, and later became the property of Stantec, a successor corporation.

Two stakeholder groups requested the NRI factor data used in the 2002 program. Stantec assisted the County in identifying the best available information in their archives, to provide to the County. Ultimately, the County determined that it would not take possession of the data as it was not used as data in support of its transmittal and it is not County data.



Staff is grateful to County citizens who took the time to contribute to these public dialogues. Along the way, a diversity of opinions were shared and captured through various means, including break-out group discussions, comment cards, and open questions and comments. At the same time, staff acknowledges hurdles inherent in a year-long public discussion of a complex program. The more casual observers, those who attended only a few of the workshops tended to have difficulty understanding the material.



During the final two workshops, the public was encouraged to find areas of agreement or disagreement with many of the statements, concerns, or solutions mentioned in group discussion, comment cards, or correspondence. As in previous sessions, Dr. Amanda Evans, FGCU, a certified mediator provided leadership for group activities. These ideas or statements were sorted into “affinity” groups by attendees and ultimately discussed to determine where there was agreement, and where there was not. The results of this exercise appear at the beginning of each substantive section of this White Paper following the data update section.



Rural Lands Stewardship Area Overlay White Paper

B. Data Update

Acreage and Credits

Program Acreage Calculations

This section updates some of the basic quantitative data associated with the RLSA program and the status at the present time (as of March 2019). These calculations and formats are similar to those provided in the 5-year Review, but include more recent data.

Early descriptions of the RLSA describe an area of 195,846 acres. This was the original study area. However, when the RLSA was adopted, it excluded portions of state-owned lands, both in the Okaloacoochee Slough State Forest and the Corkscrew Regional Ecosystem Watershed (CREW). The resulting Adopted RLSA totaled 185,935 acres.

The depiction below, Exhibit A-1, shows the location and acreage of the adopted RLSA overlay areas, along with publicly owned land, at the present time. This map depicts areas designated as FSA, HSA, WRA, 500' Restoration Area and Open. The map also indicated that 7,067 acres are in public ownership, resulting in 178,868 acres of privately held lands. Under current Plan provisions, only private lands are eligible to participate in the Stewardship Credit program. Of the 7,067 acres of publicly-owned lands in the RLSA, 4,136 acres are located within designated protection areas (FSAs, HSAs, WRAs, and 500' buffers).

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Figure B-1



RLSA ADOPTION MAP

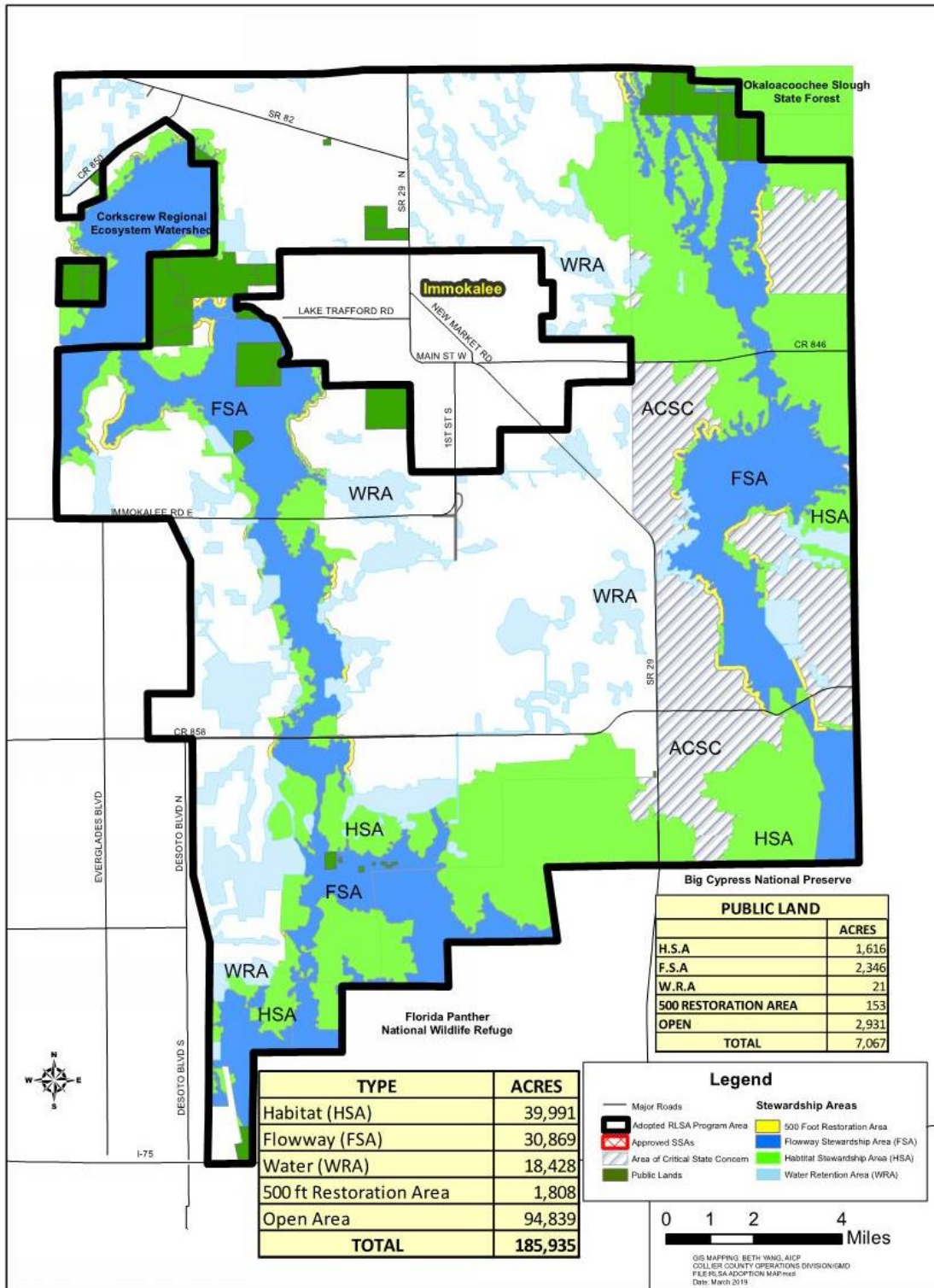


Table B-1 provides a summary of the acreage of each designation and the acres that have been protected through Stewardship Sending Areas since the RLSA program inception. The Approved Percentage column shows the percentage protected within each RLSA stewardship protection area type. A total of 50,431 acres have been protected to date through SSA designations, although some remain “in escrow.” Accordingly, approximately 56 percent of all FSA, HSA, WRA, and 500’ Restoration Areas (designated protection areas) have been protected in this way. Table B-2 shows the number of acres of stewardship protection pending under existing SSA applications.

Table B-1
Summary of Stewardship Designations within Approved Sending Areas
Rounded to nearest acre

RLSA Designation	Total RLSA Acres	SSA Acres Approved	Approved Percentage
FSA	30,869	17,906	58%
HSA	39,991	28,883	72%
WRA	18,428	3,071	17%
500’ Restore	1,808		*
Open	94,839	570	1%
<i>Designated protection areas</i>	89,288	49,860	56%
Total	185,935	50,431	27%

Source: Collier County GIS, Recorded SSA Easement Agreements; SSA Land Characteristics Summary

*500’ Restoration approved areas included in HSA % category

Table B-2
Summary of RLSA Designations within Sending Areas Pending

RLSA Designation	Total Acres	SSA Acres Pending	Percentage of Designated Area
WRA	18,228	3,122	17%

Source: SSA # 17 application

Table B-3 shows the land use layers remaining under SSA designations: Ag-1, which includes active agricultural uses remaining, including: row crops, citrus, specialty farms, horticulture, plant nurseries, improved pastures for grazing, and similar activities; Ag-2, which includes passive agricultural activities, including: unimproved pastures for grazing and ranching, forestry, and similar uses and related support uses. In summary, the SSAs approved have protected 50,431

acres of agriculture use, primarily passive uses. All other more intensive land uses not otherwise indicated have been removed from each of these SSA designated areas.

**Table B-3
SSAs and Land Use Levels Remaining**

SSA #	Ag – 1	Ag - 2	Other	Total Acres
SSA 1		146.6		146.6
SSA 2		704.1		704.1
SSA 3	858.0	2,337.8		3,195.8
SSA 4	654.0	585.9		1,239.9
SSA 5		1,201.0	651.3 Conservation	1,852.3
SSA 6	2,712.7	7,198.4		9,911.1
SSA 7		985.4		985.4
SSA 8	WD	WD		WD
SSA 9		739.3	50.1 Earth Mining	789.4
SSA 10	4.1	5,864.6		5,868.7
SSA 11		3,663.9	35.1 Recreational Uses	3,699.0
SSA 12		4,775.9		4,775.9
SSA 13		7,414.0		7,414.0

**Table B-3 (Continued)
SSAs and Land Use Levels Remaining**

SSA #	Ag – 1	Ag - 2	Other	Total Acres
SSA 14	1713.5			1,713.5
SSA 15	5,259.0			5,259.0
SSA 16	2,876.2			2,876.2
Total	14,077.5	35,616.9	736.5	50,430.9

Source: Recorded SSA Easement Agreements, Collier County SSA Land Characteristics Summary

Stewardship Receiving Areas (SRA) Acreage.

As shown in Table B-4, the Town of Ave Maria SRA approved by the county in 2005 contains 5,027 acres. Over 1,000 of the total acres are public benefit uses, including Ave Maria University. As of March 1, 2019, no other SRAs have been approved.

Eight Credits are required for each acre of land included in an SRA, except for open space in excess of the required thirty-five percent as described in Policy 4.10 or for land that is designated for a public benefit use described in Policy 4.20.

**Table B-4
SRA Acreage**

SRA Designation	Acres	Public Benefit Uses (Acres)	Total Acreage	Planned Gross Density	Goods and Services per DU**
Town of Ave Maria SRA	4,000	1,027	5,027	2.19*	112 s.f.
Total	4,000	1,027	5,027		

*Gross density is based on planned units within total acreage, excluding University housing, ALF, hotel, etc.

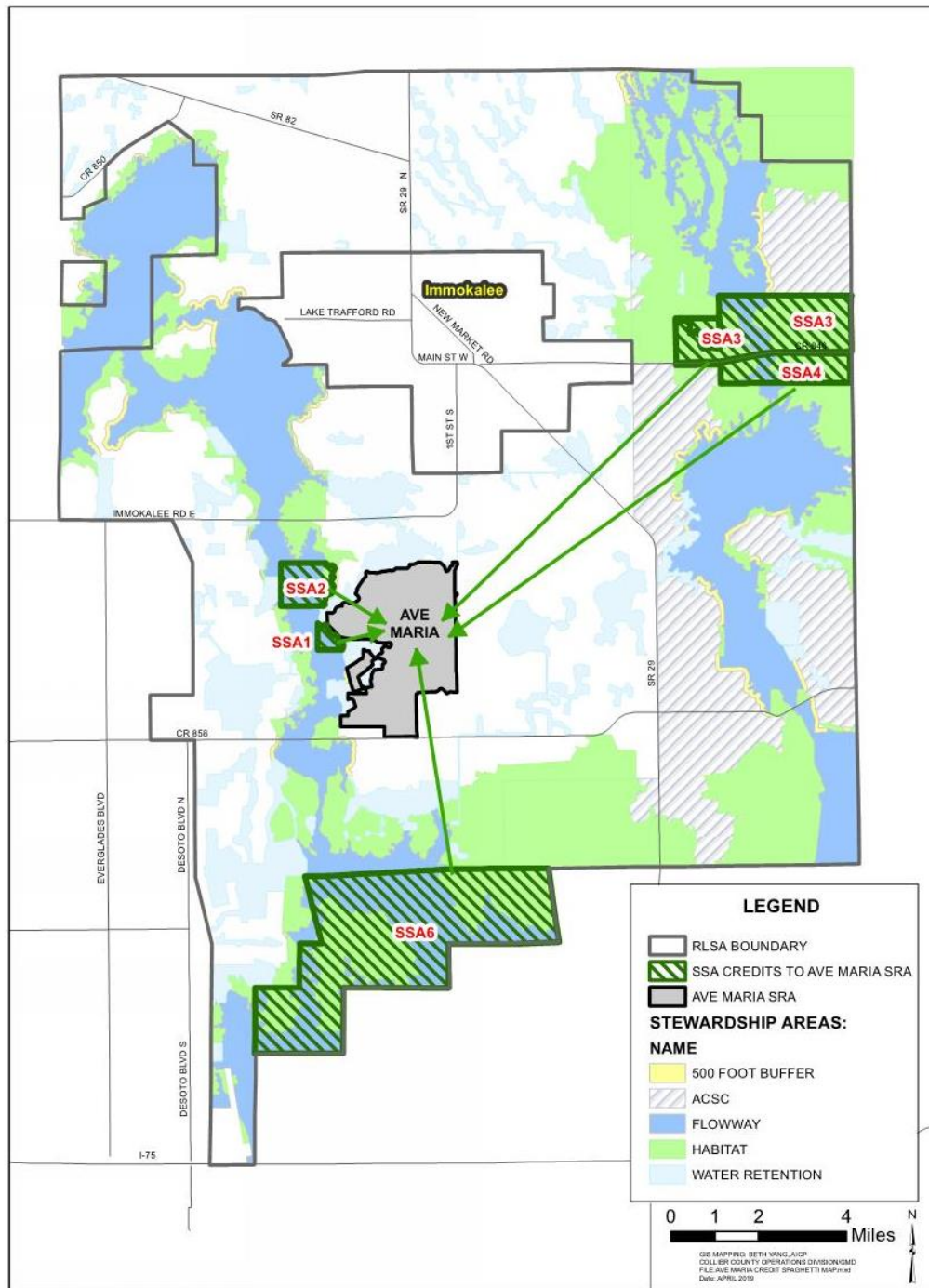
** Includes retail, office and medical

Figure B-2 shows the location of the existing Town of Ave Maria, along with the SSAs created to produce credits used to support the application. A total of 28,658 credits were used, representing 13,974 acres of preserved SSAs. Credits from SSAs 1-4 were used in full; 20,118 credits from

SSA 6 were redeemed for Ave Maria, leaving 2,832 credits as a remaining balance in SSA 6. Thus, nearly 14,000 acres have been put under SSA easements to create a town of 4,000 acres, net of public benefit uses.

Figure B-2

AVE MARIA TDR TRANSACTIONS CREDITS



Additional Towns and Villages have been proposed in the last several years. An SRA application under the name of Rural Lands West was submitted as a 4,090 acre Town but was withdrawn in 2019. Applications appearing in Table B-5 below have been submitted and are under staff review. Both are submitted as Villages.

**Table B-5
SRA Acreage Pending***

SRA Designation	Acres	Public Benefit Uses (Acres)	Total Acreage	Planned Gross Density	Goods and Services per DU
Village of Hyde Park SRA	655	unk		2.75	25
Village of Rivergrass SRA	1,000	unk		2.5	32
Total	1,655				

*Applications submitted as of March 1, 2019.

Stewardship Credits Generated, Assigned, and Held for Future Use.

Stewardship Credits (Credits) are created from any lands within the RLSA District from which one or more Land Use Layers are removed and are designated as an SSA. All privately owned lands within the RLSA are a candidate for designation as an SSA. However, lands having high ecological value, such as lands within an FSA, HSA, WRA or 500’ Restoration Area generate more credits per acre than the “Open” designated lands. Stewardship Credits can only be generated through the approval of Stewardship Sending Areas by the Board of County Commissioners using the methodology for the calculation of Credits. The methodology includes:

- 1) The Natural Resource Index Value of the land being designated as a SSA; and
- 2) The number of land use layers being eliminated.

There are additional incentive credits to encourage the voluntary designation of SSAs within the RLSA District, such as early entry bonus credits and restoration (R1 and R-2) credits.

Stewardship Credits Generated

As of March 1, 2019, a total of 16 SSAs have been approved; subsequently, one has been withdrawn. Together, these total 50,431 acres. As shown in Table B-6, these SSAs have been assigned a total of 129,987 Stewardship Credits, including Early Entry, R-1, and R-2 Credits. Additional R-2 Credits can be earned upon the successful completion of restoration work by the land owner. The maximum potential of R-2 credits within SSAs 1-16, in addition to the earned credits listed below, is 41,731.1.

**Table B-6
Stewardship Credit Summary**

SSA #	Acres	Total Credits Generated	Base Credits	Early Entry Credits	R-1 Credits	R-2 Credits Earned
1	146.6	263.6	263.6	0	0	0
2	704.1	1,268.1	1,217.6	50.5	0	0
3	3,195.5	5,332.1	3,236.9	1597.4	497.8	0
4	1,239.9	1,676.7	1,155.8	520.9	0	0
5	1,852.3	4,573.5	2,195.5	814.9	1,563.1	0
6	9,911.1	22,949.1	13,393.3	3,559.0	4,286.4	1,710.4
7	985.4	4,034.2	1,711.8	486.5	1,835.9	0
8	(withdrawn)					
9	789.4	4,481.0	1,560.2	155.2	2,765.6	0
10	5,868.7	26,943.8	9,232.5	3,838.9	13,872.4	0
11	3,699.0	8,504.8	4,432.9	1,396.7	2,675.2	0
12	4,775.9	14,780.6	8,956.8	1,458.0	4,365.8	0
13	7,414.0	20,916.1	12,999.3	1,317.6	6,599.2	0
14	1,713.5*	2,515.7	1,850.5	665.2	0	0
15	5,259.0*	7,261.8	5,434.9	1,826.9	0	0
16	2,876.2*	4,485.9	2,621.3	1,864.6	0	0
TOTAL	50,430.9	129,987.0	70,210.2**	19,552.3	38,461.4	1,710.4

Source: Recorded SSA Easement Agreements

* Amendment applications pending for R-1 and R-2 credits, increased credits shown below

**Base Credits include credits for 500' buffer areas, Policy 3.12

Stewardship Credits Assigned or Held for Future Use

As of March 1, 2019, the Town of Ave Maria is the only approved Stewardship Receiving Area (SRA) within the RLSA. The Town of Ave Maria utilized 28,658.4 Stewardship Credits generated from SSAs 1 through 4 and 6 (Table B-7). The balance remains available to the owners for future SRA development.

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**Table B-7
Summary of Credits Transferred and Utilized for the Town of Ave Maria and Credits Remaining for Future Use**

SSA #	Acres	Total Credits Generated	Credits Transferred and Utilized for Town of Ave Maria	Credits Held for Future Use
1	146.6	263.6	263.6	0
2	704.1	1,268.1	1,268.1	0
3	3,195.5	4,675.2	5,332.1	0
4	1,239.9	1,676.7	1,676.7	0
5	1,852.3	4,573.5	0	4,573.5
6	9,911.1	22,949.1	20,117.5	2,831.6
7-16	33,381.1	96,216.0	0	96,216.0
TOTAL	50,430.9	129,987.0	28,658.0	101,329.0

Source: Collier County data included in the Rural Land Stewardship Sending Area (SSA) Land Characteristics Summary and Recorded SSA Easement Agreements.

New Stewardship Sending Areas Pending in Application Status

As of March 1, 2019, only one additional Stewardship Sending Area is pending approval by the Board, SSA #17. This is described below on Table B-8. In addition, three SSAs have applied for amendments seeking approval for new designated restoration areas. These are shown in Table B-9.

**Table B-8
Stewardship Sending Areas Pending in Application Status**

SSA #	Acres	Total Credit Potential	Base Credits	Early Entry Credits	R-1 Credits	R-2 Credits
17	3,118.3	4,844.3	4,844.3	0	0	0

Stewardship Sending Area Amendments in Application Status

As of March 1, 2019, the County is in receipt of amendment applications for SSAs 14, 15 and 16. These applications identify restoration opportunities, and thereby affect the base credit calculations as well as the R-1 and R-2 potential values. Although the acreage of each SSA remains unchanged, the applicants seek additional base credits due to the restoration potential as a component of Natural Resource Index (NRI) scale, a component of base credit calculation.

**Table B-9
Stewardship Sending Areas with Amendments Pending**

SSA #	Acres	Additional Base Credits under App	R-1 Credits under App	R-2 Credits under App (max potential)
14	1,713.5	1,485.8	4,945.2	4,945.2
15	5,259.0	4,660.4	14,178.4	14,178.4
16	2,876.2	1,642.9	1,269.2	2,538.4
Total SSA Amendment App. Credits		7,789.1	20,392.8	21,662.0

A Comparison of Agricultural Activity at RLSA Inception and 2012

Table B-10 below summarizes the type of agricultural uses in 2002 compared to the type of agriculture uses in 2012. The agricultural land cover categories include all FLUCCS 200-level codes, and the FLUCCS 310, 329, and 330 rangeland codes. The pasture/rangeland category is perhaps misleading, because the movement of livestock among various grazing areas may create anomalies in the land cover indicators. For this reason, the total agricultural land change of +8.5% reflects a doubling of the acreage counted toward pasture and rangeland and may not be a good indicator of overall agricultural activity change.

**Table B-10
2002/2012 Agricultural Type Comparison**

Agricultural Type	2002 ACRES	With RLSA	Without RLSA	New Ag	2012 ACRES	% CHANGE
Citrus	39,468				35,881	-9.1%
Fallow	7,974				4,262	-46.6%
Pasture/Rangeland	17,863				36,386	+104.0%
Row Crop	27,542				24,471	-11.2%
Specialty	1,651				1,552	-6.0%
TOTAL	94,498	-5,058	-480	+427	102,552	+8.5%

Sources: 2002 and 2012 RLSA land cover/land use FLUCCS data, SFWMD

Perhaps a better indication of the change in agricultural use is reflected in the reduction in citrus, row crops, and specialty products. When comparing these active agricultural categories, there has been a reduction in acreage from 68,661 to 61,904 or -9.8% over the 10-year period. Most of this loss can be attributed to the conversion of agricultural land to the master planned community (SRA) of Ave Maria, as noted in Table B-11. In addition, cyclical and regional shifts in production and operations should be expected and may reflect a diversity of factors including international trade, the national economy, and vectors such as citrus greening.

Table B-11
2002 Ave Maria Agricultural Uses

Agricultural Type	2002 ACRES
Citrus	839
Fallow	177
Natural Wetlands and Uplands (Non Ag)	572
Pasture/Rangeland	429
Row Crop	2,562
Specialty	449
TOTAL	5,027±

The Amount and Type of Restoration Through Participation in the Stewardship Credit System

Two types of restoration credits are available within the RLSA program under Policy 3.11. Restoration 1 (R1) credits- for lands designated by the property owner for restoration activities under certain conditions. The “actual implementation of restoration improvements is not required for the owner to receive such credits...” The Policy also provides for Restoration 2 (R-2) credits- for lands designated and undertaken by the landowner for restoration activities. Credits are assigned but not available for transfer until the restoration activities have met applicable success criteria.

To the extent restoration is designated and is to be undertaken by the landowner, a Restoration Program is attached to the Stewardship Easement as an exhibit. The Restoration Program details the required restoration improvements, success criteria, and the additional land management measures required after restoration occurs.

The proposed restoration activities often require lengthy timeframes for the detailed restoration design, data collection, state and federal permitting, and years of actual restoration work to achieve success criteria.

The types of restoration listed in Table B-12 are described below:

Flowway: Restoration in areas that have been impeded or constricted by past activities resulting in a functional decrease in the Camp Keais or Okaloacoochee flowways.

Wading birds: Includes hydrologic restoration, and/or exotic removal within drained areas or excavation of shallow marsh in farm fields planted with native aquatic plants within foraging distance of a rookery.

Listed species: Restoration, exotic removal, and or management of pasture areas to support prairie species such as caracara, burrowing owls, and sand hill cranes. Could include restoration or creation of habitat for any listed species documented to occur within the RLSA.

Large mammal corridor: Restoration or creation of "preferred" habitat adjacent to or connecting with existing occupied habitat.

Table B-13 documents the amount, location, and type of proposed restoration activities within approved SSAs. This table includes the proposed restoration in amendment applications for SSAs 14,15 and 16. To date, restoration activities have been completed only in SSA 6.

**Table B-12
Amount and Types of Restoration in SSAs**

Location	Restoration Type	Acres	R-1 Credits	R-2 Credits (completed)	R-2 Credits (potential)
SSA 3	Wading Bird	248.9	497.8		995.6
SSA 5	Wading Bird	651.3	1563.1		2605.2
SSA 6	Flowway	575.0	4286.4	1710.4	2576.0
	Listed Species	619.2			
	Wading Bird	24.8			
SSA 7	Large Mammal Corridor	331.9	1835.9		1835.9
	Listed Species	75.7			
	Wading Bird	51.4			
SSA 9	Flowway	571.5	2765.6		2765.6
	Large Mammal Corridor	61.0			
	Wading Bird	58.9			
SSA 10	Listed Species	1770.5	13872.4		13872.4
	Caracara	1068.2			
	Wading Bird	317.7			
SSA 11	Large Mammal Corridor	311.7	2675.2		5350.4
	Caracara	1337.6			
SSA 12	Flowway	403.5	4365.8		8731.6
	Flowway	1779.4			
SSA 13	Large Mammal Corridor	1622.4	6599.2		6599.2
	Wading Bird	27.4			

Table B-12 (Continued)
Amount and Types of Restoration in SSAs

Location	Restoration Type	Acres	R-1 Credits	R-2 Credits (completed)	R-2 Credits (potential)
SSA 14*	Flowway	1130.7	4945.2		4945.2
	Wading Bird	90.5			
	Listed Species	15.1			
SSA 15*	Flowway	2606.5	14178.4		14178.4
	Wading Bird	914.5			
	Listed Species	23.6			
SSA 16*	Large Mammal Corridor	153.7	1269.2		2538.4
	Listed Species	480.9			

Source: SSA recorded documents and applications

*Includes pending amendment applications as of 4/15/18

Table B-13
Restoration Acres Dedicated by Type (R-1)

	Approved	Proposed	Total	Percent Of Total
Flowway	3,329	3,738	7,067	41%
Large Mammal Corridor	1,995	154	2,149	13%
Listed Species	2,466	520	2,986	18%
Wading Bird	1,380	1,006	2,386	14%
Caracara	2,406	-	2,406	14%
TOTAL	11,576	5,418	16,994	100%



Rural Lands Stewardship Area Overlay White Paper

C. Water Resources

The following points were discussed at Public Workshops on February 28 and March 28, 2019 (Appendix A: Public Outreach Meeting Summaries).

Consensus:

- Affirm conformance with Lower West Water Supply Plan
- SRA approvals should stop if water quality/quantity is negatively affected
- Advocate/Encourage filter marshes before any discharge into WRAs, where appropriate
- Redirect development outside important flowways and wetlands
- If a water retention area is used for an SRA it should count toward SRA acreage (does not include downstream receiving bodies)
- Incentivize water storage on farm lands
- Water resources must be preserved
- Observe growth plan – runoff after development cannot exceed runoff before development
- County should closely monitor water pollution and water levels (quality and quantity)

Non-consensus:

- Low impact development practices to manage stormwater run-off where appropriate
- Add provisions to protect water supply
- 3rd party study of cumulative impacts on water quality/quantity from 43,000 acres of development
- Require more stringent water management in SRAs than SFWMD requirements

5 Year Review Recommendations

- If WRAs are used for primary water treatment, count acreage in SRA

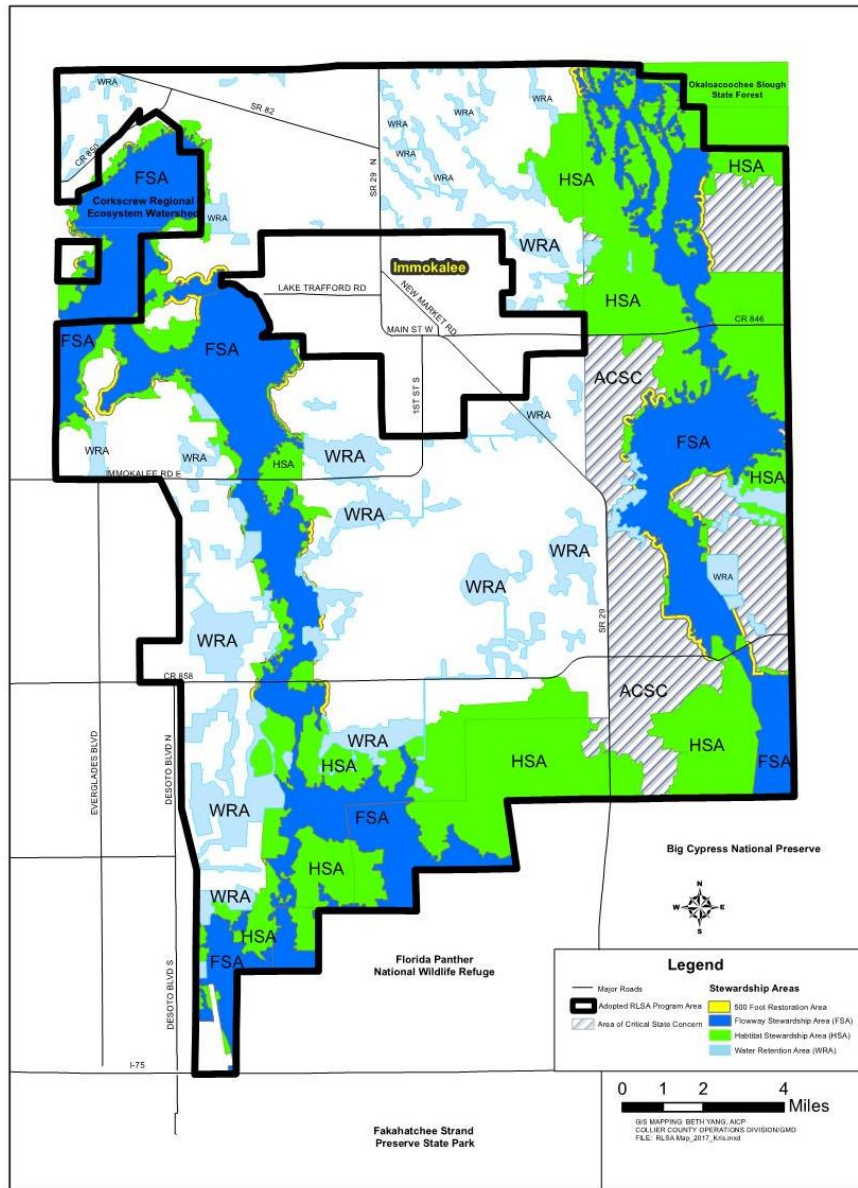
Water issues represent a major part of the environmental analysis, including environmental sustainability. Surface water management and aquifer health are the two most important components of total water resource planning in the RLSA. Recognizing the importance of this topic, a Water Resources Workshop was convened on September 27, 2018. The panel of experts included Jerry Kurtz, P.E., Collier County Stormwater Section Manager; Brad Cook, Section Leader, South Florida Water Management District; Steve Messner, Director, Water Division, CCWSD; Kirk Martin, Senior Hydrologist, Water Science Associates.

Surface Water

Unlike manmade systems prevalent in the urban and Golden Gate Estates areas of the County, the natural topography in the RLSA has historically accommodated the principal water flows to the south. These natural flowways have been supplemented by permitted uses of water retention areas (WRAs). Together, these systems have served the needs of the agricultural

uses in the RLSA. The map below (Figure C-1) depicts these areas as indicated by Flowway Stewardship Areas (FSAs) and WRAs, first identified as such by the Rural Lands Assessment Area Oversight Committee. These Overlay features encourage development outside important flowways and wetlands.

**Figure C-1
Adopted RLSA Overlay Features**



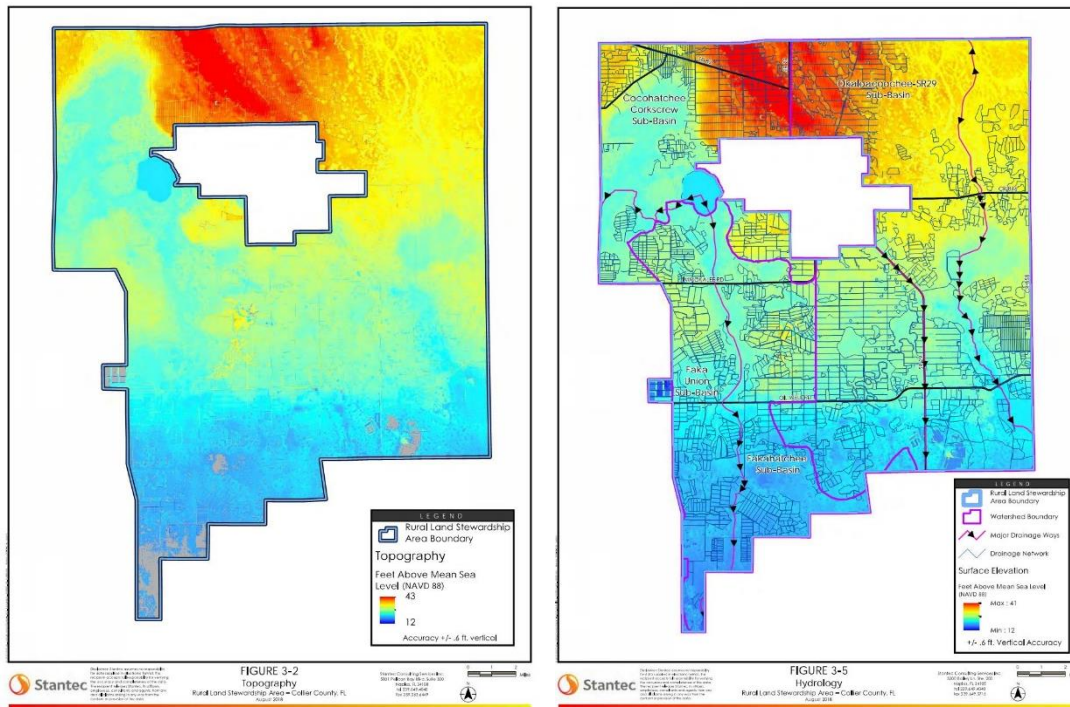
According to Mr. Kurtz, the County’s water management programs historically focused on drainage improvements to increase areas of habitability and to maintain these areas with a minimum of nuisance flooding. More recently, the focus has shifted to include watershed health management. The County’s Stormwater Division actively manages the smaller canals, lakes, and ditches, while the SFWMD actively manages the larger systems. This Division also contributes to planning analysis during the rezoning process.

The SFWMD continues to regulate stormwater discharge rates (0.15 cubic feet per second per acre) so that new development does not impact downstream areas to any degree greater than the pre-development scenario. However, the County has supplemented this regulation, having identified 16 of 51 sub-basins that are now subject to County maximum peak discharge rates that are more stringent than SFWMD would otherwise allow. In large part, this is due to areas within those sub-basins that were developed before the SFWMD standards applied. One of the 16 restricted sub-basins falls within part of the RLSA. It is the Faka-Union Canal Basin North with a rate of 0.09 CFS/acre.

Continue to study the need for maximum peak discharge rates for basins within the RLSA to maintain water quality and quantity downstream.

The Flowway Stewardship Areas (FSAs) identified within the RLSA serve as receiving bodies and conduits for surface water in the RLSA, generally moving from north to south. The flows continue through the Panther National Wildlife Refuge, Big Cypress National Preserve, Fakahatchee Strand Preserve State Park and ultimately, Ten Thousand Islands and the Gulf of Mexico. This north to south flow becomes very evident in reviewing the topography shown in Figure C-2, and the altered surface drainage pattern shown in Figure C-3 as published in the HCP application.

**Figures C-2 (left) and C-3 (right)
RLSA Elevations and Surface Drainage**



As stated in the FDOT study entitled SR 29 Road and Canal Corridor Report, the Okaloacootchee Slough (OK Slough) is among the largest and most regionally connected natural flowways in the Big Cypress Basin. It is a vital lynchpin for achieving water resource goals such as wetland preservation, water quality maintenance, and aquifer recharge. Much the

same can be said for the Camp Keais Strand. Agricultural operations currently use the FSAs as receiving bodies for surface waters. These include the Camp Keais Strand toward the west and the OK Slough toward the east within the RLSA.

Agricultural operations currently use the FSAs as receiving bodies for surface waters. These include the Camp Keais Strand toward the west and the OK Slough toward the east within the RLSA. These are supplemented by water retention areas (WRAs) permitted by the SFWMD as primary treatment and detention areas for agricultural operations. These WRAs serve an important purpose and should remain available, as permitted, for stormwater management. As a point of consensus during the 5 year review, WRAs converted for SRA development use as primary treatment areas should count toward SRA acreage.

Count WRAs as SRA acreage if used for primary water management.

Encourage filter marshes prior to offsite discharge or discharge into WRAs where appropriate.

Two observations can be made about the use of these natural flowway systems. First, they are more effective in attenuating discharge as compared to ditch and canal systems found in many parts of the County. Second, they require periodic maintenance since they are affected by upstream activity over time. For the second reason, staff recommends Flowway Management Plans as a required component of development (or continued agricultural operations) in the RLSA.

Flowway Management Plans would be created through a public/private partnership and would involve at least two major functions. One would be monitoring the health and changes over time, including wetland health and water quality. The other function would be operational-maintenance functions may be required from time to time, and these should require upstream entities to contribute to needed maintenance activities. Examples would be natural lands inspection and management when necessary, identifying and addressing any debris and vegetation accumulation over time, which can affect the flowway's capacity for normal overland flow conveyance.

Flowway Management Plans might be further described to include:

1. Mapping limits of actual overland flow areas
2. Vegetation mapping
3. Annual water level gauging and monthly level recording throughout the year
4. Annual ground inspection of the flow path areas
5. Inspections following significant storm events
6. Estimation of flow quantities and rates
7. Controlled burns where appropriate as well as other accepted natural lands and/or forestry management techniques
8. Vegetation harvesting
9. Mowing
10. Spraying herbicide

11. Exotic or invasive vegetation control
12. Silt build-up or shoaling removal
13. Downed tree removal

Require flowway management plans as part of the SRA approval process to supplement the SSA maintenance functions in a more specific way and to provide a mechanism for flowway management in the absence of established SSAs or to supplement SSA land management activities.

Similarly, coordination with FDOT and SR 29 improvements should be addressed, so that functionality of the OK Slough is maintained and areas needing hydration are properly hydrated. This, in turn, affects wildlife habitat, area susceptibility to wildfires, and point discharge to the coast. Support for a multi-disciplinary “SR 29 Comprehensive Water Resources Plan”, as recommended by FDOT, should be considered.

Coordinate with FDOT and other state and local agencies on an SR 29 Comprehensive Water Resources Plan aimed at restoring the health of the Okaloacoochee Slough.

Water Supply and Aquifer Health

The RLSA is largely served today by shallow wells drawing from the surficial aquifers, principally for agricultural use. One major exception is the new Town of Ave Maria, which is served by a centralized private water/sewer system. In addition to the Ave Maria utility, Immokalee also is served by a centralized private utility. The service boundary of the Immokalee Water and Sewer District extends beyond the Immokalee urban area, although a relatively small distribution system currently extends into the RLSA. Otherwise, the Collier County Water Sewer District (CCWSD) service area now extends to all areas within the RLSA not otherwise contained within the two aforementioned private utility areas. The CCWSD plans to build a new Northeast Raw Water Treatment Plant (NERWTP) and North East Water Reclamation Facility (NEWRF) to serve the eastern areas of the County, including the RLSA, for future water, sewer and irrigation service.

The County is responsible for the data, analysis, and report for the 10 Year Water Supply Facilities Work Plan (10 Year Supply Plan) every five years. The latest 10 Year Supply Plan was completed in February 2019 and likely adopted by the time of this White paper publication. The 10 Year Water Supply Plan is built upon the foundations of the Lower West Coast Supply Plan (LWCSP), which looks out 20 years into the future. The current Plan extends to 2040. The current LWCSP updates the demand projections for water use by public supply and private systems, agriculture, irrigation, commercial, recreational, and other users.

Both plans conclude that there are sufficient water resources and facilities to accommodate demand over the planning periods. Of note, domestic per capita demand has decreased significantly over the past 20 years due to conservation practices, including increased use of reclaimed water for irrigation, block rate structures, and flow efficient fixtures. These conclusions

are based on regional supply and demand and not tailored specifically to the RLSA. Moreover, it is prudent to look beyond a 20 year horizon for the RLSA given the unique development pattern there and the vital importance of water resource sustainability.

In 2002 when the RLSA was conceived, a Technical Memorandum was produced to address groundwater Issues (CDM Missner ver. 9/2002). This study noted the primary concern for attenuation and groundwater recharge: “Residential developments tend to have larger areas with impermeable surfaces such as roads, housing, and parking areas. Directly connected impervious surface areas can lead to increased runoff that does not enter the groundwater system” (p. 4-1). However, the report explains that modern permitting standards require stormwater management systems that restrict runoff to pre-development levels. Thus, provision of appropriately designed water management systems allows area recharge characteristics to be maintained even with an increase in impervious systems. With respect to consumption and SRA development, the report concludes that the conversion of land from agricultural use to residential and commercial development results in a net reduction in water use.

Concerns were raised during public outreach as to the accuracy of the net reduction in water use from agriculture to development. Specifically, there were concerns that the studies looked at permitted supply rather than actual use, and that the recharge characteristics of agricultural irrigation were overlooked. To that end, a 2009 study by Johnson Engineering looks at water consumption and recharge extending through a hypothetical “build-out” scenario. The study reviewed the effects of water draw as well as evapotranspiration (ET) in comparing actual water resource demand during a long-range planning horizon and considering the possibility of 45,000 acres of SRA development. This study concluded that the conversion of land from agriculture to residential will result in a decrease in water use due to decreased ET. Additional assurance of sustainability derives from the emergence of alternative water supply practices.

These findings were updated and confirmed by Kirk Martin, Senior Hydrogeologist, Water Science Associates at a public workshop in 2018. Mr. Martin stated that water use reduces significantly when agriculture converts to new communities. His research has indicated that such conversion would reduce actual withdrawals 50-65%.

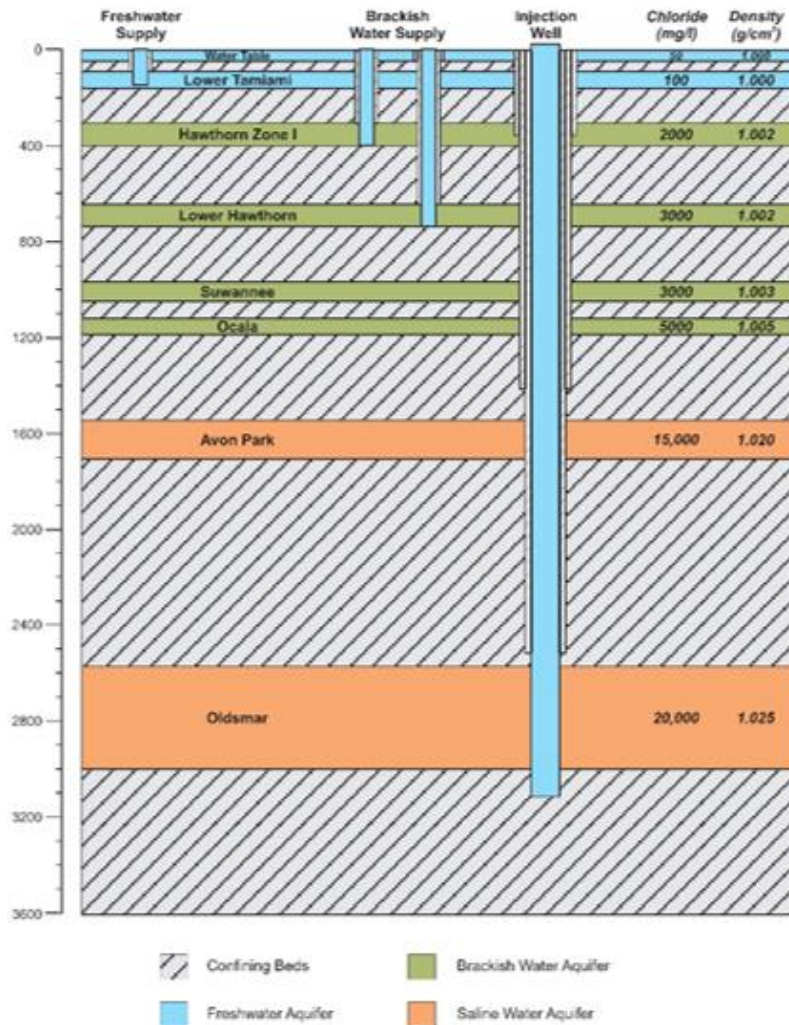
Continue to monitor aquifer supply and quality through existing federal, state and local programs.

In a collaborative paper entitled “Water 2070”, the authors note that the overall increase in population in the state of Florida will stress available water availability by 2070 unless additional measures are undertaken. In its recommendations, it notes the importance of increasing supply through alternative water supply programs and decreasing demand through conservation efforts. “The single most effective strategy to reduce water demand in Florida is to significantly reduce the amount of water used for landscape irrigation.” Among the other conservation recommendations appearing in this statewide publication, nearly all have been adopted in Collier County.

The CCWSD has been at the forefront of these and other conservation efforts and continues its progressive campaign into the future. Irrigation Quality (IQ) water supply has been a focus of the CCWSD for many years. It is moving to dramatically increase the efficiency of the IQ system through seasonal supplementation to extend total distribution and storage methods such as Aquifer Storage and Recovery (ASR) wells.

The CCWSD balances withdrawals from various aquifers to meet seasonal and total demand, and in this way has been in the forefront of Florida utility systems. Withdrawals from the Hawthorne (brackish) aquifers with reverse osmosis treatment has been a practice in Collier County for over 20 years. The Figure C-4 below shows the relative locations of these aquifers. Monitoring of supply and salinity occurs on an ongoing basis.

**Figure C-4
Collier County Hydrology**



Other conservation programs include low-flow fixture enforcement, stepped water use rates, leak detection systems, asset management systems, irrigation restrictions, and education

including the promotion of Florida-Friendly landscaping practices. Both Ave Maria Utility Company and the Immokalee Water Sewer District have moved in the same conservation direction.

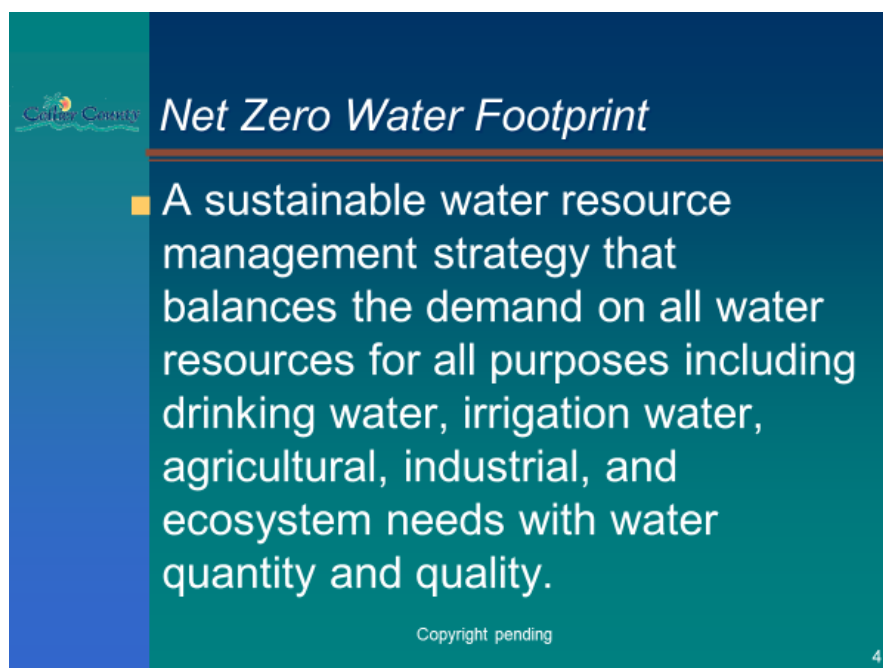
In 2015, the Board of County Commissioners accepted the “Integrated Water Resource Management Strategy,” that seeks to integrate stormwater and utility planning and operations in a holistic manner. Two slides, below, provide some insight into this strategy. One important goal is the move toward a “net zero water footprint.”



Integrated Water Resource Management Strategy

- Is based on but not limited to:
 - Net Zero Water Footprint county-wide
 - Concurrency Management, Environmental & Regulatory Compliance
 - Demand Management/Water Conservation for Quality & Quantity
 - Develop IQ supply to meet irrigation demand
 - Operational Excellence
 - Affordability

3



Net Zero Water Footprint

- A sustainable water resource management strategy that balances the demand on all water resources for all purposes including drinking water, irrigation water, agricultural, industrial, and ecosystem needs with water quantity and quality.

Copyright pending

4

During the public workshops, questions arose as to the potential impact of sea-level rise on aquifer health. Currently, there is a great deal of study on this and other sea-level issues at the national, state, and local level. According to the United States Geological Survey, drainage canals, withdrawals, and other factors contribute to salt-water intrusion in Southwest Florida. However, the USGS states that the existing monitoring network is insufficient to properly evaluate the level of intrusion.

In contrast, Kirk Martin, Water Science Associates, states that there is no apparent movement of saline water in Collier County at present. He cites the incidence of “connate water,” which is brackish in nature but does not rise to the level of saline water, in areas within the Lower Tamiami aquifer. Connate water is trapped water from ancient sea bed areas, that has not been flushed out and is not attributable to salt water intrusion.

Additional recommendations were received by the public that would apply County-wide or in areas beyond the RLSA, and so not made a part of the White Paper recommendations for the RLSA. These include:

- Fertilizer Ordinance- review and enhance
- Florida friendly Landscaping- beyond education
- Irrigation Restrictions- review and enhance
- Climate change best practices following the reports from the collaborative efforts of the County, FGCU, NOAA, etc.

Water Resources- List of Sources

SR 29 Road and Canal Corridor Report, 2019, Big Cypress National Preserve Draft Report [web library]

Saltwater Intrusion in the Surficial Aquifer System, Big Cypress Basin, USGS, 2013 [web library]

Water 2070, UF, 1000 Friends, Dept. of Agriculture, 2013 [web library]

Ten Year Water Supply Facilities Work Plan, Collier County Water Sewer District, 2019 [web library]

The Immokalee Area Study Stage II Tech Memorandum- Groundwater, CDM Messner, 2002 [web library]

Eastern Collier Water Resources Availability, Johnson Engineering, David Hoffman, P.G., 2009 [web library]

RLSA Public Workshop Summary, Water Resources, 9/27/18 [web workshop page]

Stormwater Management Staff

Stakeholder and community input

Five Year Review Recommendations [web library]



Rural Lands Stewardship Area Overlay White Paper

D. Agricultural Protection

The following points were discussed at Public Workshops on February 28 and March 28, 2019 (Appendix A: Public Outreach Meeting Summaries).

Consensus:

- Create credits to keep Ag in open lands in perpetuity
- Ag Stewardship Credits: keep 5-year review recommendations
- Remove the word “premature” from description of agricultural conversion
- Support and incentivize the preservation of agriculture

Non-consensus:

- Agriculture should not be allowed in SSAs
- Ag 1 should not be expanded in SSAs, even if in escrow

Five Year Review Recommendations:

- Provide agricultural credits for use in open areas

From cattle ranching in the 19th Century to the rapid expansion of orange production in the 1960's to further expansion of vegetable production in the 1980's, agriculture has played an important role in the economy of Collier County. South Florida is the only location in the U.S. where certain crops can be grown during the winter months.

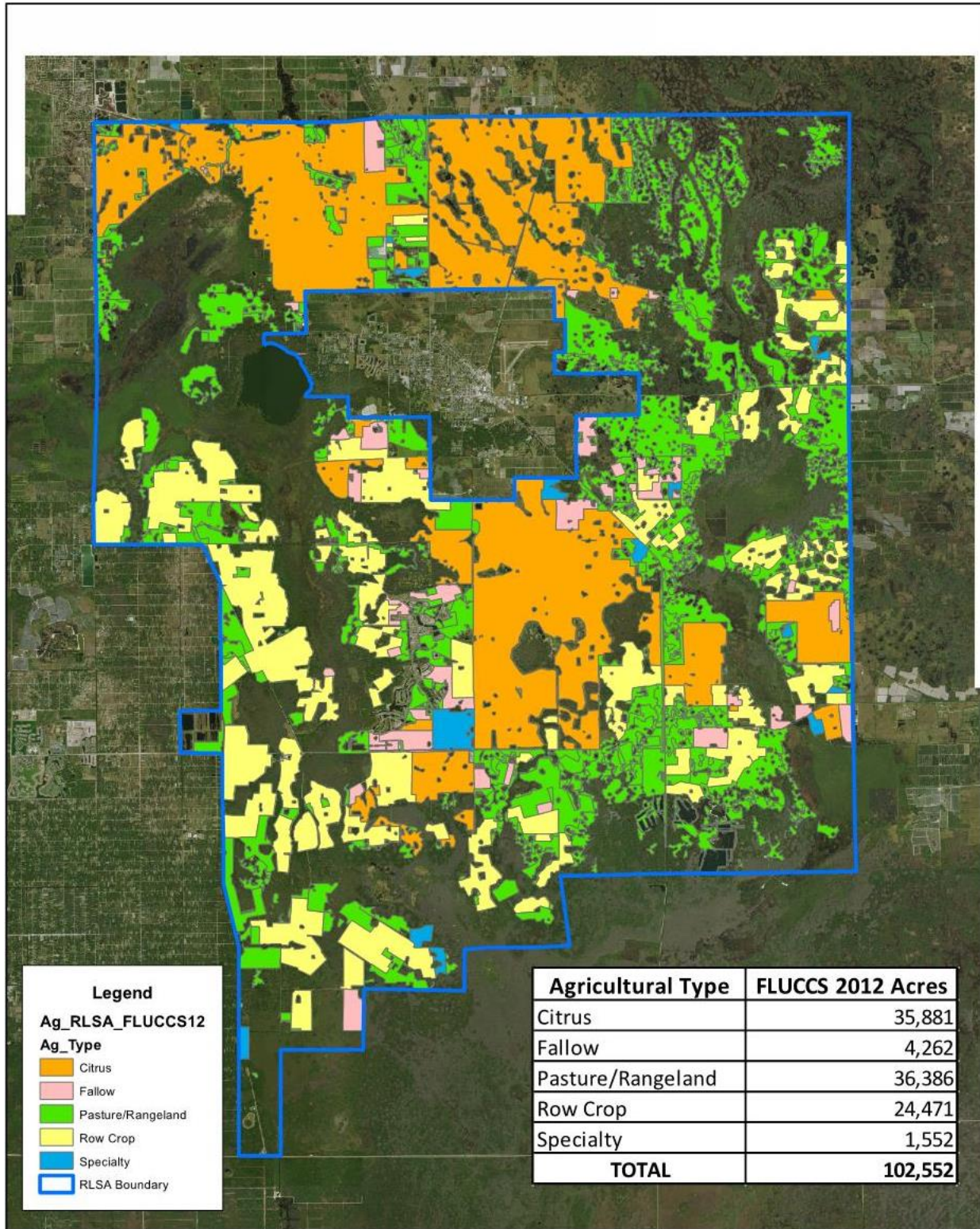
Agriculture remains a backbone of economic activity in Collier County, although development has impacted its range. As noted the data update (Section B) in this report, the RLSA has lost between 6,000 to 7,000 acres of citrus, row crop, and specialty crop production during the period 2002 to 2012.

A look at the latest FLUCCS depiction (2012) of Agricultural activity in the RLSA is shown in Figure D-1. This is the best available information reflecting current conditions. The acreage used in support of these agricultural categories are provided.

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Figure D-1

2012 FLUCCS LAND USE - AGRICULTURAL LAND



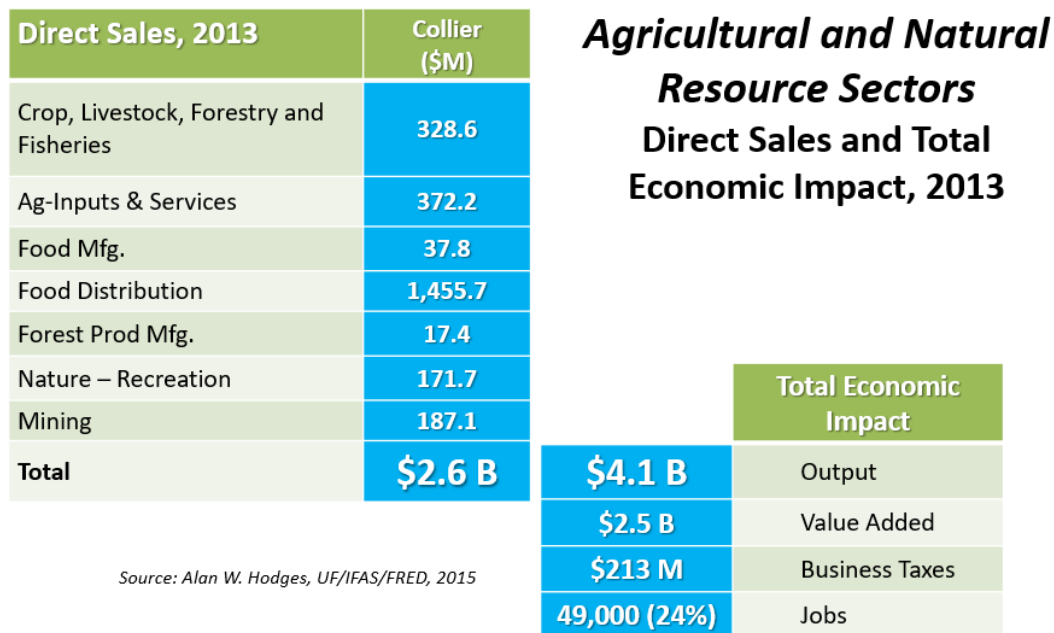
Current conditions reflect an overall decrease in active agriculture between 2002 and 2012, as noted in the “Data Update” section of this report. Citrus, row crop and specialty operations contracted in the RLSA by over 6,000 acres. Development of the Town of Ave Maria would be the major contributor of this factor. Otherwise, current data does not expose significant reductions in active or passive activities.

A similar but more acute trend is noted by Dr. Fritz Roka, FGCU (formerly UF/IFAS), in looking at County-wide agricultural losses. The area of total County active farm land has decreased from 181,000 acres in 2002 to 124,000 acres in 2012, a decrease of 46%. Most of this loss has been in the area west of CR 951, the County’s “urban area,” where gated communities have displaced agricultural operations. Over the same period, Dr. Roka notes that the average value of farm land has increased about 78%, reflecting development pressure.

In looking toward the future, one study predicted little change over the next 15 years. In its study of freight movement, FDOT District 1 estimated the net impacts of development encroachment on agricultural production in Southwest Florida Counties. While many coastal counties will see significant out-migration of agricultural production, Collier will remain very stable (showing a modest gain). This study does not go beyond 2035.

The economic importance of agriculture to the County can be seen on the Figure below, derived from a UF/IFAS study, 2015. The positive economic impact of farming in Collier County exceeds \$4 billion annually. Along with economic significance, the importance of food security, local sourcing and employment were all factors mentioned by the public.

**Figure D-2
Agriculture: Economic Impact to Collier County**



Source: Alan W. Hodges, UF/IFAS/FRED, 2015



Another important consideration in agricultural retention is the profitability of each enterprise. When Dr. Roka provided input to the 5 Year Review Committee in 2008, he identified the following business threats: disease, regulations, water allocations, land values, knowledge, and foreign competition. The same factors were mentioned again in 2018. Thanks to the work of UF/IFAS, best management practices, and education reduce some of the threats. Nevertheless, profitability remains a major obstacle to Collier agricultural viability, as demonstrated by grower (pre-market) price volatility and break-even cost points for the 3 largest Collier commodities (Figure D-3). Because of this volatility, bank financing is difficult, and owner financing becomes necessary.

**Figure D-3
Economic Considerations for Growers**

Grower Prices

Commodity	Unit	Break-Even	Price Range (2008-16)
Juice Oranges (on-tree, 220 bx)	Bx	\$10.00	\$5.77 - \$9.92
Tomatoes (1,400 ctns)	Ctn	\$12.50	\$4.95 - \$32.95
Bell Peppers (1,000 bu)	bu	\$18.50	\$5.35 - \$51.65



During the 5-Year Review, Committee members noted that agricultural protection may have fallen short in the balance between development, environmental preservation, and agricultural protection within the RLSA. A 2007 study by FGCU noted that even if SW Florida agriculture merely maintains the status quo in production, it could grow in relative importance as production statewide continues to shrink.

The Review Committee considered exiting language in Group 2 policies, Policy 2.1, referring to the protection of lands from premature conversion to other uses. The consensus and recommendation from the Committee was to remove the word “premature” from the statement, despite the fact that the word was used in the State’s “Final Order.” The apparent implication of that adjective is that conversion is somehow inevitable at some point in time.

The public, during a Workshop on the subject, also picked up on this word and were substantially in favor of removing this from the goal and policy of protecting agriculture.

Remove the word “premature” from agriculture protection references in Policy Group 2.

In the RLSA public workshops, the public expressed strong support for agricultural preservation. While economic support for agriculture is provided by the state through various programs, local support may make the difference in maintaining agricultural viability locally. The public brainstormed ideas for local support, including stewardship credits, County-funded purchase of agricultural easements, County subsidies, and County tax incentives.

The 5-year Review Committee considered long term agricultural viability and the desirability of achieving two goals: certainty of agricultural preservation and elimination of baseline residential rights. For these reasons, the Committee supported stewardship credits in exchange for agricultural easements. Where an easement is obtained, it runs with the land and permanently extinguishes the underlying baseline rights, including 5-acre ranchettes and an array of conditional uses.

Because the Stewardship credit system favored environmental values above all, the credits associated with agricultural land in the open areas was comparatively low. These values were perceived to be far too low to provide reasonable compensation for easements. Based on parallel or average Natural Resource Index (NRI) scores in designated FSAs, HSAs, and WRAs, the Committee proposed 2 credits per acre for agricultural easements (2.6 if located in ACSC).

Potential advantages of agriculture credits:

- Incentivizes permanent protection of agricultural operations in open areas
- Prevents the environmental degradation of low density “ranchette” development

Potential disadvantages of agricultural credits:

- Creates too many credits in the system, resulting in more SRA development area
- It won't work- owners will not voluntarily accept this option

With respect to the second disadvantage, we heard from one owner at a public workshop who predicted that the firm would never accept credits for a permanent easement, preferring to always keep the baseline development options open if agriculture someday loses its viability. On the other hand, another owner enthusiastically embraces the option, notable because it would allow that owner the ability to derive credits and create SRA development on owned parcels. In staff's estimation, the possibility that this tool will not work, or will not work for all owners, does not speak against its adoption. It is a tool that can be available to incentivize permanent agricultural retention in some locations.

With respect to the concern over too many credits in the system, staff remains sensitive to this point. Given the advantages conveyed, staff believes that credit values should be adjusted to reflect this increase in supply while maintaining an appropriate balance between agricultural

credits and environmental stewardship credits. To the extent agricultural credits become available, reductions in other credit allocations will be necessary.

The 5-year review estimated the value of agriculture credits by comparing these to environmental area credit generation. Specifically, they looked at SSAs 1-9 to determine the average credit per acre generated and associated this figure with the most important open areas for agriculture preservation- those in the ACSC. This calculation resulted in 2.6 credits per acre for agricultural preservation in the ACSC. The ACSC is most important for agricultural preservation because of the desire to protect this fragile environment from other baseline zoning uses. The non-ACSC open areas were proposed to have a 2.0 credits per acre, mirroring the lesser base credits available even to environmental targets in non-ACSC areas. In both cases, credits need to be sufficient to incentivize preservation under this voluntary system.

Given the input from agricultural land owners, staff believes that it is unlikely that most agricultural property will voluntarily accept a permanent agricultural easement in return for credits. The sentiment of “wait and see” was an opinion offered by some. In the credit assessment section of this paper, an estimate of 50% utilization of the agricultural easement was suggested, believing this to be a conservative estimate. If actual desired utilization of agriculture easements exceeds this estimate, other preservation options can be considered. Therefore, these credits should be capped at a 50% utilization rate.

Other preservation options include state programs such as the Rural and Family Lands Protection Program, which has already purchased an easement in the RLSA covering 1,600 acres. Additional ideas were provided through public input, including the purchase of local easements. Local easements can be time-limited, so that Collier County could purchase, say, a 10-year agricultural easement to help farmland preservation through difficult economic times. These options are not likely to be initiated for many years, and probably decades.

Provide credits to owners in open areas at the rate of 2.6 credits per acre in the ACSC and 2.0 credits per acre in the non-ACSC open areas in return for permanent agricultural easements allowing active or passive agriculture.

Create a cap for agricultural easement credits calculated at a 50% utilization rate.

Finally, one concept brought forward in the 5-year review and repeated in public workshops was to exclude any aquiculture operation from the ability to obtain credits. As credits are an incentive and not regulatory, this exclusion would not offend the Right to Farm Act. Staff agrees with this exclusion.

Exclude any aquiculture operation from the agricultural credit system both at inception and through easement language.

Policy 2.3 directs the County to establish, within one year of adoption (2003) an Agricultural Advisory Committee (AAC) to advise the BCC on matters relating to agriculture. No such advisory committee has been established to date. In conversations with various representatives

of agricultural interests, there did not appear to be a firm desire to create this body, although it might be appropriate at some point in the future. Staff recommends that this provision remain as a possibility, but not as a commitment.

Collier County may establish an Agricultural Advisory Committee at a time deemed appropriate by the BCC.

Agriculture Protection- List of Sources

Economic Importance of Agriculture to Collier County and Southwest Florida, UF/IFAS, Dr, Fritz Roka, 2018 [workshop #1]

Ag Business in Southwest FL: Present and Future, Lutgert College of Business, FGCU, 2007 [restudy library]

Agricultural Growth and Development in District One and the Impacts on Transportation and Freight Logistics, FDOT, 2017 [restudy library]

Meeting Summary, RLSA public Workshop, 3/22/18

Five Year Review Recommendations, Group 2

Minutes of RLSA Review Committee, 3/4/08, 4/1/08 [restudy library]



Rural Lands Stewardship Area Overlay White Paper

E. Environmental Protection

The following points were discussed at Public Workshops on February 28 and March 28, 2019 (Appendix A: Public Outreach Meeting Summaries).

Consensus:

- Provide NRI data used to create program prior to 2002 to County
- Include species of special local concern to wildlife protection efforts (County Wide)
- Create outdoor lighting standards (County Wide)
- Enhance regional water flow
- Allow conditional approvals of SSAs

Non-consensus:

- Align restoration credits along cost basis
- Required external wildlife crossings at certain locations, developer contributions
- Sustainable panther habitat must be preserved
- Make wildlife corridors 1 mile wide
- Create panther corridor creation credits
- Agriculture should not be allowed to increase in SSAs
- Zero development in primary panther habitat or adult breeding area
- Add primary panther area as panther present on Natural Resource Area scoring
- Don't allow golf courses in HSAs
- Require 3rd party monitoring of restoration areas
- Easements should require more specific land management practices
- Limit extensions of SSA conditional approvals to 1 year
- SRAs should require 4 of 5 votes for BCC approval
- No conditional uses in HSAs if SSA created

5 Year Review Recommendations

- Allow SSA approval through conditional process- 5-year period plus 1-year extension
- Add additional state grantee to perpetual restrictive easements in SSAs
- Reduce restoration designation (R-1) credits to 2 per acre in all locations
- Structure restoration completion (R-2) credits according to difficulty and value
- Add credits for creation of wildlife corridors
- Limit restoration credits to one type per acre

Staff Analysis

Introduction

Environmental protection is one of three legs of the RLSA stool. The topic of water resources is described separately but absolutely interwoven into the environmental preservation fabric. This section will discuss the Stewardship Sending Areas (SSAs) in the context of creating easements, restoration provisions, panther science, Habitat Conservation Plan (HCP), wildlife corridors and other environmental concerns,

Without a doubt, the environmental component of the RLSA stirs the most interest and passion among many groups and individuals. Although disagreement on the ways and means of environmental stewardship was evident from the beginning, all participants agreed with the following goals, which can be considered a composite statement culled from many comment cards, table exercises, and correspondence:

To achieve sustainable environmental value and balance, the RLSA overlay should maintain functional flowways, wildlife habitats, wildlife connectivity, and quality agricultural land and help assure the regional long-term viability of the Florida panther population.

Those of us who live in North Naples, the City of Naples or East Naples must come to terms with the fact that our predecessors in title have displaced the Florida panther from its habitat as recently as 50 years ago. We live in areas that were once the home of this magnificent animal, yet few of us would voluntarily relocate to encourage its resettlement.

Like most environmental causes, we awaken to the damage well after it has occurred, and we press for recompense in those areas that have not yet been affected to the same degree. This is not only natural but in many ways, appropriate. We learn lessons from the past.

At the same time, areas less disturbed that support a greater variety of wildlife are often under private ownership. While vast acreages of land in eastern Collier County are under state and federal ownership, 96% of the RLSA is owned by private interests. There were no public recommendations from the workshops advocating large scale public purchases within the 179,000 acres of private property in the RLSA.

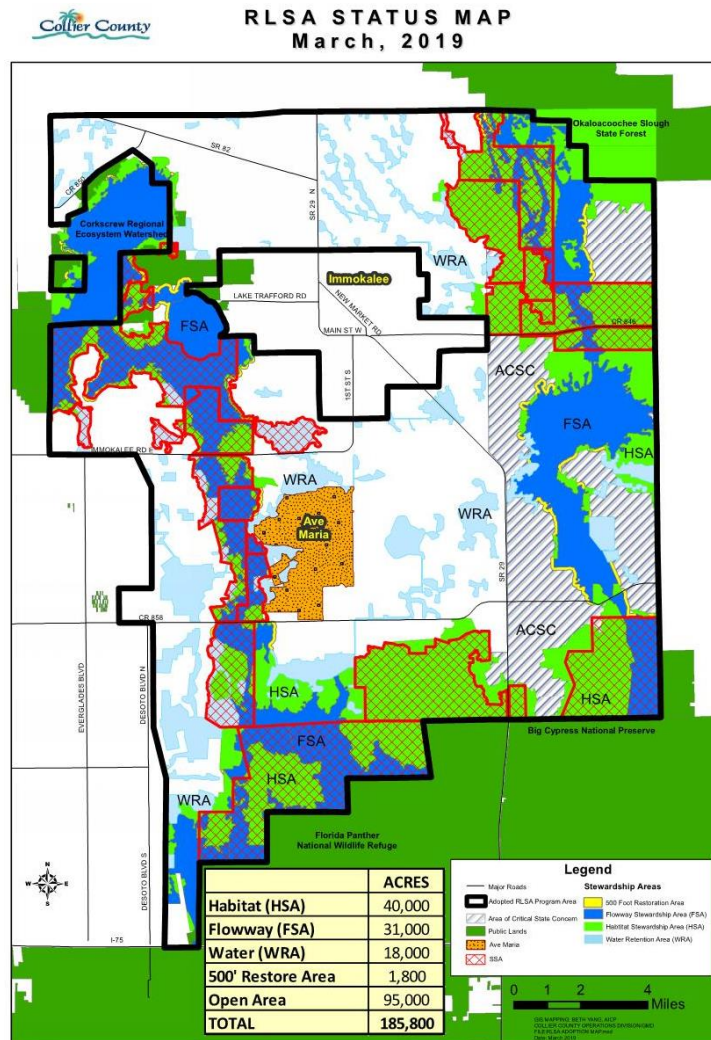
Private ownership confers property rights. In the RLSA, there are at least two layers of private property rights that must be considered in reaching an appropriate balance in regulatory action.

First, “baseline” rights include land use rights that existed prior to the adoption of the RLSA. Those rights were generally derived from the agricultural zoning that was in effect prior to and after 2002: one dwelling unit per 5 acres; agricultural uses and support uses; the ability to apply, through the conditional use process, for various mining, social, institutional and recreational uses.

Second, the adoption of the RLSA conferred an optional/voluntary right to create SSAs, derive credits, and use credits to build Towns, Villages, and smaller developments. These rights were conferred by the County under requirements created by the State of Florida, and can be seen as an agreement between State, County, and landowners within that sub-district. These were memorialized in the GMP as well as in the LDC as a zoning overlay. This is not to say that the 2002 GMP and subsequent LDC cannot be improved, but rather that existing rights created in 2002 must be respected in the process.

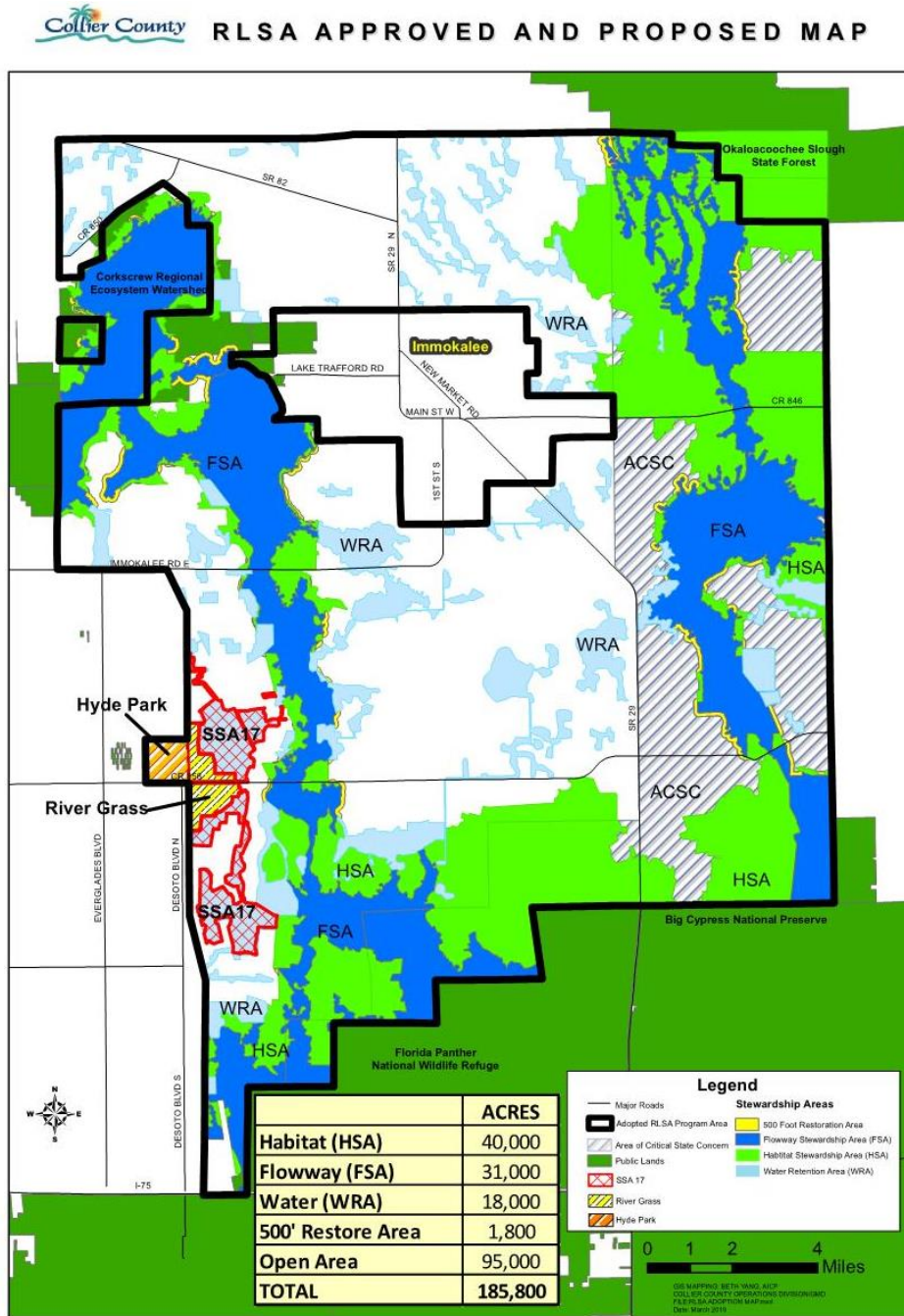
An observation related to habitat and species protection might be noted. Much attention is paid to panther protection, not only because it is endangered and considered an “umbrella” species, but also because of its anthropomorphic and mammalian status. Insect and especially bee species, meanwhile, are undergoing massive reductions in numbers and diversity across the world. These were not mentioned by any participants. Keystone species, critical to the natural habitat, will deserve a great deal of attention in the coming years. No doubt other species, whether listed, keystone, umbrella or none of these deserve similar attention.

Figure E-1
RLSA STATUS MAP
March, 2019



In any event, the design of the RLSA program favors the preservation of the most environmentally significant lands as of program creation in 2002. As can be seen on the RLSA Status Map (Figure E-1), 15 SSAs have been created to date, resulting in approximately 50,000 acres of preserved area, shown cross-hatched in red. Preservation through the SSA process covers about 55% of the targeted designation areas (HSAs, FSAs, WRAs). An additional SSA, labeled as SSA 17, has been proposed (Figure E-2).

**Figure E-2
Proposed SSA 17 and SRAs**



The Voluntary Stewardship Process

Three aspects of creating Stewardship Sending Areas (SSAs) were discussed with the public. These include the approval process at the Board level, the conditional approval option, and grantees of the SSA easements.

Approval of SSAs by the Board of County Commissioners requires a simple majority (3 of 5 votes). Similar to the discussion of Stewardship Receiving Areas (SRAs) discussed in a later section, some members of the public believed that a supermajority (4 of 5 votes) should be required. Staff does not perceive any advantage to this proposal, since SSA creation is generally fostered by the Board. To this end, staff also believes that clearer easement protections should be secured, such as better guidelines for land management within the recorded easements (discussed below).

Conditional approval is a concept that derived from the 5-year Review Committee. It is similar in nature to the current “escrow” process that was adopted by Board policy. Its purpose is the encouragement of SSA protection with some security to the owner to opt out, if conditions change. The Committee recommended a shorter timeframe for this wait and see approach- 5 years plus an optional 1-year extension, compared to a more open-ended approach as used under the escrow approach today. The public also felt strongly that Agricultural activities should not be intensified during the conditional period, other than rotational or access uses.

Staff also observes that escrowed SSAs can be in effect for many years, avoiding program changes such as those through a restudy of other plan update. Consideration should be given, after legal review, to require escrowed SSAs to conform to any GMP or LDC plan changes while these plans remain in escrow.

Add a provision in the SSA approval process that allows a conditional approval for 5 years, with optional extensions; require under the terms of the instrument that no overall increase in Agriculture 1 activities may occur during this period. Require a provision within conditional or escrowed SSAs that any new RLSA master plan amendments arising during the escrow/conditional period shall apply to the SSA.

Current requirements under the GMP and LDC require perpetual restrictive easements to run with the land and remain perpetually enforceable by the County and one additional state agency. Public opinion favored an additional easement grantee, and this was also recommended in the 5-year review. The 5-year review Committee recommended that the Florida Fish and Wildlife Commission (FFWCC) serve as one of the necessary grantees.

Establish a third grantee for enforcement of easements under SSAs; one grantee will be the Florida Fish and Wildlife Conservation Commission (should they agree).

As pointed out by the Conservancy of SW Florida, there may be instances where proposed development adjacent to areas under consideration for SSA application and approval may have

an effect on the Natural Resource Index (NRI) values of the SSA. In such circumstances, the applicant should address the effect of the SRA proximity on NRI values in the adjacent SSA.

Require applicants to address the effect of potential SRA development on adjacent SSA values when SSAs are proposed.

SSAs: Management, Maintenance and Restoration

Land management received considerable attention from the public and stakeholders during the Workshop phase. Many people expressed concern with the lack of standards inherent in the SSA designation process, and even more attention was paid to restoration credits, particularly the number of credits issued for “designation” without requiring completion of any plan. The recommendations in this section are preliminary recommendations, acknowledging the fact that the transition from the public’s identification of the issue to finding and implementing the best solution may still require more steps. Clearly, the goal of improving the restoration credit system is to improve measurability, transparency, incentivization, and overall environmental quality in result.

Foster further data and vetting of the land management and restoration recommendations prior to Transmittal.

Land Management under SSA conservation easements

Within the SSA areas, there is an opportunity to apply for restoration credits along with the base credits otherwise created on every acre of an SSA. Base credits are calculated under a number of factors that make up the Natural Resource Index (NRI) values of the base credit system. NRI values are multiplied by factors reflecting use reductions (land use layers) that are voluntarily removed as part of the system. 100% of the NRI values would result from the removal of all land use layers down to the Conservation layer. To date, most owners have opted to remove most, but not all layers: Ag 2 uses are predominant, which allow owners to graze cattle. Removal of uses to this layer provides credits equal to 90% of the NRI values. Ag 1 uses are retained to a lesser extent, to allow the continuation (but not expansion) of active agriculture such as vegetable and citrus crops. Credits for Ag 2 designation equal 60% of the NRI values.

To date, all other uses, such as residential, mineral and gas extraction and a wide variety of conditional uses have been permanently removed from all but 90 acres of the 50,000 acres of SSAs now in existence.

SSA credits are secured by easements that contain restrictions and land management standards. Typical easement language in SSA instruments approved to date include the following:

- (a) “On those lands on which Agriculture Group 2 uses are the only remaining agricultural uses, land management measures will be those customarily utilized in

ranching operations in Southwest Florida. These customary measures may include brush clearing, mechanical brush control (“chopping”), prescribed burning, other exotic and nuisance species control, fence construction and maintenance, silvicultural management, and berm, ditch and road maintenance.”

- (b) “On those lands on which land use layers 1-4 are eliminated [Ag-1 uses retained], the measures above may be utilized. In addition, disking, irrigation, ditch, dike and pumping construction and maintenance, mowing and other exotic and nuisance species control measures, farm road construction, and maintenance, storage of farming equipment, and other practices consistent with the restoration and land management measures specified herein shall be utilized.”
- (c) “For those areas designated for restoration activities, additional land management measures will be required. The additional land management measures are set forth in the Restoration Program.”

While easements of this nature need built-in flexibility, some specific maintenance standards for the predominant Ag 2 uses may be appropriate. For example, exotic vegetation control may invite a reasonable standard, such as “maintenance to assure no greater exotic vegetation cover than existed at time of SSA application.” In this way, at least a minimum exotic maintenance will be required as part of the SSA designation, thus reducing the need for restoration activity in the future.

Add specific exotic vegetation control measures to the SSA agreement and easement and require a maintenance standard that assures no greater infestation than that existing at time of SSA designation.

Consider, through the LDC amendment process, any additional specific maintenance standards that should be included in all future SSA agreements and easements.

Improving Standards for Restoration Credits (R-1 and R-2)

When the RLSA was adopted in 2002, there was a move to include additional credits for restoration of certain areas that needed more than standard maintenance. Improvements to constricted flowways and habitat corridors provided some of the rationale. The Land Development Code is slightly more specific in identifying, along with wildlife corridors and flowway widening, other recreated habitats for listed species and wading bird foraging areas at appropriate locations.

At time of adoption, no one could have predicted exactly how many credits would be generated by restoration activities. As an incentive, the plan provided credits for simply designating land for restoration- known as R-1 credits- a status that would allow any public entity to enter the land and perform the restoration work. Restoration completion credits, R-2 credits, would be available to the owner after the owner or agent (not outside agency) completes the restoration according to success criteria.

The 5-year review Committee recommended some reform measures associated with restoration credits: No more than 2 credits for R-1 designation (Camp Keais Strand currently allows 4) and structure the R-2 credits to better reflect difficulty and importance.

As noted in the data summary, above, a large number of credits have derived from R-1 restoration designation. Only a small portion of that designated area has received R-2 restoration completion credits. This is not to say that restoration activities are not underway in other locations.

The overall amount of earned and potential restoration credits seems to be out of balance with the base credits in the program. As a percentage of approved SSAs, the earned restoration credits are already at 55% of the base credits (38,461/70,210). This percentage does not reflect the completion of most of the restoration work and would be much higher if successful completion results.

The program allows amendments to SSAs for additional restoration. Thus, SSAs 14-16 have submitted amendment applications for another 49,844 credits based on restoration potential and completion. If we consider only the restoration designation (R-1) credits, those result in a figure that is 95% of the SSA designation credits when looking at SSAs 1 through 16, without requiring any actual completion. In other words, R-1 designation credits have doubled the credit compensation to landowners who have created SSAs, without the necessity to complete the restoration projects.

The result if restoration is successful in all designated and applied for SSAs, which we certainly hope obtains, would be 116,838 credits or 166% of the base credits. If projected through the remaining targeted stewardship designated areas at the same rate, we would add roughly 95,594 additional credits for restoration. Such a projection would result in a credit balance, as between these two types, as follows:

- Base (SSA) credits 127,432
- R-1 and R-2 credits 212,432

Meanwhile, only 34% of the existing SSA acreage is proposed for restoration at this time. The regulations do not prohibit owners from amending SSA applications at any time to earn additional restoration credits in areas not previously identified for restoration.

In practice, applicants have sought R-1 designation for exotic vegetation removal on the basis of listed species enhancement, rather than performing this maintenance function under the terms of the SSA easement. As indicated in the recommendation above, at least a minimum exotic maintenance standard should be included in all SSAs.

With respect to restoration credits, these can be modified to better reflect the importance, difficulty, cost, and value of different restoration activities. The 5 year review recommended new categories for restoration depending on type. The credit projections as a result of this recommendation only reduced total restorations credits slightly.

**Table E-1
Tiered Restoration Credits, 5-year Review**

Restoration Type	Acres	Credits Per Acre	Restoration Credits
Panther Habitat	600	10	6,000
Caracara	2,750	4	11,000
Exotic Control/Burning	2,750	6	16,500
Flowway	2,750	6	16,500
Native Habitat Restoration	2,750	8	22,000
Total	11,600	N/A	72,000

Staff agrees with the 5-year Review recommendation to reduce credits for restoration designation (R-1 credits) to 2 in most instances. However, staff proposes to address the effectiveness of R-1 credits by awarding only one credit at time of R-1 approval, and only after a restoration plan has been approved by the Florida Fish and Wildlife Commission (FWC) or other appropriate state or local agency. The second R-1 credit would be awarded only after successful completion of all restoration activities (R-2) as determined by the permitting agency. In this way, completion of restoration becomes highly incentivized. Within each restoration plans, as approved by the permitting agency, staff is in full support of ongoing maintenance requirements included in such permits.

As suggested by Florida Wildlife Federation (FWF) and Audubon Western Everglades/Audubon Florida (Audubon), the activities associated with R-2 restoration could be simplified and structured to make the efforts more predictable and transparent. Other than wading bird habitat creation/restoration and large mammal corridor creation/restoration, all other restoration activities could be structured as follows:

- Hydrological restoration, approved by a permitting agency- 2 credits
- Flowway restoration- 2 credits for recontoured areas, 1 credit for flowway expansion areas
- Planting- 2 credits

The specific requirements and need for these activities would be contained in the permit, and in most acreages, only a portion of these total activities/credits would be appropriate. Through this system, the labels of “Native Habitat Restoration” and “Panther Habitat Restoration” would be replaced by activities that make those habitats viable.

FWF and Audubon would also support separate categories for large mammal corridors and wading bird restoration. Each would be eligible for up to 10 credits per acre; 2 R-1 credits following permit approval by an ERP agency, 2 R-1 credits following full completion of R-2 activities, 3 R-2 credits following completion of hydrological restoration and 3 R-2 credits following planting. It is anticipated that a limited acreage within these categories would be

eligible for all 10 credits. It should also be noted that the total area of these special restoration areas is estimated at approximately 1,500 acres- far smaller than the likely sum of other restoration areas.

The 5-year Review approach and the FWF/Audubon approach should be further vetted with permitting agencies and land management experts. Staff believes that it is critical to create careful estimations of needed restoration activity throughout the RLSA private lands, and through that work create a balanced credit system that does not generate excess credits. All credits likely to be generated by restoration and all sources should not exceed the credits needed for the allowable footprint of 45,000 acres.

Allow Restoration Area applications only once within any single SSA.

Restructure the timing of R-1 credits: only half of R-1 credits awarded at time of permit approval through the ERP process (or County permit if no ERP required); the remaining "R-1" credit(s) would be awarded only after the owner successfully completes all phases of R-2 restoration.

Engage an independent third party prior to Transmittal to study the needed restoration activity in RLSA private lands so that needed restoration credits can be reasonably estimated and structured; add specificity to restoration standards and objectivity to the acres claimed by different restoration types; review with permitting agencies and land managers.

Structure restoration credits so that needed restoration is assured in return for the maximum credit and acreage footprint of SRA development.

Cap Stewardship credits and SRA acres; provide separate caps for restoration credits and agriculture credits.

Require third party approval and monitoring of Restoration Plans if no ERP permit process is required. The County may use an agency consultation process or contract.

Require clear maintenance obligations through SRAs based on their volume discharge to the flowway, thus assuring perpetual funding (fiscal neutrality) for downstream stormwater management in Flowways.

Projections of credits can be found within Section G - Credit System.

Review of Panther Literature

Given its stature as an endangered species and an umbrella species, a great deal of attention has been paid to the preservation of a viable panther population in South Florida. The RLSA area comprises about 196,000 acres of the 2.27 million acres of its south Florida range. While the RLSA promotes a land use plan that accommodates significant development, it is the development itself that affords the possible protection of this species through the stewardship

credit system. The RLSA program aims to place half of its private acreage into stewardship areas that would accommodate panther habitat and provide connectivity to other panther habitat areas, with required maintenance standards paid by the private sector.

Because of its importance, a number of articles have been identified in public comments during the restudies and can be found on the County website (link in introduction). A brief overview of this literature is described below. Discussion of the ways and means to effect appropriate species protection is located in the following section, "Relevance of the HCP process."

How Much is Enough? Landscape-scale Conservation for the Florida Panther (2005), Kautz et al., *Biological Conservation*, 130, 118-133.

This journal article was written by a consortium of individuals from state and wildlife agencies, universities, and consulting groups. It seeks to identify high value regions of the south Florida landscape important to long term Florida panther (panther) preservation; in particular, it seeks to establish a baseline understanding of landscape types preferred by the panther using landcover types and radio telemetry, resulting in the identification of Primary and Secondary zones.

The article concludes that:

- The Primary and Secondary zones as described and illustrated, in their current condition, would support 80 to 94 panthers, a number that is likely to remain stable for 100 years, assuming loss of habitat, especially in the Primary zone is minimized;
- A comprehensive strategy for working with private landowners to protect, enhance and restore panther habitat in all three zones (Primary, Secondary, and Dispersal) is essential;
- Dispersal to areas outside of South Florida is possible for establishment of a breeding population north of the Caloosahatchee River.

Florida Panther Recovery Plan, 3d rev. (2008), US Fish and Wildlife Service, Florida Panther Recovery Team and South Florida Ecological Services Office, Atlanta GA, 217pp.

This paper estimates that between the 1970's and date of study, the panther population has increased from 12-20 to 100-120 in number. It notes that panthers are wide-ranging, secretive and occur at low densities; that habitat selection is related to prey availability; that dense understory is important for feeding, resting and denning; that forested habitats are used in combination with other habitat types in proportion to their availability.

The PRP sets forth strategies for recovery of the panther, including maintenance, restoration and expansion of the panther population in South Florida; expansion into South-Central Florida, reintroduction into at least two additional areas outside of South or South-Central Florida and increased public awareness and education.

The goals of the PRP include an interim goal (to result in reclassification):

- Expansion in South and South-Central Florida beyond 80-100 adult panthers

- Two subpopulations established within the historic range
- Sufficient habitat to support all subpopulations for the long term.

The goals of the PRP also include a long-range goal (to result in de-listing):

- Establishment of three viable, self-supporting populations over 240 panthers each, maintained for a minimum of 12 years each
- Sufficient habitat quality, quantity, and spatial configuration to support these populations in the long-term.

Florida Panther Habitat Selection Analysis of Concurrent GPS and VHF Telemetry Data (2008), Land et al., *Journal of Wildlife Management*, 72(3), 633-639.

This Florida Fish and Wildlife Conservation Commission (FFWCC) team studied telemetry points using two technologies, effectively reviewing not only daytime, but also nighttime habitat preferences. Comparing the data, the team concluded that its limited sample size generally supported similar preferred upland and wetland forested habitats during both night and day. One observation was an increase in panther presence in open grasslands at night, suggesting continued study to distinguish these results from possible study bias (location; false negatives). The team concludes that its findings do not indicate any departure from the established habitat assessment methodology employed by the USFWS.

Technical Review of the Florida Panther Protection Program Proposed for the Rural Lands Stewardship Area of Collier County, Florida (2009) Florida Panther Protection Program Technical Review Team, Final Report, 84pp.

Members of the Florida Panther Protection Program Technical Review Team (PRT) included biologists from USFWS, FFWCC, consultants, UCF and Conservancy of SWF. They reviewed a Memorandum of Understanding (MOU) signed in 2008 by eight major land-owners, Audubon of Florida, Collier County Audubon Society, Defenders of Wildlife and Florida Wildlife Federation (the Parties). The PRT recognized that the RLSA incentive-based program was designed to protect land with the highest environmental resource value, but also allow for future development. As a team, they agreed to review the details of the MOU to determine its new effect on the existing program.

The purpose of the MOU was to approach the issue of panthers and their habitats in the context of environmental resource permitting in the RLSA in a comprehensive way, distinguished from the piecemeal approach more typical under Sections 7 and 10 of the U.S. Endangered Species Act. The current breeding range of Florida panthers encompasses 2.27 million acres south of the Caloosahatchee River, of which there is overlap in the 196,000 acres in the RLSA.

The MOU contained provisions that included:

- Provision of 25% more mitigation for impacts to the Panther Primary Zone
- Generation and use of panther credits on lands set aside as Stewardship Sending Areas
- Protection of agricultural lands through establishment of Agricultural Preservation Areas

- Establishment of a core transportation network to serve 45,000 acres of development
- Proposal to create two corridors intended to enhance landscape connectivity
- Creation of the Paul J. Marinelli Florida Panther Protection Fund
- With consensus of the PRT, the Parties would enter into binding agreement, undergo formal consultation and develop a formal Consultation Agreement or its equivalent

The PRT concluded that the proposed plan, if incorporated in combination with the 5-year Review recommendations, “would represent an enhancement of panther conservation over the existing RLSA program.” At the same time, the PRT recognized that development within the RLSA has the potential for loss of habitat, and that habitat loss does not aid in panther recovery.

Additional PRT findings:

- Additional protection of 39,000 acres of RLSA land should still leave room for 45,000 acres of development activity;
- Additional mitigation cost in Primary Panther habitat (125%) would only have an indirect benefit of increasing the trust fund donations, but no meaningful impact given the source of credits from SSAs
- Increase minimum width of north corridor to 1,200 ft.
- Trust funds should be used only for acquisition, restoration, wildlife crossings, and monitoring
- Recommend no new interchange at I-75
- Acknowledge that the 45,000 acre development cap, including mining activities, is an improvement to the 2002 Plan with no cap

Finally, an important connection was drawn between ownership interests and preservation: “The PRT recognizes that new development is the driving force for achieving natural resources conservation within the RLSA program” (p.4).

Landscape Analysis of Adult Florida Panther Habitat (2015), Frakes et al., PLoS ONE 10(7) 1-18.

This paper utilizes radio telemetry data from 2004-2013 with land cover within a large South Florida study area to predict the suitable habitat for adult breeding panthers. It examines the characteristics of land type and uses within the study area, and finds the preferred habitat based on forest and forest edge, hydrology, human settlement, and other factors. By examining the use of land types in the context of existing land cover, the model predicts an area of suitable breeding habitat for panthers over 3 years of age, and notes that 25% of this available breeding habitat is in private ownership.

The study concludes, based on panther density derived from earlier studies, that:

- There is less available breeding habitat than previously thought
- The carrying capacity for panthers south of the Caloosahatchee is already at a maximum
- The maximum carrying capacity south of the Caloosahatchee is not sufficient to maintain a genetically viable population

- Further reduction in viability would occur with any future reduction in primary panther habitat

A Critical Review of Efforts to Protect Florida Panther Habitat on Private Lands (2015), Kreye and Pienaar, Land Use Policy 48, 428-436.

This paper surveys many of the tools that have been employed in panther preservation. These include traditional federal mitigation programs under the Endangered Species Act (Conservation Banks, PHUs and Habitat Conservation Plans), Transfer of Development Rights programs, Safe Harbor Agreements (SHA) and Payments for Ecosystem Services (PES).

SHAs are intended to provide assurance from regulatory approaches, useful mostly in areas of expanding panther populations such as north of the Caloosahatchee. PES programs are more useful as an additional tool in currently occupied areas such as private lands in Collier County.

PES programs provide monetary payments, federally funded, to private landowners for conservation and management of panther habitat. They should be based on quality and quantity of land preserved, and should compensate owners, typically ranchers, for costs of depredation and land management. This is an incentive-based tool that can complement other tools for preservation on private lands.

The authors conclude that no single program or policy will effectively achieve recovery. Regulatory approaches typically result in permanent protection, but lack connectivity. (The authors classify the RLSA credit system as regulatory.) Voluntary approaches are often of short duration, but can achieve contiguity. Both regulatory and voluntary programs are needed in support of the panther.

Tolerance of the Florida Panther in Exurban Southwest Florida (2018), Rodgers and Pienaar, Journal of Wildlife Management 82 (4) 865-876.

As panthers continue to recolonize portions of their historic range, development continues to grow in the same areas. This paper looks at the attitudes of the human population with regard to panther-human conflicts.

The greatest conflict area in the recent past is in Golden Gate Estates. From 2004-2015, there have been only 110 confirmed interactions, and most of these have involved domestic animals. Only two (2) incidents were said to have involved threatening behavior by a panther directly toward a human.

The authors state Florida residents are supportive of Panther conservation in principal, but tolerance in areas where residents are experiencing negative interactions is essential for panther conservation efforts. How can tolerance be improved?

Findings of interest:

- A high percentage of the population in Golden Gate Estates are aware of panther presence and are highly tolerant, exceeding expectations
- There appears to be no correlation between tolerance and gender, education, income, or ethnicity. Older residents, however, are less tolerant.
- Residents who experienced depredations of domestic animals or livestock are less tolerant
- Residents who adequately secure pets and livestock in panther resistant pens are more tolerant.

HCP relevance and discussion

As indicated by those who attended public workshops on the RLSA, the public is very interested in the long-term viability of the Florida panther and other listed species. There is a clear need for a plan that protects these species in a realistic way.

Collier County is not in a position to mediate the best science behind panther or listed species studies as described above. County staff does not include subject-specific experts with Ph.D.s or similar levels of subject matter competency. Rather, the County has traditionally relied on federal and state environmental review permitting (ERP) processes in listed species regulation, playing an enforcement role during the permitting process.

The health and long-term viability of panther and other listed species is the primary responsibility of USFWS, USACOE, SFWMD, and FFWCC. Collier County's RLSA program is primarily a land use planning program, grounded in a balance between environmental goals, agriculture, and economic development. Further, It recognizes that development can support environmental goals through the transfer of credits representing land use rights and responsibilities, but land use regulations does not substitute for the specific environmental permitting requirements of state and federal agencies.

As a planning document, the RLSA provides a 95,000 acre area designated as "open," where Stewardship Receiving Areas can be located under County zoning. However, the ERP process further refines the rules of development, and may deny, restrict, or approve with conditions development in any location. The RLSA and the ERP review process are parallel approval mechanisms. The most restrictive of either set of rules applies to any potential development.

The majority of land owners in the RLSA, the Eastern Collier Property Owners (ECPO), submitted an ERP application document several years ago, known as Eastern Collier Multiple Species Habitat Conservation Plan (HCP). The HCP is a preferred process by ERP agencies because it takes a cumulative, holistic analysis on a landscape scale, as distinguished from a piecemeal approach. The HCP application here covers 18 listed species, most notably the Florida panther. The HCP, because it covers the majority of the RLSA, can assure one of the most noteworthy goals of panther preservation- the linkages between large panther habitat areas.

The HCP application is based on a prospective 50-year permit (ITP) covering the 152,000 acres under the ECPO application. It will also inform and facilitate future regulatory actions by the US Army Corps of Engineers (ACOE). To receive an ITP, the applicants must provide a conservation plan that avoids, minimizes, and mitigates harm to listed species and their habitats. The HCP proposes measures to achieve these goals through ecological restoration, wildlife crossings, land management, and research under a system that ensures funding and continual monitoring.

The draft Environmental Impact Statement (draft EIS) issued by USFWS in 2018 recognized the history and importance of the RLSA program, and that the proposed HCP is complementary to its goals of conservation for wildlife, listed species, habitat, and agriculture. It recites that the HCP was “built upon the original RLSP framework and selected recommendations from the Florida Panther Protection Plan.” The RLSA and the HCP mutually reinforce each other with environmental protections: the RLSA through design and local stewardship easements; the HCP through permit conditions and additional easements, ensuring habitat protection in perpetuity.

The draft EIS references a tremendous volume of research and literature, including many of the publication mentioned in the previous section of this paper. Staff does not intend to mediate the science or positions presented as part of the scoping or evaluation process. Rather, staff relies on the determinations of the FWS in applying best available science in support of sustainability for panther and seventeen other covered species. This is consistent with the County’s traditional role in deferring to federal and state agencies in environmental permitting in general, and in recognition of the greater level of expertise and resources at the federal level.

To be sure, Collier County has created its own standards for wildlife management plans in the RLSA. Where lands are not voluntarily included in the RLSA program, wildlife management plans are required for a number of listed species and subject to County approval. These reviews often rely on technical assistance from a state or federal agency and defer to those agencies with respect to state and federal environmental permitting requirements. As stated in the Collier County Growth Management Plan (RLSA Policy 5.5 (3) and CCME Policy 7.1.4): “All development shall comply with applicable federal and state permitting requirements regarding listed species.”

Ultimately, through a final biological opinion and incidental take permit, the Service must decide whether to issue, issue with conditions, or deny the HCP application. The County supports the professional judgment employed by the USFWS staff. USFWS takes primary responsibility for enforcement of the federal Endangered Species Act.

In passing, staff notes two points captured from the final application for the HCP plan. First, where preservation is ultimately determined to be appropriate, conservation easements will be placed on the land to secure this preservation in perpetuity. A state agency, either FDEP or FFWCC, will hold the easement. Importantly, the federal government through USFWS will hold third party enforcement, further securing the obligations in parallel with County easements.

A second point involves the HCP application and acreage. In its application, ECPO offers a condensed area where “covered activities”, such as towns, villages mining of other conditional uses could be located. Their analysis included the “primary and secondary” panther zones, a more recent designation analysis as compared to the RLSA scoring process. The result is that ECPO offers to put significant excess acres located in open areas under easement as well (through ERP process), restricting uses to agricultural activities and accessory dwelling units no greater than 1 per 50 acres, a huge benefit in reducing the impact of baseline development.

Several depictions from the HCP application illustrate important aspects of the RLSA area and a better understanding of the HCP application:

Figure E-3 below shows areas of preserve and very low density (green hatch and cross-hatch), areas of “covered activity” (yellow hatch) and acres not a part of this application process (non-ECPO members). Figure E-4 below provides RLSA and the HCP area in the context of the Primary and Secondary panther zones developed in 2008.

Figure E-3
HCP Exhibit- Covered Activities

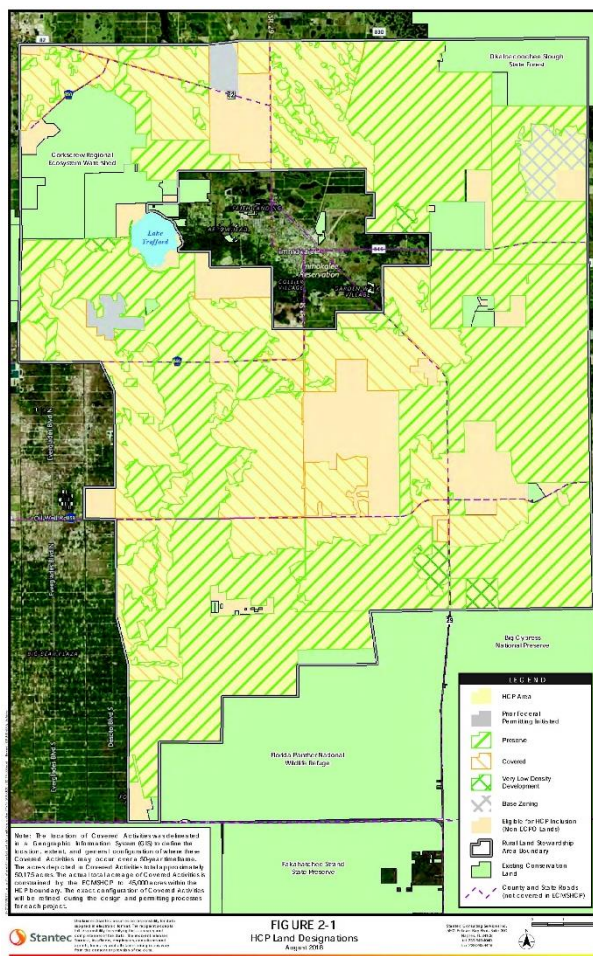


Figure E-4
HCP Exhibit Primary/Secondary panther Habitat, SW Florida

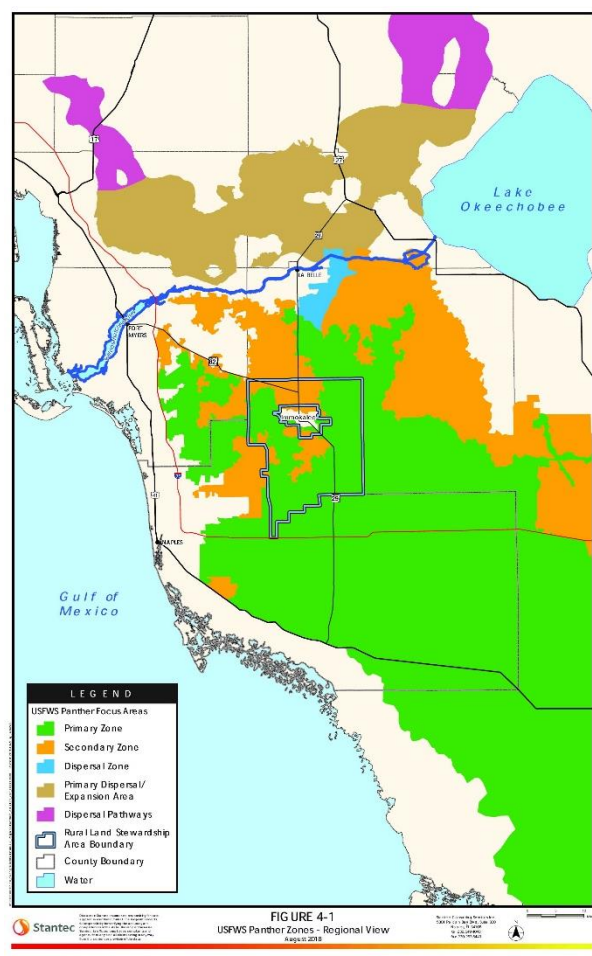
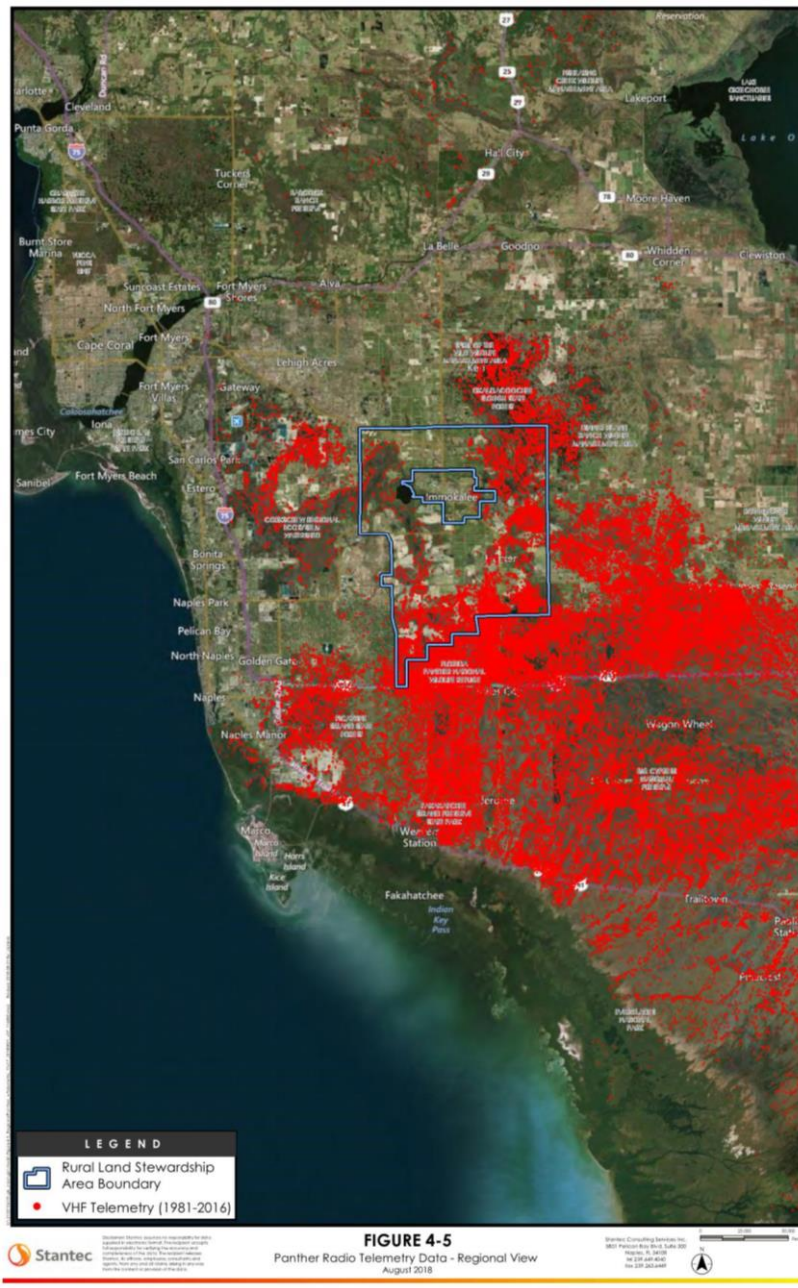


Figure E-5 below illustrates panther telemetry points over 3 decades.

**Figure E-5: HCP Exhibit
Panther Telemetry Since 1981**



Miscellaneous

Land use layers removed as part of the voluntary stewardship program generally run from more intensive uses (residential and Conditional uses, layers 1-4) to less intensive agricultural and conservation layers, layers 5-8). In the Flowway Stewardship Areas, participation in the program requires the elimination of layers 1-4 at a minimum. However, in Habitat Stewardship Areas,

conditional uses (Layers 2-4) are allowed on lands with an NRI score of 1.2 or less. Public comment questioned the rationale in treating HSAs differently than FSAs in this regard. Staff is of like opinion and recommends treating these in like fashion.

In exchange for voluntary participation in the RLSA overlay system, land use layers 1-4 shall be eliminated in HSAs, with the exception of governmental essential services

An issue discussed from time to time by the BCC is the suitability for County ownership of lands within the RLSA, either through Conservation Collier or otherwise. This issue received little attention by the public during this restudy process. Staff believes that there is some benefit to County ownership, if deemed appropriate under broad public policy considerations, such as the mission of Conservation Collier. One benefit would be the capture of stewardship credits by the County and removing these from the potential expenditure within the RLSA. County purchase of land (or credits) could accomplish one of two things: permanent retirement of the credits to reduce overall development potential, or conversion of the stewardship credits for use in the urban area under certain limited conditions.

One thought raised in this regard is the use of credits within the Immokalee urban area, such as requiring the use of stewardship credits in the Low Residential subdistrict to allow for the highest density, say the 3rd or 4th unit per acre. Unfortunately, use of credits within Immokalee would increase the cost of development there, frustrating housing diversification, development, and redevelopment. However, this can be considered if the Board feels that “Low Residential” should remain lower than 4 units per acre, absent the purchase of credits.

Another thought is to allow the private purchase of credits, in the sole discretion of the Board, for high density projects within the urban area that seek density above the current density rating system. This would be highly discretionary at the Board level but would provide an additional tool where high density is sought at appropriate locations. A Unit equivalency based on RLSA SRA densities could be used.

Closer to the notion of extinguishing credits altogether, the County may wish to purchase land without using credits in any fashion. This is a concept similar to state conservation programs that have been in existence for some time. For example, the Rural and Family Lands Protection Program has been utilized in the RLSA to create agricultural easements over land that will permanently remove development rights. The County could also consider partnering with state programs to accomplish similar outcomes.

Provide an avenue for County purchase of land or credits in the RLSA; create LDC standards for discretionary approval of private entity purchase and use of credits for high density projects in the Urban area; explore opportunities for County purchase of easements in coordination with identified state programs.

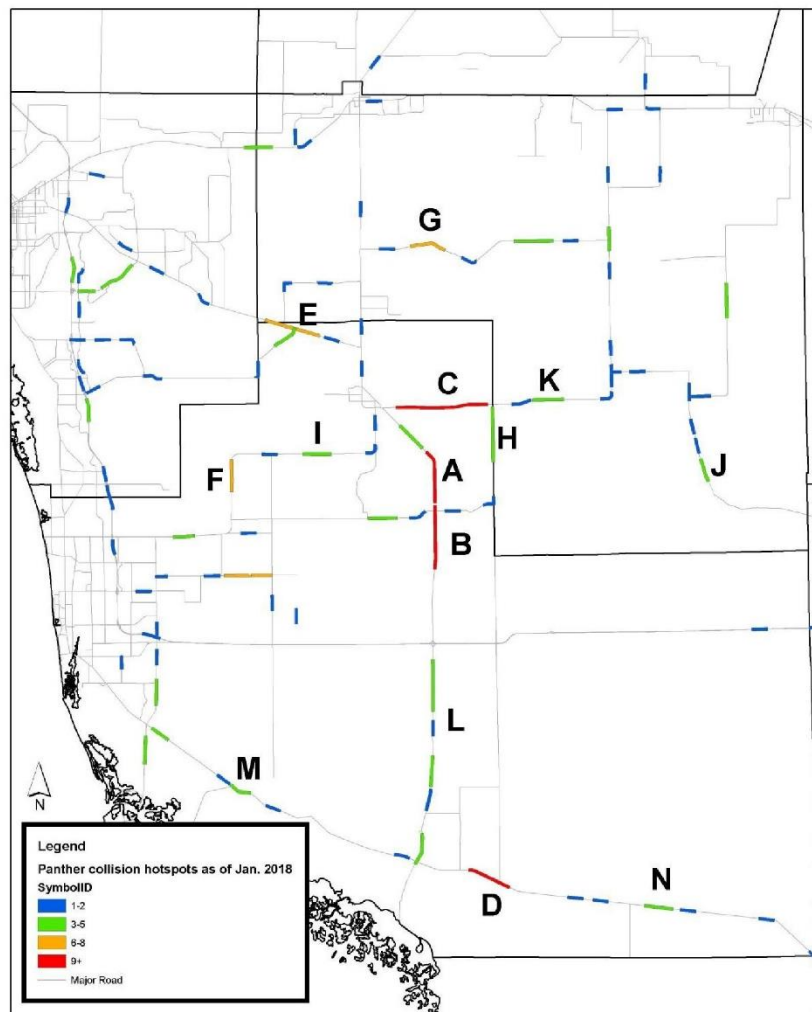
Transportation issues will be discussed further under Towns and Villages, below. Of note in the environmental discussion is a recommendation in that section to reduce speed limits on arterial

and collector roads, consistent with allowable FDOT parameters. Lower speed limits, particularly at night, can provide a significant reduction in panther mortality. According to the Naples Daily News, there have been at least 140 panthers killed by motor vehicles since 2014, far outpacing any other mortality factor.

Environmental organizations have called for lower speed limits along with wildlife crossings to curtail the high vehicle mortality rate. Wildlife crossings such as underpasses should be highly effective, but overall reductions in vehicular speed may prove a potent protection for these animals. Along with lower speed limits, traffic calming and enforcement measures would be necessary.

Along with fencing and crossings, night time speed limit reductions may further reduce the panther collision “hotspots” as identified in Figure E-6. The USFWS has established a Transportation Sub-team to assist the Florida Panther Recovery Implementation Team in protecting the Florida panther.

**Figure E-6
Panther Collision Hotspots**



Reduce speed limits along collector and arterial roadways, particularly at night.

Finally, the 5 year review Committee recommended new rural lighting standards to improve environment, quality of life, and safety. These should be studied along with the further development of improved lighting standards throughout the County, reflecting context and Dark Skies principles, and implemented in the RLSA. Reduced and improved lighting has benefits for both wildlife and human well-being.

Provide LDC regulations for outdoor lighting to protect the nighttime environment, conserve energy, and enhance security and safety.

Environmental Protection- List of Sources

[See panther articles listed above]

USFWS Panther Recovery Implementation Home Page (2019) [web]

Draft Environmental Impact Statement, Habitat Conservation Plan USFWS (2018) [restudy library]

Habitat Conservation Plan updated, Stantec (2018) [restudy library]

RLSA Overlay Recommendations, League of Women Voters (2019) [restudy workshop page]

Critique and Recommendations, Conservancy SWF (2019) [restudy workshop page]

Restoration Credits and Suggested Policies, M Seef (2019) [restudy workshop page]

5-year Review Recommendations (2009) [restudy library]

Meeting Summaries (2018 to 2019) [appendix]



Rural Lands Stewardship Area Overlay White Paper

F. Towns, Villages and Other Development

The following points were discussed at Public Workshops on February 28 and March 28, 2019 (Appendix A: Public Outreach Meeting Summaries).

Consensus Items

Consensus:

- SRAs should have Mobility Plans
- “Universal Design” should be available to buyers
- Plan for aging in Place
- Encourage shade trees, narrow streets, healthy community checklist (countywide)
- Housing should be diversified by type and price
- Encourage more compact development
- Encourage Florida-Friendly Landscapes (countywide)
- Encourage best practices for town core and town centers density
- CRDs should be more carefully defined
- Incorporate green building standards (countywide)
- Require Florida Green Building certification (county-wide)

Non-consensus:

- Hamlets should be eliminated
- Increase minimum densities
- Firm up phasing schedules for commercial components
- Require annual monitoring reports
- Require periodic measurements of internal capture
- Change size parameters: Villages to 1,500 acres; Towns to 5,000 acres
- Incentivize economic development for self-sufficiency
- Use ¼ mile standard for walkability

5 Year Review Recommendations

- Cap maximum acres and credits
- Create “build-out vision plan” (transportation network)
- Require wildlife management plans
- Require mobility plans, both internal and external
- Eliminate hamlets from allowable SRAs
- Change size parameters: Villages to 1,500 acres; Towns to 5,000 acres
- Define CRDs more effectively

- Require 10 credits per acre for SRAs from future SSAs
- Refine uses in ACSC
- Protect historical and cultural resources
- Create outdoor lighting standards

Staff Analysis

Introduction

Much like environmental issues, the public was highly interested in forms, requirements and incentives related to SRA development- the use of stewardship credits to create Towns, Villages and other forms that best represent “smart growth.” The public was well versed in many smart growth goals and principles, including walkability and alternative transportation modes within developments, efficiency in transportation costs outside of developments, self-sufficiency, economic development, housing diversity and affordability, social opportunity and community character.

When the Board initiated the eastern area restudies in 2016, one comment heard many times was that, given the 10% of remaining area in Collier County available for future development, this is the last chance the County has “to do it right.” There was and is a growing recognition that the development pattern dominating the urban area of the county could have been better, particularly with respect to transportation, housing, and other smart growth principles. Opportunities for different community designs are quickly diminishing.

Many members of the public see the benefits of smart growth not only for life in the 2020’s, but also for future generations. We have heard time and again that the largest cohort following the baby-boom generation, the millennials, will prefer to live, work, and play in close proximity. Meanwhile, the development community informs land owners that the “market” prefers an automobile-centric, low density environment with certain upscale amenities. To the extent this remains true for the next several years, the remaining development area gradually disappears. The next generation will either adjust to these 20th century preferences, or existing housing stock will move lower in relative value, and its infrastructure maintenance will increase in per unit cost, if and when vacancy rates increase.

Certain members of the public have been quick to criticize the RLSA program as a “whitewash” in favor of developers or a program that encourages “unrestrained growth.” In fact, it is neither. The important issues in the RLSA, where the stewardship program was launched over 15 years ago, revolve around the form of growth, the design of well-planned communities with character and economic sustainability, allowing the physical space needed to create a smart growth transect. Along with that opportunity comes the responsibility for land owners to assume permanent maintenance of the 90,000 acres of natural area expected to be protected.

The development that will occur over a long period of time in the RLSA will make the preservation, restoration and long-term maintenance of natural areas possible, without commensurate public expenditure. Rather than a drain on taxpayers, this aspect reflects a huge win for taxpayers. Meanwhile, the public should continue to demand that in other respects, development proves to be fiscally positive to the County over a reasonable period of time, and that communities are sustainable in terms of environmental compatibility, water use, transportation, goods and services, employment, housing and economic development.

The Collier Interactive Growth Model (CIGM) developed by Metro Forecasting Models predicts future populations in various parts of the County based on subdistrict characteristics. This differs from the County-wide population projections in methodology and detail. The CIGM estimates a current population in the RLSA at roughly 5,000 persons. A majority of that population resides in the Town of Ave Maria. By 2040, the population of Ave Maria will triple, and the population in the RLSA is projected at approximately 47,000 people. For perspective, this compares with about 76,000 people who will live in the Golden Gate Estates area east of Collier Blvd by 2040.

Table F-1
CIGM Population Projections
GMP Districts East of CR 951
Rounded to nearest 1,000
Est. Oct. 2018

	CIGM 3 2017	CIGM 3 2040	CIGM 3 2070	CIGM 3 Build-out
RLSA	5,000	47,000	116,000	243,000
RFMUD	8,000	31,000	53,000	65,000
Immokalee	25,000	34,000	41,000	47,000
GG Rural and OT	45,000	76,000	82,000	82,000
Totals E of 951	83,000	188,000	292,000	437,000
Totals W of 951	286,298	339,171	348,466	357,760

General Design, Towns and Villages

Over 15 years ago, Dover, Kohl & Partners prepared a document for Collier County entitled Toward Better Places, the Community Character Plan. The principles of town development embodied in that document are well known to many:

- Identifiable center and edge
- Walkable neighborhoods
- Proper building placement
- Special sites for civic uses
- Mixed uses and building types
- Integrated street network
- Diversity of housing types and price points

The Dover Kohl document provided a basis for support among diverse perspectives. Developers can enjoy lower land costs per unit when higher net densities are achieved; more market flexibility is inherent in mixed housing types within the same neighborhood. Municipalities and taxpayers benefit from a more balanced tax base and higher tax values per acre, as well as lower overall infrastructure costs inherent in transect design.

Similarly, the firm of Duany Plater-Zyberk (DPZ) has long promoted walkable urbanism, complete neighborhoods and smart codes that deconstruct older notions of Euclidean zoning (separation of uses requiring motor vehicles as predominant and necessary), favoring a mix of uses that results in less motor vehicle dependence. Smart codes reflect context and transect zones just as Dover Kohl described- higher density and mixed uses near the town centers, lower density closer to edges.

An idealized rendering of a transect, inherent in these new urbanism concepts, appears in Figure F-1. In practice, there would be many variations depending on context, local conditions, and community vision.

The Community Character Plan suggests neighborhoods with connectivity and walkability, made possible through density increases near town core and town centers. A requirement for a minimum density within a ¼ mile of these mixed-use areas should be established and required,

Figure F-1
Town Transect



Source: DPZ CoDESIGN

accounting for area-wide context and character. Given the sentiment to retain a continuum of density or transect, from denser to semi-rural or open space at town edges, low density should be expected in many town locations, bringing the gross density much lower than within walkable neighborhood areas.

Doesn't this ideal run contrary to compact growth? It is important to recognize the difference between gross density (the entire Town or Village) and net density (such as would be encouraged in and near Town Core and Town Centers). To achieve the vision of a transect, density and intensity needs to diminish approaching the edges, particularly where SRAs border important environmental resource areas, common throughout the RLSA. Moreover, the requirement for 35% open space, not counting any single-family yard areas, contemplates a larger overall town footprint while also encouraging a denser mixed use core and center.

The way in which population is accommodated and the design elements derived from smart growth principles form the backdrop of recommendations related to SRAs. These recommendations should serve and enhance livability, fiscal responsibility, and environmental objectives while respecting property owner rights.

One of the recommendations of the 5-year Review Committee would alter the size parameters of Villages and Towns. Specifically, the recommendation would allow Village development beyond its 1,000 acre maximum to 1,500 acres, and would allow Towns to grow from 4,000 acres to 5,000 acres, inclusive of public benefit acres or excess open space.

In thinking about town size and design, consideration should be given to sustainable, compact development and its relationship to economies of scale and critical mass. In an analysis by Metro Forecasting, one might envision a minimum size rural village or town as one large enough to support a grocery-anchored plaza, a mix of goods and services, park space large enough for a range of recreational activities, emergency medical services, and an elementary school.

To achieve this mix, a population of between 14,000 and 18,000 residents would be required. Based on expected persons per household and a gross density of 2.5 units per acre, approximately 2,700 acres would serve this ideal vision. Larger development would garner even more critical mass, since middle schools, high schools and a broader range of commercial, civic and governmental services could be supported, in turn making the SRA more self-sufficient.

Of course, to the extent that residents of Golden Gate Estates become a part of the commercial and cultural "shed," the critical mass is more easily reached. The same can be said for smaller Village development that is close geographically and well connected by collector roadways. And SRAs need not follow the same patterns- communities geared toward seniors may not need to accommodate schools but will need sufficient population to support retail, civic, and entertainment options.

Density near the Town Core and Town Center provide the critical mass to allow trip capture, shorter trips, community engagement, and healthier walkable community hubs. These factors

are generalized and could be considered met with two large Villages adjacent to each other, each with a Center, or possibly sharing a Center/Core. In this configuration, it will be important to consider the level of required services similar to Towns when measured in total.

Require minimum densities within a ¼ mile of a Town Center, Town Core or Village Center. Based on the SmartCode v.9.2, those areas (center/core plus ¼ mile) should exceed 6 units per acre, excluding acreage for civic uses.

Create an aggregation rule for Villages: if adjacent and under common or related ownership or control and judged to be part of a unified plan of development, Town standards should apply if aggregate size exceeds maximum village acreage.

Village sizes should not be increased to 1,500 acres unless additional commercial, civic and governmental minimums are proposed; Town size increases to 5,000 acres should be allowed only if, in the discretion of the Board, greater efficiency in service provisions and fiscal impacts are demonstrated.

Another factor to consider is the required square footage in Towns and Villages for the provision of commercial goods and services, parks, civic and governmental services. The requirements enumerated in Attachment C in the RLSA GMP are less than half of the likely need as estimated by Metro Forecasting, in both Villages and Towns. The restudy did not dive into the specificity of needed retail, services, and parks with opportunity for public input and refinement. However, the need for explicit timing of these provisions in the phasing of the entire SRA was mentioned several times.

Likewise, the need for economic diversification and development was a theme brought out by the Greater Naples Chamber of Commerce and many public speakers, noting that it would provide the kind of synergy to allow a well-balanced rural town environment, where people can live, work and play in the same area. These opportunities take time and talent to identify and deliver, but a reservation of space for corporate office, light manufacturing, or business park would help the long-term sustainability of SRAs.

Propose greater minimum requirements for commercial, civic and governmental uses, and specify the timing of these uses in the phasing of the residential portions of both Towns and Villages, seeking further vetting on phasing requirements through an LDC process.

Propose a required acreage set-aside for corporate office, light Industrial or business park, available for sale or lease for a specific number of years for economic development.

Allow corporate office, light industrial and manufacturing uses in Villages.

The current RLSA Overlay provides an exemption from the use of credits for “public benefit” uses and excess open space. Public benefit uses are closely defined as public schools K-12,

public or private post-secondary institutions, excess (over required) acreage within community parks and government facilities (excluding essential services).

Excess open space is not well defined, and consideration should be given to removing this exemption from the use of credits. On paper, it may appear that open space beyond the required 35% would be a benefit to people and the natural environment. In practice, it appears that this reduction in “credit cost” is incentivizing poor land planning, including “sausage lakes” with long cul de sacs, golf courses and the like. Open space should be carefully defined, and no exemption should be given for excess open space.

Define open space more clearly, including the elimination of single family dwelling unit yards, to reach the minimum required 35% open space; eliminate the credit exemption for excess open space.

Wildlife and Flowway Management Plans

SSAs are allowable in Open Areas, which generally score lower on the Natural Resource Index scale, yielding few stewardship credits. However, Open Areas are not devoid of environmental and wildlife significance. SSAs will contain within them pockets of higher value wetlands or uplands, preservation areas and wildlife corridors for various species. As described in the 5-year Review, SRA Master Plans should contain Wildlife Management Plans, assuring that incompatible uses are directed away from wetlands and critical habitat, that buffer areas are created and maintained, and that human and animal conflicts are minimized through best management practices and resident, business and governmental services share in the dissemination of information. Although not considered previously, a similar requirement should deal with wildfire protection through best management practices and public education. This has traditionally been required in the form of a “Firewise” community designation.

Require Wildlife Management Plans as described in the 5-year Review and Wildfire Management Plans within all SRAs.

As described in the Water Resources section, natural water management systems such as flowways require periodic maintenance, since they are affected by upstream activity over time. Flowway Management Plans would be created through a public/private partnership and would involve at least two major functions. One would be monitoring the health and changes over time, including wetland health and water quality. The other function would be operational-maintenance functions as needed from time to time, and these should require upstream entities to contribute to needed maintenance activities. Examples would be natural lands inspection and management when necessary, identifying and addressing any debris and vegetation accumulation over time, which can affect the flowway’s capacity for normal overland flow conveyance.

Require Flowway Management Plans as part of the SRA approval process to supplement the SSA maintenance functions in a more specific way and to provide a mechanism for flowway

management in the absence of established SSAs or to supplement SSA land management activities.

Housing Affordability and Suitability

Affordable Housing has been a high priority topic in Collier County for the past several years. This White Paper does not attempt to survey all possible aids or remedies within the RLSA, as these in some ways parallel the needs of the entire County and should be considered in a holistic way as the County continues to refine its approach to the topic. It has been staff's perspective throughout the restudy that most areas in the eastern lands would not be suitable for affordable workforce solutions to problems arising in the urban area. That is primarily because of the distance between the RLSA and the urban area. When one critical goal of development in the RLSA is trip capture, and fewer vehicle miles traveled, the notion of providing affordable workforce housing in the RLSA for an urban workforce runs counter to that goal.

On the other hand, RLSA housing affordability is important for other reasons. These include workforce housing for a workforce that will be needed in the developed areas of the RLSA. There is also a need for affordability for retirees and elderly populations.

Prior to state-level reforms to the Development of Regional Impact (DRI) review process, applicants were required to undergo a "Housing Analysis." The benefits of the housing analysis were the exposure to review of the prospective market for retirees, families, single individuals, and second home buyers. More importantly, the Housing Analysis required a market study of housing availability to accommodate the needs (by projected income levels) of all persons to be employed within an SRA. Availability could be measured both on and off-site. Off-site accommodation required an estimate of commuting length, time, and cost. A plan was required to address any shortcomings.

As an example, the Town of Big Cypress, following its inventory and needs analysis, committed to providing 500 moderate income units and 732 Low Income units under the Collier County definitions. In return, they requested eligibility in trip count adjustments, impact fee deferral program, and an infrastructure investment tax offset. Staff believes that the Housing Analysis makes sense in the context of new towns and Villages in the RLSA.

In addition to that, housing affordable to the elderly should be provided. The smart growth goals in the RLSA include a diversity of housing types for a diverse population. By requiring a mix of smaller units at lower price points, close to Town/Village Centers or Cores, the needs of many elderly people will be met, both in terms of cost and accessibility. Standards for market price points for smaller units should be a feature of the Housing Analysis.

Require a Housing Analysis similar to the former DRI requirement to assure a wide range of housing types and price points and to accommodate the needed workforce within the SRA.

Based on the demographics of Collier County as a whole, it is believed that many home buyers in the RLSA will be 50 years old or older. The Senior Advisory Ad Hoc Committee, in its final report in April 2019, recommended Universal Design in the sale of homes County-wide. This should be a required option, not mandating its selection by homebuyers. Universal design allows later age-related home modifications at low cost, simply by accommodating certain structural elements at time of first sale. Universal Design is embraced by the National Association of Homebuilders and AARP and adds on average about \$300.00 to the original price point.

Require all homebuilders in the RLSA to offer a Universal Design option in the sale of new homes.

Types of SRA Development

SRA types: Most public discussion revolved around Towns and Villages. The 5-year review recommended elimination of a third type of SRA, the Hamlet. Hamlets may be created between 40 and 100 acres and would have a very limited convenience retail component. One of the original rationales was that Hamlets would be a better alternative to 5-acre (baseline ag zoning) ranchettes. There may be limited instances where property owners own small tracts within and outside the higher value stewardship designated areas, so that credits could be transferred. However, properties within the Open designation only would need a very high aggregation of protected Open areas in order to create clustered residential development in place of 5 acre ranchettes. This is an unlikely scenario. Moreover, no applications for Hamlets have been submitted to date.

Eliminate the category of Hamlets as a form of SRA development; consider adding this category at a later time if environmental, economic, and equity factors favor its creation in certain locations.

Compact Rural Developments (CRDs) are the fourth type of allowable SRA in the RLSA. A recommendation was made in the 5-year review to better define its purpose and extent. The proposed language supported the County's valued attributes of agriculture, natural resources, and economic diversity, and land uses may include uses related to research, education, convenience retail, tourism or recreation. The Review Committee also further limited the maximum size to 100 acres. With the exception of convenience retail, staff is in agreement with these further limitations to the original plan. Convenience retail, if allowed, should be defined as an allowed use ancillary to the other listed uses.

Describe allowable uses in the Compact Rural Developments (CRDs) with greater clarity, allow retail only as an ancillary use, and limit the size of any CRA to 100 acres.

Fiscal Responsibility

Fiscal impacts and fiscal neutrality were concepts not well understood by the public during the restudy. The GMP requires demonstrations of fiscal impacts and a projection of fiscal neutrality at time of application for SRA development. These are critical to the determination of application approval, and the County should continue to review these projections with clear eyes, requiring supplemental information or third-party review where deemed appropriate.

Some commentary has been received that underscores the value, from a fiscal perspective, of compact, as opposed to spread-out (sprawl) development. This is an obvious conclusion, but the notions of compactness seem to be an important point of diversion in perceptions. One can always show that 1,000 units placed on 100 acres provides a better fiscal outcome than 1,000 units placed on 400 acres. Infrastructure costs, in particular, will be far lower in the former example. What matters is context, and the balance to be created by creating livable areas that are marketable.

Marketability leads to a fiscal outcome that can be attained with some assurance. The outcome not only assures fiscal neutrality with respect to infrastructure costs, but also affords the huge costs associated with saving and maintaining very large wildlife and natural areas.

A review by Smart Growth America was submitted that provided the obvious tenant that compactness is good. It was completely deficient in understanding the context of the RLSA, its historical antecedents, or the important facts involved in community development in reaching its financial conclusions. It did not consider impact fees, developer contribution agreements or “proportionate fair share,” it provided no basis for the assumption that County growth will “accelerate” in the future, and no apparent understanding of which roads are public and which are paid by development/CDD. It also based a fiscal assessment for future ad valorem revenues on a per capita basis, which is not acceptable in any form of fiscal modeling. Finally, it lacked understanding between revenue from single family and multi-family development and offered a significant mathematical error in the body of the material.

This review was unfortunate, because fiscal impact is extremely important. An economic assessment is required by the GMP and LDC to address the fiscal impacts of transportation, potable water, wastewater, irrigation water, stormwater management, solid waste, parks, law enforcement, emergency medical services, fire, and schools. The methodology must be pre-approved by the County, and the modeling, assumptions, and calculations should be disclosed and reviewed thoroughly.

All SRAs should be subjected to rigorous and disciplined fiscal examination. The fiscal analysis should be reviewed by both the County and a third-party peer reviewer. A special assessment should be imposed for any identified shortfall in any public service.

Review SRA applications with careful attention to fiscal neutrality at a reasonable horizon date and closely scrutinize calculations and methodologies to assure that SRAs become fiscally positive by the horizon date or impose special assessments.

Require annual monitoring reports to gauge the status of all developer commitments associated with the SRA and developer contribution agreements.

The Area of Critical State Concern

The Area of Critical State Concern (ACSC) is a large area in eastern Collier County, with its northern reaches comprising about 62,286 acres surrounding the OK Slough. The ACSC has been a state designation going back to the 1970's, recognizing the critical importance of surface water protection in this area, with particular emphasis on protecting and/or recreating sheet flow. The state still maintains a review function over all zoning and building permits to assure compliance.

SRA development is required to use credits from such development solely from lands within the ACSC. The 5-year Review further restricted Village and CRD development in the ACSC: SRA development along State Road 29, may not exceed 1,000 acres in total, and the only SRA development east of the OK Slough would be CRDs less than 100 acres.

Restrict SRA development in the ACSC by limiting the total development along SR 29 to 1,000 acres and allow only CRDs as a form of SRA development in lands east of the Okaloacoochee Slough.

Transportation and Mobility

There is a close link between land use planning and transportation. The best arrangements of land uses, placing residents close to goods, services, cultural location, and jobs, result in mobility and infrastructure efficiency. Smart growth principles underscore this connection, and this factor was an important aspect of the creation of the RLSA: providing innovative land use practices while preserving environmental and agricultural assets. This connection also underscores the importance of economic development and job creation in the RLSA and in the Immokalee urban area.

The County's Master Mobility Plan, accepted by the Board in 2002, provides guidance for internal and external mobility with respect to eastern lands, including Towns and Villages. It incorporates land use strategies, multi-modal transportation alternatives, wildlife crossings, and roadways designed to reduce vehicle miles traveled (VMT) through connectivity. "Developments outside of the built/urban environment must be self-sustaining, especially in terms of employment and non-residential services to achieve the same vehicle miles traveled (VMT)-reducing impact as development within the urban area... self-sufficient development will not completely eliminate the need for inter or intra-county travel; however, self-sufficient development will increase localized daily/routine travel"- thus reducing VMT and vehicle hours traveled (VHT).

The 5-year Review recommended a Mobility Plan as a component of the SRA Master Plan. The Mobility Plan would include “vehicular, bicycle/pedestrian, public transit, internal circulators, and other modes of travel/movement within and between SRAs and other areas of outside development and land use.” Strategies might include “bus subsidies, route sponsorship, or other incentives which encourage the use of mass transit services.” Importantly, the mobility plan would demonstrate “land uses to accommodate services that would increase internal capture and reduce trip length and long-distance travel.”

Internal mobility planning should address FDOT’s “complete streets” program, including the accessibility and safety characteristics, for pedestrian movement, bicycle travel, neighborhood electric vehicles, and other motorized carriers. Safe street crossings and traffic calming designs should also be included. Separated pathways should be favored for some modes, depending on context. Transit infrastructure, including bus shelters and transit cut-outs, should be required in Town Core, Town Center and Village Center areas.

In terms of fiscal impact, the 5-year Review clarifies that all internal roads, both public and private, should be built and maintained by the SRA that they serve.

External mobility should be demonstrated through connection points to adjacent or future SRAs and other developments. These are best accommodated by having an internal network that is a grid of local collector roads.

Require Mobility Plans as a component of an SRA Master Plan, with specific components as identified in the LDC. Additional LDC components should include specification in the Master Plan to provide depictions of local streets to demonstrate connectivity.

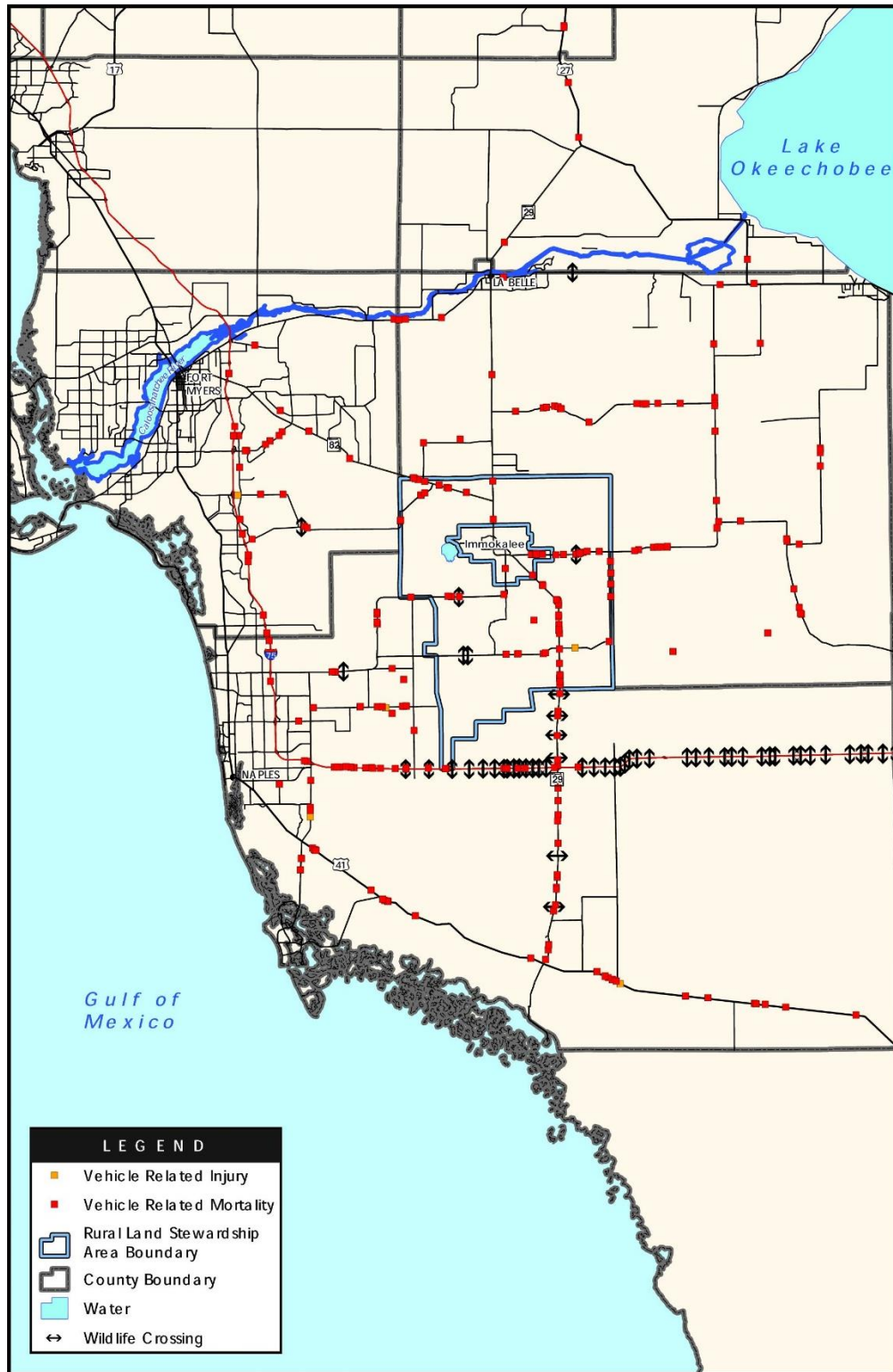
All roads internal to an SRA will be constructed and maintained by the SRA.

The Master Mobility Plan recommends that the County work with USFWS and FFWCC to optimize the placement of wildlife crossings along County roads, to protect wildlife and allow passage across arterial and collector roads. These should be financed, to the extent possible, with road impact mitigation funding.

Speed Kills

In addition to wildlife crossings, consideration should be given to lowering speed limits on collector and arterial roadways, consistent with FDOT standards for a minor arterial roadway where listed species are well documented. Lower speed limits, particularly at night, can provide a significant reduction in panther mortality. According to the Naples Daily News, there have been at least 140 panthers killed by motor vehicles since 2014, far outpacing any other mortality factor.

**Figure F-2
Vehicle/Panther Collisions**



**Figure 4-3
Panther-Vehicle Collisions, 1972-2017
August 2018**



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Environmental organizations have called for lower speed limits along with wildlife crossings to curtail the high panther mortality rate. Wildlife crossings such as underpasses and fencing should be highly effective, but overall reductions in vehicular speed may prove a potent protection for these animals.

Lower speed limits have also been shown to reduce human fatalities and injuries and result in fewer crashes overall. Health and safety of Collier residents and visitors are better protected by slower speeds in rural areas. Along with lower speed limits, traffic calming and enforcement measures would be necessary.

Lower speed limits also reinforce self-sufficiency in rural towns and villages. Longer travel times between the rural areas of the County and the urban area create an incentive to provide more needs, including goods, services, entertainment, civic uses, and employment within the same geographic area. This is consistent with the smart growth philosophy.

Provide needed wildlife underpasses inside and outside of SRAs, and lower speed limits on collector and arterial roadways for human safety and wildlife preservation.

Towns, Villages and Other Development- List of Sources

Master Mobility Plan, Final Report, Tindale-Oliver et al. (2012) [Comp Planning web page]

Toward Better Places, Community Character Plan for Collier County, Dover Kohl and Partners (2002) [Comp Planning web page]

SmartCode v. 9.2, DPZ Codesign et.al., (2009) [web]

RLSA Recommendations to meet LOS, Metro Forecasting (2019) [restudy library]

Collier County Ideal Future Town Size, Metro Forecasting (2019) [restudy library]

Fiscal Implications of Development in RLSA, Smart Growth America (2018) [restudy workshop page]

Universal Design in Homes, Center for Universal Design (2006) [restudy library]

RLSA Overlay Recommendations, League of Women Voters (2019) [restudy workshop page]

Critique and Recommendations, Conservancy SWF (2019) [restudy workshop page]

5-year Review Recommendations (2009) [restudy library]

Meeting Summaries (2018 to 2019)



Rural Lands Stewardship Area Overlay White Paper

G. Credit System Analysis and Recommendations

This Credit System portion of the White paper is intended to (I) memorialize the estimations of the current credit system as provided by the 5-year review Committee, (II) summarize the effect of additional recommendations from that Committee, (III) update the estimations made in 2009 given the data on hand as of March 2019, and finally, (IV) to suggest a realignment of credits under the general recommendations made in the Environmental Protection portion of this White Paper and those stated below. This short introduction and the material under section IV should be the most informative.

As discussed in the Environmental Protection section, the solution to better credit management requires a third-party analysis of the potential restoration credits, including clear definitions of different restoration types, and a quantitative analysis of acreages that would qualify under each definition.

Staff's intent in part IV is to find a credit balance that does not exceed the need for the desired or anticipated SRA footprint. Both credits and acreages should be capped. In addition, following third party analysis, each category should be capped: Base credits, restoration credits and Agricultural credits, so that excess credit use in one category does diminish the intended results in another category.

Accordingly, the following recommendations for the credit analysis follow:

Procure an independent analysis of the definitions and estimated acreages associated with a revised Restoration program prior to Transmittal hearings, considering the 5-year Review "tiered credit system" approach and alternatives, including the FWF/Audubon approach; the analysis should be based on incentivization of restoration activities in all needed areas and a credit calibration and cap so that will no more credits are produced than necessary for 45,000 acre SRA footprint.

Provide the third-party analysis to stakeholders and public for further vetting prior to Transmittal hearings.

Cap credits within the categories of base credits, restoration credits, and agricultural credits separately.

I: Background: Credits Under Current System Estimated by 5-year Review

The credit system put in place in 2002 is the credit system in effect today. It includes credits from creating Stewardship Sending Areas (SSAs), from creating and executing restoration projects within the SSAs (R-1 and R-2 credits), and credits for early voluntary entry into the program (Early Entry). The estimates of credits yielded under each credit type was estimated during the “5-year Review”, 2007-2009, since estimates would have been more speculative at the time of adoption. The 5-year Review estimates of current plan provisions have been updated, below (Section III), based on program information. The 5-year Review also recommended changes to the program, and the estimated credits are shown in Section II. Staff recommendations and estimated credits are shown in Section IV.

SSA creation credits:

These were calibrated to yield a development footprint to accommodate the former baseline zoning sprawl potential of 1 unit per 5 acres, or 36,444 units spread throughout the RLSA. These units could be accommodated through higher clustered density in rural developments (calculated at 2.17 units per acre)

SRA acres: 16,000
Credits: 128,000

Restoration credits:

Restoration credits were created with broad support among landowner and environmental groups between the Transmittal hearings and Adoption hearings in 2002. Other than those groups, it is not likely that many members of the public were fully aware of this additional credit type. Two types of credits were envisioned- “dedication credits” (R-1) and “completion credits” (R-2), available in Habitat Stewardship Areas (HSAs), Flowway Stewardship Areas (FSAs) and 500’ Restoration Areas. R-1 credits can be earned at the rate of 4 credits per acre in the Camp Keais Strand and 2 credits per acre in the Okaloacoochee Slough. Completion of restoration earns 4 credits per acre in both locations.

SRA acres: 20,000
Credits: 160,000

Early Entry Credits:

Although these credits expired in 2009, they were designed to reward early program participation in the protection of lands designated HSA. This was a slight reduction from the earlier program design, as requested by the FL Dept. of Community Affairs.

SRA acres: 3,375
Credits: 27,000

“Public benefit acres”

Acres: 3,940

TOTAL, 2002 Plan Estimate in 2009

SRA Acres: 43,315
Credits: 315,000

Comment: Credits must be accumulated to entitle SRAs- Towns, Villages, etc. These require 8 credits per acre for development. “Public benefit” acres within SRAs that do not require credits, but are estimated at 10% of each SRA. Remaining “baseline” development potential under agricultural zoning (either agricultural uses or other baseline zoning development) was estimated at 43,700 acres.

II: Five-year Review Recommended changes to Credit System (2007-2009)

As discussed throughout the White Paper, the 5-year Review provided an important analysis based on significant public participation and agreement. With respect to credit calculations, Section 3, Supporting Documentation of the Phase 2 Report, provided the following data:

- Estimated credits and development acres under the 2002 Plan based on track record (above)
- Emphasized Agricultural protection and additional wildlife corridors in “Open” area
- Recalibrated Restoration credits as “tiered” system
- Addressed need to incentivize large mammal corridors
- All recommendations supported by Board, land owners, committee, environmental groups at a Board hearing, April 21, 2009, as part of Final Report to Board
- Five-year Review recommendations were not adopted, due to the downturn in economy and disagreement over the fee for the amendment process
- 45,000-acre maximum, below, is consistent with current application to USFWS for multi-species habitat conservation plan (HCP), an environmental review permitting process

Base credits	128,000
Restoration credits	144,000
Early Entry Bonus	20,000
Agriculture credits	89,000
Panther/wildlife corridors:	23,000
Tentative total:	404,000

Modifications to reduce expanded development impact:

1. Slight reduction in Restoration credits
2. No further Early Entry credits
3. Recalibration in credit currency (new SSAs would require 10 credits for each acre of SRA development)

Net effect on development: **SRA acres: 47,120**

Comment: Acreage calculation includes 10% increase to reflect “public benefit” acres

Additional restriction:	Capped SRA acres:	45,000
	Capped Credits:	404,000

Comment: Capped credits reflected 76% at 10 credits per SRA and 24% at 8 credits per SSA.

III: A Review of RLSA credits (Part I) based on Today's Data

SSA Base Credits: Assuming all FSAs, HSAs, WRAs and 500' Buffers (target areas) are included in SSAs; calculations are based on approved SSAs 1-16 (#8 withdrawn) plus SSA amendment applications (14-16):

SSA 1-16 acres:	50,431
SSA 1-16 credits:	77,999
Factor, credits per SSA acre:	1.55
All target area acres:	86,960
SSA base credits based on historic factor:	134,788

Comment: This Base Credit estimate is slightly higher than the 5-year Review estimate of 128,000 Base Credits. One explanation is that the amendments for restoration push the base calculations up, as they are one factor in the NRI score for Base credits.

Early Entry (EE) Credits

All EE credits	19,552
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Comment: EE credits expired in 2009

Restoration Credits

R-1 (Dedication)

SSA 1-16 credits (with amendments)	58,854
Target area acres	68,553
R-1 credits (extrapolation to all target acres)	80,207

Comment: The factor per gross acre is 1.17, based on all approved SSAs and 3 amendments that remain pending. This figure is not a cap, in that approved SSAs 1-16 could still apply for additional amendments for restoration dedication that would increase the total.

R-2 (Completion)

Actual R-2 credits earned to date	1,710
Potential R-2 credits, 1-16 (with amendments)	63,393
Target area acres	68,553
R-2 credits extrapolation to all target acres	88,433

Comment: Like R-1 credits, this total is based on extrapolation and may be greater if a higher percentage of SSA areas become restoration areas.

Potential Credits, Current RLSA Program **322,980**

SRA Development Footprint (8 credits/acre) **40,373**

Comment: Extrapolation of existing credits and acreages are 2.5% higher than the estimate made in 2009. This estimate does not include changes proposed by 5-year Review Committee.

IV: RLSA Credits Based on White Paper Recommendations (rounded nearest 100)

Base SSA Credits:

Recalculated Base credits (Section III)	134,800
@ 8/SRA acre	78,000
@10/SRA acre	56,800
SRA Acres Attributable to Base Credits	15,500 acres

Early Entry Credits **19,600**
SRA Acres Attributable to EE Credits @10 cr/acre) **2,500 acres**

Agricultural Credits

NRPA "Open" areas, 15,278 acres* (50% participation cap; 7,850 acres) @ 2.6 credits/acre	19,900
*Open acres reduced by SSAs (181) and Priddy Easement (1,617)	
Non-NRPA Open areas, 74,443 acres (50% participation cap; 14,300 acres) @ 2.0 credits/acre (Open reduced by SRA 45,000; less 864 corridors; less SSA 389)	28,600
Total Agricultural Credits	48,500

SRA Acres Attributable to Ag Credits @ 10 cr/acre 6,100 acres

Public Benefit (PB) Acre Adjustment 2,300 acres

Comment: Public benefit acres are estimated at 5% on the basis that excess open space will no longer be eligible for credit deduction.

SRA Acres: Base, EE, Ag, PB 26,400 acres

Restoration Credits 18,600 acres

Restoration credits should be calibrated to result in the total development footprint projected and approved as part of the restudy. Further, they should be calibrated such that if the total anticipated need for restoration throughout the RLSA private lands is fully realized, then credits to entitle the full desired footprint will result, and no more.

Given the recommended credit allocation for Base, EE, Ag and PB above, the credits for restoration, vested or future, should not result in SRA acreage that exceeds 18,600 acres if 45,000 acres is the desired SRA cap. As with all credit categories, credits and acres should be subject to caps. Restoration credits should be calibrated to cover all needed restoration acres, including appropriate large mammal corridors, resulting in credits yielding the desired acreage above.

To date, credits equivalent to 15,300 acres of development are vested at the current 8 credits per acre standard, although more than half would require completion. Recalibration will be necessary for future restoration area credits.

Comment: The existing SSAs (1-16) already cover 68% of areas where restoration credits are possible (FSAs, HSA, and 500' buffers). Within existing SSAs, 36% of these eligible land areas are claimed as restoration areas. However, some of these existing SSAs have not applied for restoration credits yet. Care should be taken to assure that credits are available for all areas needing restoration, giving priority to large mammal corridors.



Rural Lands Stewardship Area Overlay White Paper

H. Consistency with Other Planning Areas

Following is a list of items that were discussed and considered during the RLSA restudy and incorporated, directly or indirectly, into the Overlay or recommended revisions.

Immokalee:

1. Agricultural land use retention is critical to the continued support of the agricultural sector within Immokalee. Processing and distribution operations depend on quality agricultural land to grow cattle and produce. Jobs within Immokalee and field operations in the RLSA are major employers.
2. Additional workplace opportunities will grow in the RLSA to the benefit of skilled workers coming from Immokalee. These will emerge in the traditional building and service sectors as Towns and Villages grow. In addition, the requirement for future business park locations will provide an avenue to higher paying jobs following location of target businesses to these pad-ready locations.
3. The RLSA required “housing analysis” will likely include Immokalee as a potential source of housing options, keeping the vacancy rate at a minimum.
4. The emphasis of the Immokalee Regional Airport as a commercial catalyst will help attract new target businesses to the RLSA (and Immokalee) area.

Golden Gate Estates:

1. Proximity of a large community living in the eastern portion of the Rural Estates will have access to new locations for goods and services within new Towns and Villages in the RLSA. This will provide a benefit to the transportation system by reducing vehicle miles traveled, a benefit to the Estates residents by providing fewer vehicle hours travelled, and a benefit to Town and Village development, lending support for goods and services within those new communities by reaching critical mass earlier in time.
2. Estates residents will also benefit from job creation. Like Immokalee residents, they will enjoy new employment opportunities in the traditional service sector (building and resident services) and in the emerging new business locations in the RLSA that can attract target or export industries.
3. It is important to note that Estates residents disfavored any upsizing of commercial locations within the Estates, although the Immokalee curve at Randall Blvd. will likely

meet some of that need. Again, for estates residents in the eastern area of the Rural estates, the RLSA Towns and Villages provide an important option.

Urban Collier County:

1. As recommended in this White Paper, the conversion of stewardship credits for use in the urban area should be considered. This would provide a tool for the Board to consider if development at a given location requests more density than is otherwise available under the density rating system. Such use by an applicant with approval by the Board should be discretionary.
2. The County may decide to procure additional lands within the RLSA as part of the Conservation Collier mission for the recreational benefit of all County residents.
3. The County may wish to purchase land in the RLSA or stewardship credits and ultimately retire those credits, thus reducing the available build-out footprint in the RLSA; private firms including not-for profit organizations may wish to do the same.



Rural Lands Stewardship Area Overlay White Paper List of Staff Recommendations

Water Resources

1. *Continue to study the need for maximum peak discharge rates for basins within the RLSA to maintain water quality and quantity downstream.*
2. *Count WRAs as SRA acreage if used for primary water management.*
3. *Encourage filter marshes prior to offsite discharge or discharge into WRAs where appropriate.*
4. *Require flowway management plans as part of the SRA approval process to supplement the SSA maintenance functions in a more specific way and to provide a mechanism for flowway management in the absence of established SSAs or to supplement SSA land management activities.*
5. *Coordinate with FDOT and other state and local agencies on an SR 29 Comprehensive Water Resources Plan aimed at restoring the health of the Okaloacoochee Slough.*
6. *Continue to monitor aquifer supply and quality through existing federal, state, and local programs.*

Agricultural Protection

1. *Remove the word "premature" from agriculture protection references in Policy Group.*
2. *Provide credits to owners in open areas at the rate of 2.6 credits per acre in the ACSC and 2.0 credits per acre in the non-ACSC open areas in return for permanent agricultural easements allowing active or passive agriculture.*
3. *Create a cap for agricultural easement credits calculated at a 50% utilization rate.*
4. *Exclude any aquiculture operation from the agricultural credit system both at inception and through easement language.*
5. *Collier County may establish an Agricultural Advisory Committee at a time deemed appropriate by the BCC.*

Environmental Protection

1. *To achieve sustainable environmental value and balance, the RLSA overlay should maintain functional flow ways, wildlife habitats, wildlife connectivity, and quality agricultural land and help assure the regional long-term viability of the Florida panther population.*
2. *Add a provision in the SSA approval process that allows a conditional approval for 5 years, with optional extensions; require under the terms of the instrument that no overall increase in Agriculture 1 activities may occur during this period. Require a provision within conditional or escrowed SSAs that any new RLSA master plan amendments arising during the escrow/conditional period shall apply to the SSA.*
3. *Establish a third grantee for enforcement of easements under SSAs; one grantee will be the Florida Fish and Wildlife Conservation Commission (should they agree).*
4. *Require applicants to address the effect of potential SRA development on adjacent SSA values when SSAs are proposed.*
5. *Foster further data and vetting of the land management and restoration recommendations prior to Transmittal.*
6. *Add specific exotic vegetation control measures to the SSA agreement and easement and require a maintenance standard that assures no greater infestation than that existing at time of SSA designation.*
7. *Consider, through the LDC amendment process, any additional specific maintenance standards that should be included in all future SSA agreements and easements.*
8. *Allow Restoration Area applications only once within any single SSA.*
9. *Restructure the timing of R-1 credits: only half of R-1 credits awarded at time of permit approval through the ERP process (or County permit if no ERP required); the remaining "R-1" credit(s) would be awarded only after the owner successfully completes all phases of R-2 restoration.*
10. *Engage an independent third party prior to Transmittal to study the needed restoration activity in RLSA private lands so that needed restoration credits can be reasonably estimated and structured; add specificity to restoration standards and objectivity to the acres claimed by different restoration types; review with permitting agencies and land managers.*
11. *Structure restoration credits so that needed restoration is assured in return for the maximum credit and acreage footprint of SRA development.*

12. *Cap Stewardship credits and SRA acres; provide separate caps for restoration credits and agriculture credits.*
13. *Require third party approval and monitoring of Restoration Plans if no ERP permit process is required. The County may use an agency consultation process or contract.*
14. *Require clear maintenance obligations through SRAs based on their volume discharge to the flowway, thus assuring perpetual funding (fiscal neutrality) for downstream stormwater management in Flowways.*
15. *In exchange for voluntary participation in the RLSA overlay system, land use layers 1-4 shall be eliminated in HSAs, with the exception of governmental essential services.*
16. *Provide an avenue for County purchase of land or credits in the RLSA; create LDC standards for discretionary approval of private entity purchase and use of credits for high density projects in the Urban area; explore opportunities for County purchase of easements in coordination with identified state programs.*
17. *Reduce speed limits along collector and arterial roadways, particularly at night.*
18. *Provide LDC regulations for outdoor lighting to protect the nighttime environment, conserve energy, and enhance security and safety.*

Towns, Villages and Other Development

1. *Require minimum densities within a ¼ mile of a Town Center, Town Core or Village Center. Based on the SmartCode v.9.2, those areas (center/core plus ¼ mile) should exceed 6 units per acre, excluding acreage for civic uses.*
2. *Create an aggregation rule for Villages: if adjacent and under common or related ownership or control and judged to be part of a unified plan of development, Town standards should apply if aggregate size exceeds maximum village acreage.*
3. *Village sizes should not be increased to 1,500 acres unless additional commercial, civic and governmental minimums are proposed; Town size increases to 5,000 acres should be allowed only if, in the discretion of the Board, greater efficiency in service provisions and fiscal impacts are demonstrated.*
4. *Propose greater minimum requirements for commercial, civic and governmental uses, and specify the timing of these uses in the phasing of the residential portions of both Towns and Villages, seeking further vetting on phasing requirements through an LDC process.*
5. *Propose a required acreage set-aside for corporate office, light Industrial or business park, available for sale or lease for a specific number of years for economic development.*

6. *Allow corporate office, light industrial and manufacturing uses in Villages.*
7. *Define open space more clearly, including the elimination of single family dwelling unit yards, to reach the minimum required 35% open space; eliminate the credit exemption for excess open space.*
8. *Require Wildlife Management Plans as described in the 5-year Review and Wildfire Management Plans within all SRAs.*
9. *Require Flowway Management Plans as part of the SRA approval process to supplement the SSA maintenance functions in a more specific way and to provide a mechanism for flowway management in the absence of established SSAs or to supplement SSA land management activities.*
10. *Require a Housing Analysis similar to the former DRI requirement to assure a wide range of housing types and price points and to accommodate the needed workforce within the SRA.*
11. *Require all homebuilders in the RLSA to offer a Universal Design option in the sale of new homes.*
12. *Eliminate the category of Hamlets as a form of SRA development; consider adding this category at a later time if environmental, economic, and equity factors favor its creation in certain locations.*
13. *Describe allowable uses in the Compact Rural Developments (CRDs) with greater clarity, allow retail only as an ancillary use, and limit the size of any CRA to 100 acres.*
14. *Review SRA applications with careful attention to fiscal neutrality at a reasonable horizon date and closely scrutinize calculations and methodologies to assure that SRAs become fiscally positive by the horizon date or impose special assessments.*
15. *Require annual monitoring reports to gauge the status of all developer commitments associated with the SRA and developer contribution agreements.*
16. *Restrict SRA development in the ACSC by limiting the total development along SR 29 to 1,000 acres and allow only CRDs as a form of SRA development in lands east of the Okaloacoochee Slough.*
17. *Require Mobility Plans as a component of an SRA Master Plan, with specific components as identified in the LDC. Additional LDC components should include specification in the Master Plan to provide depictions of local streets to demonstrate connectivity.*
18. *All roads internal to an SRA will be constructed and maintained by the SRA.*
19. *Provide needed wildlife underpasses inside and outside of SRAs, and lower speed limits on collector and arterial roadways for human safety and wildlife preservation.*

Credit System

1. *Procure an independent analysis of the definitions and estimated acreages associated with a revised Restoration program prior to Transmittal hearings, considering the 5-year Review “tiered credit system” approach and alternatives, including the FWF/Audubon approach; the analysis should be based on incentivization of restoration activities in all needed areas and a credit calibration and cap so that will no more credits are produced than necessary for 45,000 acre SRA footprint.*
2. *Provide the third-party analysis to stakeholders and public for further vetting prior to Transmittal hearings.*
3. *Cap credits within the categories of base credits, restoration credits, and agricultural credits separately.*



Appendix A

Rural Lands Stewardship Area Overlay Restudy Public Outreach – Meeting Summaries January 2018 – March 2019



Meeting Summary

RLSA Restudy “Kick-off” Meeting

Introduction, History and Perspectives

January 25, 2018, 6:30 PM, North Collier Regional Park, Exhibit Hall

I Introduction and Selected History

Kris Van Lengen, Community Planning Manager, opened with welcoming statements at approximately 6:30 p.m. He advised that the meeting includes a series of presentations meant to provide background information and perspectives on the Rural Land Stewardship Area (RLSA) program and the Five Year Review. Mr. Van Lengen said there might be an opportunity for speakers from the audience after the presentations, however time is limited because the meeting room must be cleared at 9:00 p.m.

Mr. Van Lengen displayed the future meeting schedule and advised that future meetings will allow time for speakers from the audience; he said the next meeting is planned to open with time for public speakers, and each meeting thereafter will have time for speakers.

Mr. Van Lengen explained that the County has four restudies underway. The RLSA encompasses an extensive area and there are many interests in the area. He displayed the link to the County website (<https://www.colliergov.net/GMPrestudies>) and advised that it contains a great deal of information, with around 150 documents. The website is useful, and if anyone finds that information could be added to the website, the County welcomes that information.

Mr. Van Lengen explained that the “1999 Final Order” spawned the RLSA program and the Rural Fringe program. The program is for protection of agricultural activities, and protection from unrestrained growth to protect wetlands, protected species, and wildlife habitat. The program aims to direct growth to appropriate locations through creative land use planning techniques. The program is a way to balance continued agricultural viability, environmental resource protection, and long-term economic prosperity and diversification, including smart growth principles. These are the three legs of the three-legged stool, and the program is about balancing the three elements. In some cases, these elements reinforce each other, and in some cases, they don’t, especially land use allocations. That’s been a point of contention, and it’s important to consider all three and find balance.

Mr. Van Lengen said he was going to talk about a slice of history, but because there is such a lineup of speakers that he’s going to be brief. Instead of going into detail on footprints and 16,800 acres versus 45,000 acres, he said all slides will be available on the website, and a narrative report from

staff will be on the website. He said that it's important to start with consensus on the facts to move toward consensus on solutions. Mr. Van Lengen stated anyone is invited to critique staff's narrative after it is published next week. He said the narrative covers the program history of transmittal, adoption, assessment, base credits and bonus credits and how they were expanded. He said there was a quote in the staff's Executive Summary to the Board of County Commissioners that was repeated at transmittal and adoption stages, and it was misleading about the estimated 16,800 acres (or 9% of the RLSA study area) for clustered development. That statement was taken from the assessment out of context; it referred to base credits and not bonus credits. At that time, the bonus credits were simply not quantified in the way they could be today.

Mr. Van Lengen stated the RLSA program was adopted in 2002, and an excellent Five Year Review report was done but not adopted for a number of reasons. At this point, he said the original habitat areas, flowway areas, and water retention areas are high value environmental areas that are slated for protection. Almost an equal amount of 95,000 acres is open for development.

He explained that base credits yield around 16,000 acres of development. Early entry credits translate to another 3,400 acres of development. He said there was no way at inception to quantify restoration credits, quantification today relies on assumptions, and there is no cap on restoration credits. New ideas from the Five Year Review, such as agriculture protection in the open areas and panther corridors, were very important concepts that involved new credits, but they were not adopted. It was realized that too large a footprint was possible, so the footprint was reduced through different recommended strategies.

Mr. Van Lengen went on to discuss participation in Stewardship Sending Areas (SSAs). He said of 90,000 acres, there are 50,000 acres protected under permanent Conservation Easements. The majority of the easements relate to agriculture, and some are at the conservation level. The easements are protective and require maintenance by the owner in perpetuity.

Mr. Van Lengen summarized that new towns of 9,000 acres include the 5,000-acre town of Ave Maria and an application for a new town called Rural Lands West. The SSA credits earned so far already entitle 16,000+ acres of development area, and at least 40% of the SSA areas are yet to be protected. These remaining areas will yield credits as well, and all of this information will be part of data and analysis during the Restudy.

Mr. Van Lengen said the evening's scheduled speakers will provide various environmental, citizen, landowner and agricultural perspectives. He said he hopes this is the beginning of an experience considering views and facts on this complicated topic, and it needs to begin with facts and slowly build to a consensus.

II Comments by Stakeholder Groups

1. Florida Wildlife Federation Nancy Payton, *SW Florida Representative* (Maps were displayed.)

Ms. Payton introduced herself as the Southwest Florida Field Representative with the Florida Wildlife Federation. She explained her background with the Federation since 1994 when their Southwest Florida office was opened to address rural lands. She was the point person for the Federation involved in the Final Order and the planning process through today. The Federation and Audubon Society joined the State of Florida to challenge Collier County’s Growth Management Plan and its failure to protect wetlands and wildlife habitat.

Ms. Payton displayed an old Future Land Use Map that showed the rural area was not “green” at the time of the administrative challenge, which was an issue because of the significant wetlands and wildlife habitat in eastern Collier County. She displayed a map she dubs the “Blood Map” created by the 1000 Friends of Florida and University of Florida GeoPlan. The map shows the rural area as if there was no Rural Land Stewardship Overlay. Baseline density would be one unit per five acres with no protections, no clustering, just platted property and mining with little if any consideration for wildlife needs. She explained that this is why there was a challenge and Final Order for the County to generate a better plan.

She said that when the Final Order was issued, there were two major documents that were relied upon regarding wildlife:

- (1) A report by the Florida Fish and Wildlife Conservation Commission, formerly the Game Commission, called “Closing the Gaps.” Eastern Collier County was identified as the most important wildlife area in Florida for wide ranging species (panther and black bear). She cited the report’s reference to the low percentage of conservation lands in this part of the state.
- (2) A report by Frank Mazzotti with University of Florida Institute of Food and Agricultural Sciences (IFAS). He studied the Immokalee Rise and his study identified the need for uplands to have healthy wetlands. The report is dated in the 1990s. Ms. Payton added that uplands are important, and they get overlooked when dealing with conservation.

Ms. Payton displayed the 2002 Buildout map for the Rural Land Stewardship Area, which she said shows the benefits of the RLSA program. She said that benefits include: more green area, connections are protected (including Camp Keais Strand and Area of Critical State Concern, connection to the Big Cypress National Preserve and the Slough, which helps move wildlife, particularly the panther). She went on to describe benefits of the current program including wildlife crossings. She described the crossing and bridge locations connecting private conservation lands (SSAs) thanks to the cooperation of private owners. She said there are roughly 50,000 acres that have been restored, privately maintained, and still on the tax roll.

Ms. Payton gave examples to illustrate why preserve lands are far too expensive for outright purchase. She said Edison Farms in Lee County was just purchased for roughly \$10,000 an acre. The Triple H Ranch in North Belle Meade was recently appraised at \$8,000 an acre. She calculated that 50,000 acres at \$9,000 per acre equals \$450 million, and noted that Florida Forever can't get \$100 million. She explained the RLSA allows for conservation to be done and maintained forever, for the benefit of wildlife, on the tax rolls. She said the goal is to conserve 100,000 acres or more, which would cost well over \$1 billion if it had to be purchased.

Ms. Payton described that 14,000 acres of preserved land buffer the Panther Refuge, and about 4,500 acres buffer the Big Cypress. Privately restored and maintained conservation habitat along Camp Keais Strand is ambitious and more supportive of wildlife than the boundaries determined by Corkscrew Regional Ecosystem Watershed (CREW), which only covered the deepest flowways and not upland buffers.

Ms. Payton asserted that the RLSA Program is a holistic approach for wildlife species that provides incentives, not burdens, for hosting listed species. The more species on the land, the more credits the land yields, and uplands get equal consideration.

Ms. Payton explained that a few other programs have come out of the RLSA Program. One is the Florida Panther Protection Program, which is a partnership of organizations and owners working cooperatively to enhance wildlife habitat. The \$150 million Paul Marinelli Trust Fund is anticipated for additional enhancements, including hopefully a wildlife institute for additional research in support of the Stewardship Area and the habitat that is forever protected.

Ms. Payton displayed a map based on amendments proposed by the Five Year Review Committee. She said it's restricted to 45,000 of developable land. She reminded that if 43,000 acres are to develop with credits, the balance would be for platted communities or mining. Agricultural credits allow areas to be protected for agriculture. She referenced that Frank Mazzotti's study emphasized the importance of agricultural and natural lands together for wildlife. She pointed out that the 45,000 acres of development includes public uses. Ave Maria University was not included before in the development area, and the Five Year Review Committee recommended including all uses in the development area.

She referenced the incentives for habitat links, coexistence plans, management plans, and dark skies strategies. She said Florida Wildlife Federation supports the RLSA program and looks forward to working together to make it a great program.

2. 1000 Friends of Florida **Thomas Hawkins, *Policy and Planning Director***

Mr. Hawkins noted that the Florida Legislature is in Week Three of its session. He shared that he has been with 1000 Friends of Florida for 18 months. He described that in 2014, 1000 Friends of Florida reviewed the RLSA on behalf of the Conservancy of Southwest Florida. Their report recommended eight changes to the RLSA as it was originally created in 2002:

- The first recommendation was to re-evaluate the RLSA credit system. Originally there was a conception, as reflected in the Executive Summary to the Board of County Commissioners for approval of the RLSA, that the credit system would allow around 16,000 acres of development. He said it’s now known based on the credits available, around 43,000 acres is for urban type development (2.5 units per acre) and another 43,000 acres is for ranchette type development (one unit per five acres).
- The second recommendation was to restructure the RLSA to do more to protect rural agricultural lands.
- The third recommendation was to consider panther habitat when identifying protected lands.
- The fourth recommendation was to identify appropriate locations for new towns.
- The fifth recommendation was to address infrastructure costs, which Mr. Hawkins said he’ll discuss further.
- The sixth recommendation was to limit infrastructure in the Big Cypress Area of Critical State Concern.
- The seventh recommendation was to incorporate Immokalee in RLSA planning. He said an integrated plan will be better in the long run.
- The eighth recommendation was to limit the extensions of stewardship agreements to one year exemptions.

Mr. Hawkins reiterated a statement from the Executive Summary from the 2002 RLSA transmittal hearing regarding the credit system. *(For the text on the slide, refer to Mr. Hawkin’s PowerPoint presentation that is part of the record of this meeting.)*

Mr. Hawkins said it’s recommended to focus development in the secondary panther habitat and not to encroach on primary habitat.

Mr. Hawkins moved his focus to the cost of infrastructure and displayed images from Alachua County, Florida, produced by Joe Minicozzi of Urban 3, regarding ad valorem tax production geographically. He explained that downtowns are more productive of tax revenue because they are denser, create unique places, and more desirable due to sense of place. He said single family housing is not productive of taxes compared to shopping centers or undeveloped land, especially considering homestead exemptions.

Mr. Hawkins pointed out that development requires services, and the costs of services must be paid somehow. Costs to provide service to development is a function of how development is designed, and how much space is taken up. He referred to downtown areas, where development is very close together, and the ratio of developed space to length of roads is much different from suburban areas where it is more expensive to provide services to development. He gave the example that a small three-acre downtown development has higher productivity and ability to repay infrastructure cost than a suburban development. He said a thirty-acre development in the suburbs costs \$28,000 per unit for services compared to \$15,000 per unit in a downtown area,

and he summarized that the tax productivity is better for downtown style development compared to suburban development.

Mr. Hawkins urged review of walkability and density as development occurs in the RLSA, stating that higher density development is more desirable and incurs less public liability for costs in the long term. He concluded that building better communities and environmental conservation are mutually beneficial goals.

3. Conservancy of Southwest Florida **Nicole Johnson, Director, Environmental Policy**

Ms. Johnson described her tenure with The Conservancy since 1997, and that she was involved in the RLSA program since 1999. She said her presentation will focus on why the RLSA is important to all in coastal and eastern Collier County, what’s been learned over the past 16 years, and the Conservancy’s recommendations for moving forward together.

Ms. Johnson referenced the intent of the Final Order to protect agriculture, natural resources and habitats and allowing for Smart Growth development and avoiding sprawl. She said it all came together in the RLSA Overlay map, and the RLSA precludes residential development in flowway areas and habitat areas and allows intensification in certain areas.

Ms. Johnson reiterated the intent per staff’s Executive Summary to the Board of County Commissioners from the 2002 adoption hearing. She quoted:

“It is believed that the adoption and implementation of the Rural Lands Stewardship Area Overlay will not result in an increase to the total number of allowable dwelling units or population in the Eastern Lands area, but rather result in a re-allocation of the density and population allowed under the pre-Final Order conditions from a land-consuming checkerboard pattern into compact, mixed-use development.” - Collier County Board of County Commission Adoption Hearing Executive Summary. Oct. 22, 2002.

Ms. Johnson said the whole intent was to remove the one unit per five acre development pattern and consolidate it into development areas. She said 16,800 acres and no ranchettes was the intent of the program. During the Five Year Review she said it was learned that there is capacity for 230% more new towns in the RLSA. Another 43,700 acres of ranchettes means 87,000 acres of towns and ranchette sprawl has resulted. She said there is a vast difference between 16,800 acres of compact development versus 87,000 acres of sprawl.

Ms. Johnson said The Conservancy’s recommendation is to reevaluate the RLSA based on the original intent. She said the RLSA program is complex with different layers and valuations, and the currency in the RLSA is a stewardship credit. She said in order to balance credits for the system to work, the RLSA requires eight stewardship credits to equate to 1 acre of development. She added that eight credits per acre is the balance for having the right amount of development and not having too much development.

Ms. Johnson said the system ended up with more credits than anticipated. Credits were added for restoration, which needs to be re-evaluated in the 2018 review, because credit is given not only for restoration, but for saying that the land can be restored by a third party. Ms. Johnson said this can be fixed by recalibrating the credits, meaning the 137,000 credits thought to be in the system could be factored by 2.3 times to equal the anticipated amount of development acreage, so that greater than eight credits still equals one acre of development.

Ms. Johnson said that The Conservancy concludes that 87,000 acres of new towns and ranchettes constitutes sprawl. She quoted:

“The large 93,000 acre area eligible for designation of receiving areas, which also allows the conversion of land uses to the underlying low-density uses, is the exact opposite of a plan to direct growth to the most suitable areas.” - Dept. of Community Affairs *Rural Land Stewardship Area Program 2007 Annual Report to the Legislature*

She said The Conservancy recommends, as it did during the Five Year Review, that these areas where intensification is allowed be re-evaluated based on latest science, economic conditions and the original intent of the program.

Regarding best available science, Ms. Johnson explained the RLSA was based on year 2000 science, and now 2018 is best available science. She gave an example of the area critical for the panther that could be more valuable and provide for protection of agriculture. She referenced a map prepared as part of the Five Year Review showing 45,000 acres of development area and highlighted the lines indicating expanded or new roads. The cost in 2010 was calculated by the Conservancy to be \$2.1 billion, some of which will be borne by taxpayers, which she said was learned from the Oil Well Road expansion. She said the costs to be borne by taxpayers, developers and new residents needs to be updated and evaluated.

Ms. Johnson said public participation has been a hallmark in the past for the RLSA program, and the Conservancy appreciates it being a part of the 2018 Restudy. She encouraged people to get involved and stay involved.

She ended by saying it’s rare to have a chance to reevaluate a program like this. It’s an opportunity to look at what went right or wrong in 2002, and what’s been learned since the Five Year Review. She said there is nothing binding us to the Five Year Review recommendations. She reiterated The Conservancy’s recommendations as the “five R’s”: reassess, recalibrate, revise the overlay, recalculate cost of infrastructure to taxpayers, and remember participation by all stakeholders is critical.

4. **Audubon of the Western Everglades** **Brad Cornell, Southwest Florida Policy Associate**

Mr. Cornell explained the organization’s name was Collier County Audubon when they collaborated with other agencies and the State on the original RLSA related litigation against the

County. He said it’s important to think about the whole community and getting things done in the big picture. He said when things are going the wrong direction, it’s important to raise a hand.

Mr. Cornell was on the Five Year Review Committee, and he recalled that there was a lot of concern the RLSA program might not work, because no such program had been done before in the State of Florida. The Five Year Review was meant to evaluate whether the program’s intent was accomplished. He explained the Five Year Review Committee spent two years, and he showed that they wrote three volumes of material and pointed out that this Restudy is not new. He said the recommendations of the Five Year Review Committee had a great deal of public input and participation, and the Growth Management Plan (GMP) amendments that were recommended are still prudent today. He said the end for this Restudy is to look at the GMP amendments, tweak and update and adopt them, adding that almost all of 1000 Friends of Florida’s questions are answered in the GMP amendments.

Mr. Cornell gave highlights of the Five Year Review Committee’s Technical Review (Phase 1 Report). Almost 55,000 acres of stewardship sending easements had already been put in place, which is a lot of land and high quality habitat, which he said was a success. He said the 5,000 acres of Receiving Areas including Ave Maria was a success too. He said landowners did participate and saw value in this program. He described the current SSA acreage is 50,600 acres because one SSA was removed unfortunately, and new town of Rural Lands West is pending.

Mr. Cornell explained that an issue identified in the Five Year Review was that the leftover land constituting 43,000 acres of open land could become like the Estates or ranchettes. He said that’s sprawl, and another incentive is needed to prevent it.

Mr. Cornell showed a map of Camp Keais Strand, noting how it is almost entirely protected, which is a success.

Mr. Cornell discussed why the 43,300 acres of land is proposed for development. He said there is a need to calibrate credits, but what counts is the map in the end. The owners of almost 195,000 acres of land need to have access to equal benefits, otherwise the program does not work. He said 43,300 acres of equitably distributed development potential relates to 134,000 acres or 92,000 acres of benefit.

Mr. Cornell discussed the 17,000 acres of primary panther habitat and the conservative assumption that all of it would be destroyed, when in fact the permitting requirements for avoidance and minimization result in landowners developing least valuable habitat first. He said the impacts to primary panther habitat could be zero; it is offset by the mitigation credits.

Mr. Cornell displayed the adopted RLSA credit system and pointed out the restoration credits. He said it is not known how many credits restoration will yield and stressed that restoration is desirable.

Mr. Cornell pointed out important outcomes from the Five Year Review:

- Capping development at 45,000 acres.
- Recalibrating and prioritizing restoration by types of restoration, referring to wordstork, wetlands, and panther.
- Regarding the 43,000 acres with potential for one dwelling unit per five acres, he suggests agricultural easements. He stressed this is still not in the RLSA program, and this is what his organization is looking for.
- 45,000 acres for development is a lot, but it is over fifty years.
- The value of farm fields is that they provide two to three times as much panther habitat.

Mr. Cornell elaborated on the Florida Panther Protection Program, and said the Five Year Review was based on this. He said it’s a commitment between four leading conservation groups in 2008 and eight major landowners, and this was done in parallel to the Five Year Review and identified ways to improve rural land stewardship beyond the Five Year Review. Mr. Cornell advised that the \$150 million Marinelli fund is explained on floridapantherprotection.com, and that the program was reviewed by six panther experts, and their assessments agreed it’s positive and good for the panther.

**5. Collier Citizens Council
Growth Management Committee**

**Charlette Roman
Neville Williams**

Ms. Roman explained she is not representing Marco Island or the Marco Island City Council. She is representing the Collier Citizens Council, which is a coalition of leaders that represent citizens’ views on local and state policy. The Collier Citizens Council Growth Management Committee has been a part of the Restudy process since its beginning almost two years ago. She expressed appreciation for Growth Management staff for their professional efforts.

Ms. Roman said the focus of her presentation is on smart growth. Smart growth includes walkable communities, sustainability, compact new urbanism, green building standards, and eliminating gated communities with no connectivity due to car-centric design. She also shared the following principles of sustainable communities: connected, compact, complete, complex, convivial, conserving, and cost-effective. She said sustainable communities reinforce compact communities, making for livable and desirable places where people want to live.

Ms. Roman displayed images of Seaside, Florida as an example of new urbanism. She explained Seaside is walkable with green space and a town center. She also showed images of Kentlands in Gaithersburg, Maryland as another example of a success story, and said it shows effective environmental and urban design in a larger region, with central parks and green space. She showed images of Fifth Avenue South in Downtown Naples as another example.

Neville Williams explained he is not an expert, just a citizen. He lived in Kentlands, Maryland which was designed by Duany Plater Zyberg (DPZ), the original authors of smart growth. He said they planned in cooperation with the City, the County, landowners, and multiple developers. Mr.

Williams suggested inviting DPZ for a couple of days to advise on how different communities have devised smart growth plans, zoning regulations and laws.

Mr. Williams referred to Babcock Ranch as an example of smart growth. He said without smart growth in planning, the County will be in big trouble, referencing an excerpt from the December issue of *Florida Weekly* about impacts of development pressures in Southwest Florida. Mr. Williams said he has lived in three counties under pressure from developers and is just an observer. He said each county had agricultural land and open space, and quality of life was accomplished through transferrable development rights (TDRs).

Mr. Williams said Collier’s TDR program is stalled, and the stewardship program is complicated. He said Collier County has a first-rate Growth Management Department, but it needs to be given the tools to achieve the vision derived from these workshops, noting that the Board of County Commissioners has yet to approve recommendations from the Five Year Review.

Mr. Williams said if the public doesn’t act, there will be 300,000 new residents spread across the Rural Fringe and the eastern lands and a nightmare of runaway sprawl. Four votes of the County Commission will determine the County’s future, so public involvement is important. *(It was acknowledged at this point of Mr. Williams’ presentation that Commissioner McDaniel and Commissioner Taylor were in the audience.)*

Mr. Williams said Rural Lands West will be a test and stressed that the roads can’t take any more traffic, so he advised members of the public to let public officials know what they want. He concluded that instituting progressive smart growth planning may be biggest political challenge the County has faced. He said he knows it can be done, and he advised the audience to speak up and get involved.

6. Stantec Consulting Services, Inc. Al Reynolds, Regional VP

Mr. Reynolds acknowledged the turnout for the meeting. He said he has been a land use planner in Naples and Collier County for forty years and is a planning consultant to eastern Collier property owners. He gave thanks to Nancy Payton and Brad Cornell for getting the ball rolling to challenge the County Comprehensive Plan, because otherwise the County would not have such a good Rural Land Stewardship program.

Mr. Reynolds explained that the stewardship program is incentive-based planning, not regulatory, and private owners choose to participate. He said that incentives encourage owners to do things that help owners and help the public. He further stated the stewardship program also balances needs and opportunities for resource protection, conservation, agriculture, restoration, promoting sustainable growth and economic diversification.

Mr. Reynolds listed guiding principles of the RLSA:

- The program is data driven, and credits are based on science that can be updated over time.

- Participation is voluntary, and the same rights exist today that existed twenty years ago before this program; the overlay is a choice while protecting underlying rights.
- There are limited public dollars. The stewardship program relies on private ownership and management of conservation as another tool in the toolbox.
- Economics of growth drive the ability to conserve land. The credit system monetizes development rights to allow for preservation without costing public dollars.

Mr. Reynolds pointed out the Collier County program is a model for others throughout the state, and the program is award-winning. He explained around 80% of the eastern land is controlled by private owners, who are good stewards by either preserving or using the land for agriculture, and they've been cooperating for twenty years to make sure the program succeeds. He referred to the credit system and pointed out that the more valuable land is for environmental purposes, the more credit it generates. Landowners get more credit for protecting more environmentally sensitive land. By giving more credit for protecting high value environmental land, he said this makes sure the most important land is protected first. He highlighted that 50,000 acres of the most critical habitat has already been protected.

Mr. Reynold advised that any development at a density other than one unit per five acres requires use of the RLSA program. He also stated that all the estimated development acreages are assuming 100% participation by all private property owners in eastern Collier County.

Mr. Reynolds gave an example of scoring stewardship credits which can be sold or used for development. He explained that over 50,000 acres have been protected, and most of this was done in the first five years of the program. He said the target for protected lands in 2025 was 89,300 acres, and the vision for 2050 is 134,000 acres.

Mr. Reynolds suggested that the RLSA program is one of the five most successful transfer of development rights (TDR) programs in the United States. He pointed out the two public conservation programs in Southwest Florida are Conservation Collier and Lee County Conservation 2020, and they are both funded with tax dollars and are both successful. He said the incentivization of private conservation is a good way to contribute to successful outcomes. He said Conservation Collier has \$144 million in economic benefit annually per the Southwest Florida Regional Planning Council formula for quantifying conservation in terms of ecosystem service value (or “TEV” value) to monetize public benefit value. He said the Rural Land Stewardship program has incurred zero cost and has \$1 billion of economic benefit for the 53,000 acres preserved. He suggests a balance of programs including public acquisition and incentivized private conservation.

Mr. Reynolds also spoke on behalf of Barron Collier Companies. He explained they have owned 65,000 acres, approximately one-third of the RLSA area, since the 1920s. He said they developed Ave Maria and protected 17,000 acres by creating the first SSA, and conservation and active agriculture was included in the sending area. He said Barron Collier Companies are retaining ranching along with conservation, and they enabled panther crossings at no public cost.

Mr. Reynolds said Ave Maria is the fastest growing master planned new town in Southwest Florida, and infrastructure inside the town was put in place by the private owner at no cost to the County. He said Ave Maria has brought diversity and investment to eastern Collier County, which is part of the RLSA balance for economic diversity and prosperity. He also said the \$200 million university with 1,100 students couldn't have happened without the RLSA program. He added that Arthrex built a 400,000-square foot facility in Ave Maria employing 1,600 people, helping meet the goal of the program to bring economic development to Collier County.

7. Collier Enterprises **Christian Spilker, Vice President Land Management**

Mr. Reynolds spoke on behalf of Collier Enterprises, stating that they own approximately 44,000 acres. Their Rural Lands West proposal has been in process for approximately three years, with around 18 months left to go. He said Rural Lands West will be a complete town with a 4,000-acre development footprint, and 1,400 acres are open space. He pointed out the development footprints must have 35% open space. He said the project represents a tax base of \$2.8 billion and will generate \$260 million in impact fees.

Mr. Reynolds said the Stewardship Sending Areas (SSAs) constitute regional scale habitat, providing a complete connection from Corkscrew Marsh to the Panther Refuge through Camp Keais Strand. He said this completes the conservation vision for land that is worth \$80-120 million but won't cost tax payers a dime.

8. Barron Collier Companies **Tom Jones, VP, Government Affairs**

Mr. Jones said Barron Collier Companies is the largest property owner in eastern Collier County. He referred to other presenters' references to the timeframe of 1999, and he said it's important to consider events before 1999. He said the challenge to the Growth Management Plan was then assumed by participants in the process to be resolved by downzoning all property east of Golden Gate Estates so that land allowed with a density of one unit per five acres would be downzoned to densities of one unit per twenty or forty acres. He said landowners of eastern Collier County had no idea there was a settlement agreement by interest groups with the State of Florida.

Mr. Jones described how Barron Collier Companies is a multigenerational company that has been good stewards for decades, and there has never been a shortage of other people deciding what to do with Barron Collier Companies' property. Rather than pursuing a lawsuit, Barron Collier Companies worked with consultant Al Reynolds to take a step back and set a direction for what landowners could do with their property. He said the Governor and Cabinet and landowners agreed to a three-year moratorium to study how development could proceed while protecting resources and maintaining the agricultural base. After three years, all parties agreed the RLSA program is a good program. He pointed out that Rural Lands West will be the second town; Ave Maria was the first.

Mr. Jones said the outcome of the 2008 Five Year Review was worthwhile, and the map got more “green.” He recommended that the outcomes of the work done in 2008 should be considered, and he supports moving forward with the recommendations of the Five Year Review.

9. Consolidated Citrus LP Mitch Hutchcraft, VP, Real Estate

Mr. Hutchcraft stated that Consolidated Citrus is a landowner within the RLSA. The parent company of Consolidated Citrus is King Ranch, which has a legacy of agricultural innovation and stewardship and is one of the largest citrus producers in the United States. The company is proud of its operations and land management practices and its history of cooperating with environmental partners to achieve regional goals.

Mr. Hutchcraft said connected open spaces and wildlife areas are critical. He said the RLSA will provide long term environmental benefits, and the benefits are maximized when agriculture is a valued part of the regional landscape. He also said that incentives to protect natural resources and economically viable agriculture are critical to achieving regional goals. King Ranch and Consolidated Citrus are supportive of the RLSA program, and their corporate interest is to remain in agriculture as long as it is economically viable, which could be five to fifty years. As adopted, the current program does not provide incentives or assurance for agricultural use, which leads to these lands to be unprotected and ultimately developable as low density residential.

As part of the Five Year Review, Mr. Hutchcraft supported updating incentives for retaining long-term agriculture. He said this must be done in a way that ensures equity for all landowners regardless of size or number of credits. He stressed that all parties agreed with the need for incentives to retain agriculture, and that incentives to retain agriculture would assure less open land conversion to one dwelling per five acres. He added that incentives to retain agriculture also provides an opportunity for agriculture to transition and buffer between natural areas and developed areas. He also said incentives for retaining agricultural lands ensure credits are in the system for developing later, and this warrants recalibrating the credit system.

Mr. Hutchcraft supports the Five Year Review recommendations to further the intent of the RLSA program, consistent with recommendations of DCA and the Five Year Review Committee. He encouraged putting weight on the Five Year Review Committee’s work and recommendations to recognize the value and importance of agriculture retention credits, and to provide equity for all to participate in the program in a meaningful way.

10. UF/IFAS-Southwest Florida Research & Education Center Dr. Fritz Roka, Food and Resource Economics

Dr. Roka began his presentation on the Economic Importance of Agriculture to Collier County and Southwest Florida by stating that agricultural activities should be valued. He displayed Agriculture Census data indicating agricultural land has decreased in Collier County over fifteen years, but the number of farms has increased, indicating diversity. He said the value of land is \$1.8 to 2 million per farming activity, which is an increase in value per acre.

Dr. Roka disagreed that there was no value in eastern Collier County before Arthrex. He highlighted the following statistics on the economic conditions for the area:

- \$2.6 billion in direct sales in mining, recreation, agriculture, which produces \$4 billion in economic impact
- For every dollar of taxes in agricultural areas, it costs the government thirty cents in services. This is a surplus of value for agricultural areas.
- The total economic impact correlates to 49,000 jobs generated from agriculture and natural resources.
- In the Southwest Florida five county area, farm value is over \$1.3 billion.

Dr. Roka explained there are high risks in agriculture. Hurricane Irma devastated citrus groves, but there is still optimism. He explained that significant dollars are spent to produce and harvest agricultural crops, and break-even financials are precarious. He said the agriculture industry has done a phenomenal job of coping with various challenges and bouncing back with help from a diversity of products and producers.

Dr. Roka said it’s important to recognize that agriculture is a business, and there needs to be a reasonable rate of return for the business. He said that enhancing the value of agriculture through public policy is going to help keep the industry going. He urged that benefits to the agriculture community can be beneficial to other aspirations of the RLSA program.

Dr. Roka shared thoughts about agriculture being considered adversarial in Southwest Florida; it’s considered detrimental to the environment. In fact, he said there is synergy between agricultural and environmental interests. He said it is good to enhance and extract environmental benefits from agricultural land with a reasonable rate of return for the landowner. He added that there is opportunity for wildlife habitat, however ranchers need compensation for calves that have been food for panthers.

Dr. Roka mentioned best labor practices and that the Coalition of Immokalee Workers has done a lot for the industry. He said that social justice is happening in Immokalee, yet no value is going to growers in exchange for the good labor practices they perform. He said this is an opportunity to market the good practices and return value to the growers.

11. Greater Naples Chamber of Commerce Michael Dalby, *President and CEO*

Mr. Dalby said the mission of the Greater Naples Chamber of Commerce is to make Collier County the best place to live, play and work in the United States. His focus is on economic prosperity and his plea is to reserve space in the RLSA for primary employers. He explained how employers are important to the community and displayed a list of various companies that are primary employers, which provide high paid high skill jobs and are primary economic drivers.

Mr. Dalby identified there are challenges and opportunities in eastern Collier County. He identified the challenge of population growth, and the continued need for jobs. He said he seeks to find companies that will bring high wage jobs to the region. Another challenge he identified is that the

top five occupations from 2016 to 2024 are lower wage service jobs. He also identified that primary employers need talented employees with proper skill sets, which makes workforce training important. Yet another challenge he identified is commercial real estate availability and limitations on primary employer space, Class A office space, business parks, and technology parks.

Mr. Dalby displayed a map showing primary employer locations scattered around Collier County and pointed out that there are no strong geographic clusters. He said eastern Collier County allows spaces to plan for a business park or tech park. He shared that Lee County has a tech park, and letters have been sent to attract Collier County businesses to the 135-acre clustered tech park for high wage and high skilled job opportunities in conjunction with Florida Gulf Coast University. He said this is something that could be accomplished in Collier County. He described opportunities in the eastern lands for two such parks, including one operated by Collier County. He stressed he is not suggesting recruitment. He envisions growth of small businesses that are in Collier County now.

Mr. Dalby concluded that the plea of the Chamber of Commerce is to include space for primary employers in the RLSA to provide for economic opportunity and living wage jobs.

12. League of Women Voters Charlotte Nycklemoe, Co-President

Ms. Nycklemoe spoke without digital aids. She said growth management is priority issue for the League of Women Voters. She said the group has a long commitment to smart growth and protecting environmentally sensitive lands. She also said they support development that supports its own impact and support government action that results in sustainability for this generation and future generations.

Ms. Nycklemoe said all members of the Collier County community are affected by what happens in the RLSA. She expressed concern that not all members of the community are aware of the workshop meeting schedule and urged the County to reach out in many forums and venues to inform citizens about the RLSA and related decisions. She asked that the County move the next four workshops from 4:00 p.m. to later in the evening for working people to attend.

Ms. Nycklemoe agreed that re-evaluating the RLSA program using County staff is vital to success and may provide an unbiased approach. She stated that in 2002 the RLSA program was adopted to protect agricultural land, direct incompatible uses away from wildlife and listed species, and to allow appropriate development while avoiding sprawl. She said the original RLSA established that only 9% or 16,800 acres would be developed, and the rest would remain in agriculture and conservation. She said the Restudy should consider Environmental Advisory Council recommendations generated during the Five Year Review, most importantly the issue of credits that exceeded the original RLSA program, because she said the proliferation of credits or incentives would contradict the integrity of the 2002 program.

She expressed concern of water supply impacts to the Lower Hawthorne aquifer. She referenced a 2016 report by the University of Florida, the Florida Department of Agriculture and 1000 Friends of Florida titled the “Water 2070 Report,” which examined water availability and needs of people, agriculture, and the environment. She said much has changed since the original RLSA was adopted and the Five Year Review was published. She referenced three studies by panther experts that identify areas in the RLSA that are essential for the survival of the panther. She referenced new water studies including the 2016 Water 2070 Report. She said the new information and other changes like climate change, increased traffic, and population growth need to be factored into a new proposal.

Following Ms. Nycklemoe’s conclusion, Kris Van Lengen apologized that no time remained for speakers from the audience because the room must be cleared before 9:00 p.m. He said the next meeting will be at 4:00 p.m. in the same room, four weeks from today. He said anyone who had submitted a speaker slip will get priority to speak at the next meeting, and the time limit for speaking will be extended. In response to an audience question about changing the start time of the next meeting, Mr. Van Lengen said the Oversight Committee will be polled to determine whether to change the start time.

The meeting concluded at approximately 8:45 p.m.



Meeting Summary

RLSA Restudy Group 1 Policies Meeting

General Purpose and Restructure of RSLA

February 22, 2018, 4:00 PM, North Collier Regional Park, Exhibit Hall

Kris Van Lengen opened the meeting at 4:15. He appreciated those in attendance and said the County will continue working on getting more people to attend the meetings going forward.

(Note: The meeting room was arranged with ten roundtables, each identified by a different color. Each attendee was assigned randomly to a table, forming groups at each roundtable.)

Mr. Van Lengen acknowledged Johnson Engineering team members for helping with the logistics of this RLSA Restudy meeting and the meetings going forward, including Laura, Ashlynn, Josh and Marina. Mr. Van Lengen introduced Amanda Evans, a professor at FGCU with broad experience including facilitation.

Dr. Evans described her role to facilitate dialogue. She explained her background is in mediation and facilitation. She has also taken students to Tallahassee every session for nineteen years to work with legislators on policy issues. She said she's also a native Floridian but does not own land in Collier County, does not live in Collier County, and does not have interests in the RLSA Restudy process. Therefore, she is a neutral party, and she is not emotionally involved in the process. She is only involved to get the conversation going. She described how the study process involves gathering data, and as a researcher, she sees the data and outcomes being derived from the participants. During the evening, questions or comments or feedback will be welcomed. She agreed with comments from attendees that working groups could be combined to make them more robust.

Mr. Van Lengen conveyed that Dr. Evans' experience is extensive, with very interesting research projects she has conducted. He then described the agenda. He announced there will first be time for speakers who had submitted speaker slips at the January RLSA Restudy meeting. Their names will be called in order and they will be given the time they need to speak. Mr. Van Lengen said he will then give an overview of the RLSA process, including how the program works. He said he'll give a quick tour of website to identify pages to help with finding material online. Then the meeting will move into group exercises meant to review Group 1 policies which are the basic purposes of the RLSA. He said the group exercises will be somewhat experimental, and a couple of policies will be assigned for the groups to discuss.

Mr. Van Lengen called the public speakers' names as follow:

Gaylene Vasaturo

Ms. Vasaturo explained that there are several topics that are important to the decision making on changes to the RLSA program. She said some additional topics should be included as topics of workshops, including:

1. Water resources – Impacts of new development to water resources must be discussed. She said the Growth Management Plan should be revised to include explicit policies to protect water resources considering all those living downstream from the proposed RLSA development. She said Rural Lands provide water storage and groundwater recharge that is important to our water quality, water supplies and flood protection.

2. Natural resources index (NRI) – She said the County should discuss Group 1 Policies 1.8 and 1.9 concerning the NRI. This was developed by Wilson Miller in 2000 and should be revised to consider new information from two panther studies and the 2008 panther recovery plan. She said the 2002 NRI assigned a low resource value to agricultural lands and disturbed lands which affects the number of credits for those lands and affects what lands are determined to be preserved. She said Wilson Miller noted in 2000 that panther use of agricultural land was not well understood and acknowledged the science would continue to evolve. She said in Willson Miller’s 2002 study, they referenced ongoing computer modeling of potential habitat and the updated Panther Recovery Plan by the U.S. Fish and Wildlife Service. She said we now have the 2008 Panther Recovery Plan and two other studies by panther experts. She said we now know that the active agricultural fields and open areas in some cases are highly valuable to panthers. Portions have been identified as primary panther habitat, and all studies and reports agree that primary panther habitat must be preserved for long term survival of the panther. She said revision to the NRI should be discussed.

3. Infrastructure – She said workshops should include discussion of infrastructure. She asked what will be required to meet Level of Service requirements for roads, schools, wastewater treatment plants, and water plants? She asked what will infrastructure cost, and who will pay? She said the costs will impact all Collier County residents, and it should be discussed in workshops, so all can participate.

Michael Seef

Mr. Seef asked about transportation issues and associated costs, and who will pay these? He said population is an issue that drives the plan. Population projections have been twice the actual population increases. He said from 2015 to the present, the population increase was 35% lower than anticipated, so population has not been growing as fast as people thought it would. Since population drives decisions, the population growth needs to be right and worked out early in the process, not as an afterthought. He said realistic projections are needed. The bureau that provides long range projections (BEPR) is a usual source for population figures. He said we also

need to understand how many households will be formed, considering 2.1 or 2.2 people per household. He said we need to make sure 20% or so of seasonal people are accounted for. He said population should be addressed early in the study, not as an afterthought. Density issues also relate to population. He questioned how dense the new towns will be, Rural Lands West and Ave Maria, for example? He questioned if there will be more sprawl like the current Naples metro area repeated in the Rural Lands? He said demand is demand, but part of the RLSA will be a denser population.

Mr. Seef said the County's CGI model can determine roads and transportation, which was a weakness in the earlier work because there aren't accurate costs identified for transportation. The County's urban area will end up paying through fees or taxes for the new proposed infrastructure for the new proposed towns. He is hoping the CGI model will give guidance on infrastructure and costs.

Bonnie Michaels

Ms. Michaels said the information shared at the meetings is important, and not enough people are attending. She said there are not enough people in attendance representing the whole population. She asked about recording of the meeting, and Mr. Van Lengen responded there is an audio recording. She said it is really important to have a recording, because she would like to refer back and listen to the meeting. People who can't attend should be able to have the frame of reference. She said Mr. Van Lengen's presentation should be online so people have a chance to learn from it.

Dr. Judith Hushon

Dr. Hushon described that she chaired the Environmental Advisory Council for Collier County during the last review (Five Year Review). She said she participated in hearings and attended all the pre-sessions. She grew familiar at the end of the whole process. She highlighted her desire to discuss whether the RLSA plan is working. She specified that the question relates to the 2002 plan, and asked whether it is working. She suggested that there are ways that it is working and ways it is not working, and the ways that it's not working need to be looked at.

She said agricultural land usage has decreased over 30% since 2002. The purpose of the RLSA plan was to encourage smart development while ensuring agricultural lands remained and were protected and that incompatible uses were directed away from wetlands and uplands to protect

water resources and wildlife. She reiterated that agricultural lands have declined. Areas were identified that were environmentally sensitive, yielding credits from 15 sending areas, allowing 28,233 acres of development that is registered. She said development was only to occur on 16,800 acres according to the original plan. One town has been built on 5,000 acres that can be doubled, with several others being planned. She said 4,000 acres are in phase one of Rural Lands West, which can be doubled. She said Alico has 778 acres, Hogan Mine has 1,200 acres, and this all adds to over 19,000 acres already planned or beginning to be planned.

Dr. Hushon said there is a total of about 95,000 acres not in conservation areas in the eastern lands. She said the panther protection team has published results and defined primary and secondary habitats to be set aside for foraging or breeding. She said this needs to be accounted for in the RLSA plan. She said setting aside the primary panther habitat still allows 40,000 acres for building and allows corridors.

She said the 2009 review (Five Year Review) was run by the landowners, which was the main reason it failed. Taxpayers need a voice, because their dollars pay for infrastructure and their future water needs must be met. Taxpayers must also endure traffic congestion and shortened resources if funds are diverted eastward.

Dr. Hushon referenced that other counties have adopted different approaches for agriculture and groundwater recharge. Charlotte and Lee Counties set aside eastern lands where development is prohibited. She said in Collier, you can presumably build anywhere except in the Area of Critical State Concern along the Everglades. She said each of the eight landowners wants to build a town, and she asked whether they really have this right.

She said we need to look at how to do smart development and how to do development that pays for infrastructure that goes into it. She said infrastructure is exceedingly expensive, which was learned due to Oil Well Road. She said Oil Well Road went in for Ave Maria, and the County paid for it, noting that it was supposed to be paid for by impact fees, by they were not paid. She said taxpayers paid for it, sacrificing other projects. She said we need to make sure we're not doing things that don't make sense as development moves forward.

Dr. Hushon said other counties in the country have concurrency, and Collier County does not have concurrency. She said concurrency means development is not allowed to be built until the infrastructure is in place. She said we want to build smart, and don't want to jeopardize the future of Collier County.

Scott Boyd was called as the final speaker. He was not present.

Mr. Van Lengen thanked participants for comments and explained this is a long process, and this is the beginning of the outreach process. He said there will be a lot of meetings and opportunities to speak about different topics because there are many policies involved. Mr. Van Lengen noted

that his presentation is a basic run through of how the RLSA program works, and that an expanded version of the presentation is available on the website.

Mr. Van Lengen mentioned the RLSA program history, starting with the 1999 Final Order by the state saying the County was not doing enough to protect natural resources. The RLSA plan began in 2000 and wrapped up with the 2002 Board of County Commissioners' adoption of the RLSA overlay. In 2004 the town of Ave Maria was approved. In 2006 the Big Cypress Stewardship Area was approved in terms of the Community Development District (CDD). In 2007 the Five Year Review began, which was required by the original legislation. The Five Year Review wrapped up in 2009 with a report to Board, and none of recommendations were adopted for a number of reasons. The Five Year Review involved a lot of important study, data and analysis from that period which is important to use and update for this project. He said in 2015, the Rural Lands West application was submitted for a new Stewardship Receiving Area west of Ave Maria, and this still in staff review, not at the public hearing process yet.

Mr. Van Lengen explained that the Restudy is an effort to find what works and doesn't work, and how well the program works and is balanced. Balance between agricultural viability, environmental protection, and responsible growth is the key so the economic prosperity of the region can be enhanced. Sometimes these things work together and sometimes they don't, and the tradeoffs need to be considered when reviewing policies.

Mr. Van Lengen highlighted the RLSA overlay map adopted as part of the Future Land Use Element of the Growth Management. The map shows the original plan provided the most important environmental assets to be protected – blue areas are flow way stewardship areas, green areas are habitat stewardship areas, and light blue areas are water retention areas, which are all important environmentally. White areas are called open areas, which are important for agriculture, and where towns villages and hamlets can be built.

Mr. Van Lengen said the private ownership occupies 186,000 acres. Environmental protection targets are at 91,000 acres. Open areas are slightly more than half (roughly 95,000 acres), which are areas where towns and villages can be built.

Mr. Van Lengen explained that credits are the currency of the program. Stewardship credits can be derived from high value areas. The value of areas as higher or lower can be debated. The application process allows an applicant to recalibrate the values. The values are Geographic Information Systems (GIS) based. Credits are sold to developers or builders for rooftops after removal from habitat or stewardship areas.

Mr. Van Lengen described the stewardship credit worksheet, which can be perplexing to most people because it looks complicated. He said the Transfer of Development Rights (TDR) process involves trading dwelling units from one place to another. The RLSA program is a more

complicated two-step process. He noted the worksheet will be on the County website and is provided on a display board in the meeting room.

He described the various elements that create the Natural Resource Index (NRI), including soil, groundcover, habitat values, and water resource values. He described a typical score of 1 to 3 when all elements are tallied together on an acre by acre basis. The second part of the worksheet is the land use layers. The owner decides how many layers to remove from a property. Layers removed from the property give a multiplier, with a maximum multiplier of 1 if all layers including conservation are removed. Most sending areas have been submitted with layers removed down to Agriculture 1 or 2. He explained the first layer constitutes the removal of residential dwelling units, yielding a 0.2 multiplier. The more layers removed, the more credits an owner gets. Other layers include conditional uses, mining, active agricultural (versus passive grazing).

Mr. Van Lengen gave an example of a 500-acre parcel with an average NRI score of 1.8, which is a relatively good score. He described the removal of layers down to grazing for cattle. The formula for the owner to determine stewardship credits would be the multiplier x 1.8 x 500 acres, yielding 810 stewardship credits. The stewardship credits are divided by 8 to determine the number of acres that could be developed. Early entry bonuses and restoration bonuses are another factor in the equation. He noted this worksheet and presentation explaining the credit formula is online.

Mr. Van Lengen described Ave Maria as an example. The developers of Ave Maria set aside 16,000 acres of sending areas in easements, mostly habitat areas along the Camp Keais Strand and the Okaloacoochee (OK) Slough. To get the stewardship credits, the easements require the owners or designees to maintain the areas in perpetuity in agricultural use or in conservation. This is done with no cost to the taxpayer.

Mr. Van Lengen gave an example of a challenge in establishing protection and maintenance of high quality habitat areas in perpetuity. The North Belle Meade area in the Rural Fringe District has high environmental importance but is vulnerable to development because there are no easements provided for. The idea of the Rural Fringe Mixed Use Transfer of Development Rights (TDR) program was to convey ownership of sending lands to a government agency. The County sought out agencies to take ownership of the lands, but no agency was willing and there is a lot of reluctance by the County to take ownership because it's costly to restore and maintain long term. The 3,000 acres is estimated to cost \$12 million for establishing and maintaining the lands in conservation over a five year period. Apply similar costs to 90,000 acres, and the costs are quite large. He summarized that the RLSA program accomplishes the removal of the development rights afforded by the Agricultural zoning from sensitive lands, and moves those rights to areas using smart growth principles (which will be reviewed during the Restudy) and in the process yields a no-cost benefit of having the sending areas being protected in perpetuity by the owners under easements.

Mr. Van Lengen said today's conditions reveal that out of 91,000 acres of highest value areas to be protected, 50,000 acres are protected (some of which are conditionally approved). To protect the remaining areas, more credits are assumed to be forthcoming.

In open areas, Mr. Van Lengen explained, conservation is still allowed, and easements are allowed for agriculture, but the NRI values are low so there is no incentive, thus less than 1% of those lands are currently protected. Mr. Van Lengen said the County will not be allowing the entirety of the 95,000 acres of open land to be developed with SRA development. The open areas outside of SRAs are vulnerable to underlying zoning, which is Agricultural zoning with development rights of 1 dwelling unit per 5 acres. This was a big concern during the Five Year Review and a big concern of staff. He said the resulting development pattern would be sprawl, and the County wants to protect open areas that won't be SRA development from such a result.

As an aside, Mr. Van Lengen pointed out that a large initiative of the County's restudy effort is the Immokalee Area Master Plan Restudy that just began. He said this is important because so much social equity can be achieved through redevelopment, and there is a lot of synergy between the RLSA areas and Immokalee. Complimentary land uses are a major theme to be aware of. He explained that if agriculture is healthy in the Rural Lands, it's healthy for Immokalee's people and economy. Immokalee is considered a possible hub of industrial and high-tech companies. There are problems with low income housing and a lack of working family housing to the extent there are no homes available for \$100-200,000 suitable for younger workers. The idea of enticing businesses to locate in Immokalee means that the affordability and diversity of housing can be addressed in the RLSA. Rules for hamlets close to or bordering Immokalee is an idea to achieve this synergy. Mr. Van Lengen challenged the audience to think of ways to achieve this synergy between the future of Immokalee and the RLSA.

Mr. Van Lengen highlighted the Restudy process. The current stage is public workshops. Six public workshops were originally scheduled, however Policy groups 3 and 4 will take two sessions each. The question of infrastructure and fiscal impact will be a separate session. The policies of Group 1 and the credit system will have to be revisited at the end of the process. After workshops, the recommendations will be compiled and revisited with the public. A white paper will be taken to the Board of County Commissioners (BCC) to explain the ideas, pros and cons. Then the BCC decides either to revisit items or to move forward to the public hearing process, which takes nine months with public hearings at the Collier County Planning Commission, the BCC, back to the Planning Commission, and back to the BCC. There will be lots of opportunities to weigh in and work on making the program a better program, which is the goal of the Restudy.

Mr. Van Lengen showed how information is on the County website. He provided the email address rlsarestudy@colliergov.net and confirmed that written comments can be submitted, and they will be addressed.

Mr. Van Lengen showed the Colliergov.net/GMPrestudies webpage. He showed the link to the Rural Land Stewardship Area page. He showed the Workshops link which has dates, times, and meeting documents. He said the Growth Management Oversight Committee meeting will be next Thursday at 3:00 p.m., where workshop start times and a greater number of meetings will be discussed. He said the fourth Thursday of the month will be used for workshops, and it's possible to skip summer.

He made it known that attendance at the Oversight Committee meeting is welcomed at 2800 North Horseshoe Drive.

He showed where RLSA Restudy meeting documents can be found online, including agendas, summaries, and PowerPoints. Meeting audio will also be posted.

Mr. Van Lengen described the RLSA Library link. He said 150 different documents are available and encouraged the public to send documents to include in the online Library.

Mr. Van Lengen pointed out the Collier County staff memo entitled "RLSA Footprint." He said the memo details the factual background on the RLSA footprint, including discussion of the original intent and factual history. He welcomed all to read and send comments, criticisms, additions, and factual challenges. He emphasized the word study means to gather the facts and then come to conclusions, and noted the Library will include the PowerPoint that expounds upon today's presentation.

Mr. Van Lengen explained the purpose of arranging today's meeting in table group format is to work together and report out what the group finds important about the Group 1 policies. He said it's an experiment that allows for us to learn and improve the next time. He said the County will post the Group 2 policies online in advance of the Group 2 policy workshop, allowing participants to tell the County in advance which policies should be considered for discussion during the next meeting.

Mr. Van Lengen summarized the Group 1 policies (*printouts of the Group 1 policies were provided to all attendees*). Mr. Van Lengen said the NRI should be addressed at the end of the Restudy Workshops because values and credits will be reviewed along the way.

Mr. Van Lengen explained there are two policies identified by the County for working group discussions during today's workshop. Policy 1.7 relates to Stewardship Sending Area (SSA) easements. Mr. Van Lengen referenced the requirement for easements to obtain a SSA. He said during the Five Year Review, it was recommended to include Florida Fish and Wildlife Conservation Commission in addition to Collier County and a state agency or land trust as grantees. The question to consider is whether it helps to have more than one grantee or enforcing party for the required easements, and whether easements are the adequate mechanism for the protection of resources.

Dr. Evans explained the group format is meant to get as many voices heard as possible. The groups may have commonalities or divergent opinions. The forms provided for gathering group input is divided to identify items for which the group has consensus, and actions items that are agreed upon; and to identify non-consensus items and the barriers to group agreement. The purpose is to gather data through the restudy process to reveal the thinking of the people who care most. There is space on the forms provided to the work groups for adding comments or questions that need to be probed further for discussion at future meetings. Dr. Evans advised that somebody in each group is needed as a scribe to take notes, and somebody is needed as a speaker to report the group's outcomes.

The meeting attendees convened in working group discussions.

The following outcomes were presented by the groups regarding Policy 1.7:

Red and Purple group

- Consensus: Three grantees should be required: county, state, and land trust or regional/state/national environmental non-profit.
- Non-consensus: There was not consensus on whether easements should be recorded at time of entering them, not held in escrow.
- Action item: Amend the plan to provide for the three grantees.

Blue and Brown group

- Consensus: Limit growth and sprawl. Two grantees should be required: county and at least one other grantee, preferably an environmental group. Easements must be in perpetuity.
- Non-consensus: There was not consensus on easements being sufficient or not for preservation. Selling of the development rights yielded from an easement still results in sprawl. An easement is a transfer of development rights. If the county purchases the easements, then the property owner should not be transferring any development rights.
- Barriers to consensus: If a property owner got a tax credit for easements instead of transferring development rights, there was concern the owner's tax credit would not be enough to compensate for the development rights. Possibility of the County buying the easements to conserve the land and avoid the area becoming Fort Lauderdale or Miami in 20 years.

Grey and Pink group

- Consensus: Update NRI science, e.g. panther data and shallow wetland science. Easements in appropriate areas are appropriate mechanisms to permanently protect high value environmental lands, as well as transfer title to County or state is also adequate. An

additional entity for a total of three to monitor and enforce the easement is needed to ensure the easement is not going to terminate.

- Barriers to consensus: Not enough time for such a complex issue. The formulas and ratios should change as science updates (panther and shallow wetlands). Easements depend on credits. Credit system is arbitrary, so those values should be discussed. The topic of easements is not a good starting point for discussion.

Green and White group

- This is a diverse group, and they could not answer the questions. There's a difference in knowledge of easements among the group. Those with easements were trying to explain to the group. Adequacy to protect depends on the terms of the easement. Is the easement enforceable? None of the information needed was provided. The group sat and looked at an easement, which was helpful, but it's hard to answer the question. They understand RLSA easements are similar but customized. More information was needed for members of this group to complete the exercise.

Dr. Evans then announced the next policy will be discussed by the working groups. Mr. Van Lengen explained Policy 1.15 relates to the action by the Board of County Commissioners to approve or deny a Stewardship Receiving Area (SRA) through a resolution by a simple majority vote (3 of 5 commissioners) versus an ordinance by a supermajority vote (4 of 5 commissioners). Mr. Van Lengen explained that the RLSA Overlay itself is a zoning action that required a supermajority vote because it determined the types of development and densities and intensities allowed in the RLSA area. After that zoning action, the implementation or consideration of an SRA is by resolution. Florida Statutes indicates that SRAs should be done by resolution. On the other hand, Mr. Van Lengen pointed out that SRAs are a lot like Planned Unit Developments (PUDs) around the County, which are zoning actions that are subject to approval by a supermajority vote.

Mr. Van Lengen explained this issue of the simple majority versus super majority voting requirement went to nonbinding arbitration in 2010 because the County felt the similarity to the PUD process correlated to a supermajority vote being appropriate for SRAs. The Arbitrator's finding was that a resolution approved by simple majority vote was sufficient for SRA approvals. Mr. Van Lengen noted that given the provisions of Florida Statutes, it may or may not be possible to impose a supermajority requirement for SRA approval. He pointed out that all answers derived during workshops will require another layer of scrutiny by lawyers at the end.

Mr. Van Lengen posed the questions to the working groups: should SRAs require simple or super majority approval by the Board of County Commissioners? Are there other alternatives to ensure responsible development? Are the Florida Statutes informative?

An audience member asked if there are criteria for SRA approval that the BCC will consider, like the criteria that applies to a PUD? Mr. Van Lengen replied the SRA process itself is like a PUD, and there are requirements including a master plan and supporting data.

The question was asked, what criteria is used as the basis for approval? Mr. Van Lengen replied that it is like a PUD – a lot of data and information is submitted and reviewed by staff, then staff makes recommendations that are considered by the Planning Commission and the BCC.

An audience member said it would be helpful if the County will post the Arbitrator’s decision and the relevant State Statute on the website. Mr. Van Lengen said the staff will do so.

The meeting attendees convened in working group discussions.

Amanda announced there is a form for attendees to identify personal views of the purpose of the Restudy.

Group Presenters on Policy 1.15

Grey and Pink

- Non-consensus: Could not reach consensus on whether three or four commissioners should be required to approve an SRA. All but one in the group felt it was vital to have four. The rationale for three commissioners was to incentivize landowners and that the program is “prescreened” via the overlay that identified the best areas for development.
- Barrier to consensus: Disagreement on whether Ave Maria is a success.

Purple

- Consensus: Super majority should be required for all approvals.
- Barriers to consensus: Not enough knowledge base to ensure alternatives that result in responsible development.

Red

- Non-consensus: Could not reach consensus on simple majority versus super majority.
- Barriers to consensus: Loss of DRI requirement is an issue.

Blue and Brown

- Consensus: The County should be consistent with State Statute, and the simple majority should remain.
- Non-consensus: Could not reach consensus on whether there is responsible growth. If the County would buy credits and not have development rights transferred, the problem would be solved. Need for adequate water, panther habitat issues, and infrastructure issues translate to non-responsible growth.

Green and White

- Non-consensus: Half of group felt supermajority requirement would lead to lawsuit. Half felt if the project impacts the entire county, it should be supermajority.

Dr. Evans asked for completion of the forms for attendees to identify personal views of the purpose of the Restudy. She asked the participants to give feedback on the work group format of the meetings or any other comments to rlsarestudy@colliergov.net.

Mr. Van Lengen said the next meeting is on the meeting schedule for 4:00 p.m. on March 22, but this might change. He advised that the website is the best place to look to keep apprised of the meeting schedule.

The meeting ended at 6:10 p.m.



Meeting Summary

RLSA Restudy Group 2 Policies Meeting Protection of Agricultural Lands

March 22, 2018, 6:00-8:00 PM, North Collier Regional Park, Exhibit Hall

I Introduction

Kris Van Lengen opened the meeting at 6:15. He welcomed those in attendance and the meeting will be composed of some good speakers and involvement by attendees to give feedback about agriculture, its importance and the ways to incentivize it.

(Note: The meeting room was arranged with roundtables, each identified by a different color. Each attendee was assigned randomly to a table, forming groups at each roundtable.)

Mr. Van Lengen presented the agenda, beginning with opening comments by Dr. Amanda Evans who will provide and her perceptions from the last meeting. Mr. Van Lengen will then go over housekeeping items, followed by Dallas Townsend, a member of the Florida Agriculture Hall of Fame, who will provide history of agriculture in Southwest Florida. Dr. Calvin Arnold, Director of the Southwest Research and Education Department of the University of Florida Institute of Food and Agricultural Sciences (IFAS) will then discuss business, technology and environmental aspects of agriculture and IFAS's role. Mr. Van Lengen will then return to speak about the five-year review and the recommended changes in relation to agriculture, which were never adopted. Those recommendations are some of several ideas that may be considered to incentivize agriculture. The agenda also includes a landowner perspective, and other landowners will have an opportunity to share their perspectives. Finally, the working session will focus on incentives of agriculture according to the points that are important to the audience.

Mr. Van Lengen went over the restudy process, reminding the audience that this is a long process, and we are at the beginning of the process with public workshops to gather public input which will last most of 2018. After public workshops, the staff will gather recommendations and present them back to the public for comments. The staff will put the public comments and staff recommendations into a white paper, which will be reviewed by the Board of County Commissioners (BOCC), who will determine if enough public outreach has been done. Then they can authorize a more formal public hearing process that involves the Planning Commission and the BOCC for two rounds of public hearings. He noted this process is a long haul from start to finish.

Mr. Van Lengen provided a new schedule, noting the new schedule is on a flyer provided at the sign-in table. He said the Oversight Committee provided for a lengthier schedule for workshops based on public suggestions. Additional workshops have been added for certain topics, particularly infrastructure costs and water resources will be addressed in separate workshops in August and September. After the final workshops on Group 4 and 5 policies regarding the built environment, meetings will be scheduled for wrap-up and discussion of recommendations. Workshop dates may change at the Oversight Committee's next meeting in June. In case there are schedule changes, Mr. Van Lengen encouraged everyone to visit the website (www.colliergov.net/GMPrestudies) and the associated workshop page for the latest meeting information.

Mr. Van Lengen highlighted communication efforts, noting that the County hears the public's interest in getting more people participating. He said the County's typical public notice process has been used, including the County website, email distributions to the press and others, Naples Daily News guest editorial, and the County Facebook page with announcements of topics and meeting schedule. On top of these methods, the County has directly contacted 180 Civic Associations and Homeowner Associations with flyers, however that outreach has not yielded too many participants. Florida Weekly was included in advertising efforts, and flyers were also included in County Commissioners' newsletters that are communicated to constituents.

Mr. Van Lengen explained this meeting is also being filmed and will become a part of the Restudy library and part of the County's video-on-demand series. Video-on-demand allows the proceedings to be viewed at the public's convenience, and the video of the workshops going forward will be accessible on the County's main webpage. He noted the audio from the first meeting was not good quality; the audio from the second meeting came out well and is posted on the County Restudy webpage. Mr. Van Lengen thanked the County Video staff and the County Manager's office for providing the video support services for the workshop. He said Facebook Live will allow this workshop and future workshops to be streamed live allowing the public to interact with comments and questions. Mr. Van Lengen mentioned a staff member will be dedicated to gather those comments and respond accordingly as time allows during future meetings.

Mr. Van Lengen highlighted that there will always be comment cards available at each workshop to allow feedback, which will be logged and part of the permanent record. He said the email address (RLSArestudy@colliercountyfl.gov) is also a tool for providing feedback, and emails will be part of the permanent record.

Dr. Amanda Evans reminded the audience that this is an ongoing study. She stressed the importance of feedback from the public, noting the actions taken in response to feedback received thus far, including the video service which allows people who are north during the summer to stay involved. She described the importance of quantitative data based on facts and qualitative data that adds a well-rounded picture of issues. She said her perception is that these workshops are an important part of the qualitative data collection, because the community's input helps put the

“meat on the bones” of the study. She reiterated the numerous ways for providing input, including the website. She said that all the input being written down and provided during workshops is being captured and reviewed to inform the next meeting. For example, during group discussion sessions of the last workshop, the feedback was that not enough information was provided for participants to weigh in on certain subjects. In response, the agenda has been changed at this workshop to include presentations to provide more information up front, allowing the group sessions to be informed with more substantive background information. Dr. Evans reminded participants that comments will be captured on the worksheets at each table. The worksheets allow for capturing issues that the group agrees on, issues that the group does not agree on, and other comments can be also provided on the form. She also reiterated that comment cards are at the back of the room for anyone who is not comfortable making comments at their table or for anyone who has to leave early. She said Facebook Live will also afford an opportunity for comments.

Mr. Van Lengen said one feedback item from participants was that the prior workshops got too specific too soon without enough background information. Today’s topic of agriculture allows the opportunity for broad questions and discussion without getting into specific policies. In the future Mr. Van Lengen anticipates the opportunity for the audience to identify the policy issues to discuss.

Mr. Van Lengen introduced Dallas Townsend, who formerly worked for IFAS and is now a celebrity. Mr. Van Lengen acknowledged the participation of IFAS, and noted the success of their recent agricultural tour.

II History of Agriculture in SW Florida

Speaker: Dallas Townsend, Florida Agriculture Hall of Fame

Mr. Townsend said there is a lot to cover in a short time, like Smokey and the Bandit. He will present the high points of agriculture in Collier County. Mr. Townsend served in Collier County as a Livestock Agent from 1965-79 and is familiar with Collier County. Agriculture is a big industry in Collier County. The cattle, citrus and vegetable industries generated \$247 million in gross sales in 2015. The economists at the Research Center in Immokalee determined a direct and indirect impact of over \$435 million in 2014.

Collier is the largest county in Southwest Florida, but comparatively has a lower percentage of the County in agricultural land because so much of the county is owned by the government. Nearly one million acres is owned by the government in the Fakahatchee Preserve, Big Cypress Preserve, Panther Habitat Preserve, and other areas.

Collier County has around 11,600 head of cattle, 73,350 acres pasture, over 29,000 acres of citrus, and 13,700 acres of vegetables, however some are double crops so there are close to 25,000 acres

of vegetables produced in the county. These major commodities utilize over 116,000 acres which does not include wetlands that are within an agricultural operation, nor does it include nursery, timber, sod or other agriculture uses.

Mr. Townsend provided a brief history of Collier County starting with 1822. Hendry and Collier County were separated from Lee County in 1923. He presented a 1922 map depicting Lee County as the largest county in Florida and east of the Mississippi River. He said 12,600 people were living in Lee County at that time.

Cattle was the first major agricultural industry in Southwest Florida. Cattlemen were in the area before 1840, and in 1840 there were 30,000 cattle shipped to Cuba from Punta Rassa. During the Civil War this area provided around 50,000 cattle to the confederate army. Around the 1900s, no law required cattle to be fenced. Florida was an open-range state. Brands and ear marks identified ownership of cattle at round ups. Mr. Townsend showed an example of an old brand registration page.

Due to the Texas Fever Tick, the state and federal government mandated a cattle dipping program in 1923. Over 3,000 dipping vats were built in the State of Florida. Cattle had to be dipped in pesticide to kill the ticks every fourteen days, which was expensive. The cattle dipping program put small farmers out of business. In 1946 the tick problem was eradicated, and the cattle dipping program ended. Mr. Townsend displayed the Jerome dipping vat on an aerial photograph from 1940, noting the dipping vat is still there.

Mr. Townsend explained that screwworms became a problem for the cattle industry in the 1930s. The female screwworms laid eggs on the umbilical cord of calf and at flesh upon birth, killing the calf. Research showed that female screwworms mated once and died. Mass produced sterile male screwworms eradicated the problem during a two-year program from 1957-1959.

Mr. Townsend presented maps of Collier County showing the geographic coverage of the cattle industry in 1923-1996. He said that cattle reached 40 cents per pound in the 1940s. In 1949 Florida passed the “no fence law” so Florida was no longer an open range state, and major freezes in 1951 and in the winter of 1957 and 1958 killed thousands of cattle. In 1952, cattle prices crashed to 10 cents per pound because the quarantine in Mexico was lifted, allowing millions of heads of cattle to come across the border in eight months. By 1973, the price of cattle raised to 80 cents per pound, and two years later prices dropped to 15 cents per pound. He summarized that the cattle industry has had its ups and downs.

Mr. Townsend said that several freezes between 1977 and 1989 caused the citrus and vegetable industries to expand, reducing the land available for the cattle industry. This results in around 11,000 head of cattle now compared to 40,000 in 1975.

The timber industry was short-lived for about 28 years between approximately 1928 through 1956. Pine and cypress timber was harvested by large companies. The town of Copeland was

created by a timber company. Mr. Townsend showed a map of Copeland in 1953, depicting the railroad trams used to transport harvested cypress timber through the Fakahatchee swamp. The tram road is located where Alligator Alley is today. It takes a long time for cypress trees to grow enough in size for harvesting, which led to the end of the timber industry in the 1950s, with the exception of some mulch and some pulpwood.

Mr. Townsend said the vegetable industry started in 1873 in Everglades City. Sugar cane and pineapple was grown in Everglades City and Marco Island. During that time vegetables had to be grown on the coast or river because of the lack of interior roads. In 1921, the railroad made its way to Immokalee. In 1928, the Tamiami Trail was completed, and State Road 29 reached Everglades City spurring commercial operations. In 1929, tomato farming also began in Ochopee.

He showed maps of farm fields around Ochopee, Monroe Station, Copeland, and Deep Lake in 1940. He said farmers used Ochopee prairies with little clearing and mules. Soils were naturally warm, there were very few frosts, and vegetables (mostly tomatoes) were grown mostly in the spring due to the wet weather. There was no irrigation or water control. Weeds and diseases made production nomadic. Between 1928 and 1955, there were over 35,000 acres in the area of Ochopee, Monroe Station and State Road 29 being farmed. Very little evidence of that can be seen today.

Before World War II the soils in the pine and palmetto woods areas were highly acidic with a pH of 4.5 or less. However, research showed that adding limestone or high calcium lime to the soil could raise the pH and allow vegetables to grow. There was a massive use of this type of terrain for farming after World War II.

In 1949, Collier County created the Extension Service. In 1955, the Collier Development Corporation and Atlantic Land Improvement Company donated 320 acres for the research center that is in Immokalee, now known as the Southwest Florida Agriculture Research Center, which Dr. Calvin Arnold now directs.

Mr. Townsend explained in the early 1960s, pine and palmetto flatwoods were abundant but they were rocky, not accessible, poorly shaped, and clearing cost was expensive. Soil fumigation and mulch culture had to be developed in the 1960s.

Between 1940 and 1979, roughly 175,000 acres of palm and palmetto woods was cleared by the vegetable industry of Collier County. Most was cleared before 1970. The vegetable acreage has remained stable in the last ten years, with around 25,000 acres of vegetable farming remaining (with actual production land area of 13,000 to 15,000 acres).

Mr. Townsend said that citrus is another large industry that arrived in Florida early. Prior to the freezes of December 1894 and February 1895, Marion County, Florida was the center of citrus farming. Citrus groves had been planted along the Caloosahatchee River and at Orange River in Fort Myers, and they survived these freezes. Shortly after 1900, a 200-acre grapefruit grove was

planted at Deep Lake Hammock north of Everglades City. Fruit was hauled by ox cart to the Barron River and shipped by barge to Fort Myers for packaging and shipment to market. Mr. Townsend showed a 1940 aerial photograph depicting the grapefruit trees that remained at that time, however the trees are not evident today.

Mr. Townsend displayed a 1922 map that showed the Deep Lake Railroad that hauled grapefruit to Everglades City. Before 1914, a grove was planted in Immokalee, part of which still exists as part of the Roberts Ranch property.

Citrus was historically planted on elevated hammock land or pine ridges. Research showed that citrus could grow on flatwoods soils, and a few small groves were planted on flatwood soils in Immokalee in the early 1960s. Citrus expansion began with the freeze of 1962. The Collier Company and Turner Corporation each planted around 1,000 acres near Immokalee in late 1960s. Major freezes of 1977, 1981, 1983, and 1989 prompted large expansion of citrus acreage in southwest Florida. In 1960 there was very little citrus, and the peak year for citrus was 2000 with 35,000 acres of citrus groves. There has been a reduction since then due to canker and citrus greening disease.

Mr. Townsend said the agriculture industry has been significantly impacted by major purchases of land by the government. The federal and state government purchased over 910,500 acres of land in Collier County for the Big Cypress Preserve and panther habitat in the 1970s and 80s, which adds up to approximately 71% of the county. At the time the land was mostly swamp.

By 1994 the Big Cypress Preserve and Fakahatchee Strand had been purchased. In 2003 the government started purchasing good agricultural production land in Hendry County. Government purchase of good agricultural land has taken a toll on the agricultural industry.

Mr. Townsend summarized that it was the agricultural industry in Southwest Florida that made this area habitable. This area is the only place in the continental United States where the vegetable crops grown here can be grown in the winter.

Mr. Townsend stated that government regulations are often imposed on farmers with little scientific basis. Environmental concerns have been impactful to the agriculture industry including water supply, water quality, wildlife habitat preservation, and free trade agreements such as NAFTA. He noted that this particular agreement nearly put all small vegetable farmers out of business. There were 60 tomato growers in Immokalee, and now it would be hard to count seven tomato growers.

Mr. Townsend said food safety regulations have become a serious issue. Consumers want very clean, wholesome foods so a farmer must hire a third party to confirm sanitary conditions in the field. If a wild animal fecal sample is found it becomes a problem. These are expensive issues that drive the exporting of our food production to other countries. Several years ago the United States became a net importer of food. Less than 1% of imported food is inspected, and quality and food

safety is no longer under our control. The last ten years has seen an increase of serious illness due to imported foods.

III Business, Technology and Environmental Factors in Agriculture

Speaker: Dr. Calvin Arnold, UF/IFAS Southwest Florida Director

Dr. Calvin Arnold said he is a fifth generation Floridian. His family still operates a cow-calf operation in Okeechobee.

Dr. Arnold said the University of Florida has a role in southwest Florida and Collier County agriculture. Like Florida Gulf Coast University, he said University of Florida is here and prepared to assist in the restudy process in any way possible. Fritz Roka has been participating and was not able attend today.

Dr. Arnold introduced the new natural resource economist, Dr. Tara Wayde, who is involved in research of the interface between commercial agriculture and natural resources. Dr. Arnold acknowledged that Dr. Mike Martin, President of Florida Gulf Coast University, is a great resource and has a lot of knowledge about the agriculture industry.

Dr. Arnold said he is talking about the IFAS Center because many people have probably not visited the center or did not know it was in Immokalee. The IFAS Center is strategically located in the middle of Southwest Florida amidst the agricultural lands being discussed. The University of Florida IFAS has been committed to agriculture for over 70 years. Collier Development Corporation donated 160 acres and Alico donated 160 acres, comprising the 320 acres at the IFAS research and education center operating today.

The IFAS Center was officially established in 1986 as research and education center, however the presence goes back to the 1950s. Today there are over 80 employees with an annual operating budget of \$11 million per year that is comprised of state funds, contracts and grants. The center is located one mile north of Immokalee on Highway 29.

Dr. Arnold shared the mission statement: “Generating new technologies to help agriculture industry be profitable and successful.” For agriculture to be sustainable, not only must it be profitable, but it also must maintain a compatible interface with the natural environment. A lot of IFAS research is focused on the interface with natural resources.

The bulk of the Center’s research is focused on citrus and vegetable commodities. A lot of different vegetables are grown in this area, with tomatoes and green peppers being the largest contributors. The citrus industry has gone through hard times for the last 10-15 years with constant urban encroachment and disease such as canker and citrus greening. While canker is a serious issue, citrus greening is a larger problem because citrus greening will kill the tree. Hurricanes have added to the plight, making it difficult to be profitable in the citrus industry.

Dr. Arnold shared the resources of the Center, including 13 research/extension program faculty members who specialize in topics related to the environment and agriculture. The staff works to reduce pesticides applied to crops and increase biological control. The Precision Agriculture Engineer has a primary objective to improve efficiency and reduce the cost of agricultural production, which helps incentivize the industry. The focus is on natural protection as well, with efficiency of spray applications, etc.

Dr. Arnold said there are currently five County Extension faculty in Collier County. Matt Krug is a new state specialized agent in food safety, which is a big issue for vegetable growers and citrus growers. Regulations needs to be sensible and logical.

There is a groundbreaking ceremony in Immokalee next Wednesday from 10:00 – 2:00 for the new culinary accelerator at the Immokalee Airport. Matt Krug, Food Safety Specialist, will be managing food quality assessment lab for the accelerator. This will serve the entrepreneurs looking to commercialize food products, such as sauces.

Dr. Arnold said development of best management practices (BMPs) is important to IFAS. The BMP program for all agricultural industries statewide is under the direction of a faculty member in Immokalee, Dr. Kelly Morgan.

Dr. Arnold said Dr. Wade started conducting research to better understand the economics of BMPs. Asking farmers to carry out practices must be economical for the farmer, otherwise it is not a realistic BMP.

Dr. Arnold explained that water farming is storage of water on agricultural lands. Florida has about 55 inches of rainfall per year. That rainfall needs to be stored because it pollutes estuaries. Storing fresh water inland helps the public collectively. Payment for Environmental Services (PES) is storing rainfall inland. If landowners are expected to store water on their farmland then it's realistic they should be paid for it. This program involves dispersed waters, not large reservoirs. It makes the owner's land wetter, increases the water level which creates less land for cattle and decreases vegetable and citrus production, which all equates to lost income. Compensation is based on per acre-foot of land for the loss of agriculture production. Dr. Arnold suggested that the RLSA Study group should look at and consider the option of water farming and the PES program.

Dr. Arnold said the IFAS Water Resource Engineer Dr. Sanjay Shukla is a foremost researcher in water storage. Currently there are around seven or eight landowners involved in PES. Dr. Shukla has been working on delineating the watershed around Lake Trafford and has discovered some discrepancies. Improvements are being made in the watershed.

Dr. Arnold referenced biological control of pests is important. He estimated that 90% of all citrus in Florida has a micro sprinkler system. A lot of water conservation is achieved through micro sprinklers rather than flooding the entire field, which in turn provides frost protection. Frost

protection is provided through heat effusion. First water is sprayed over the trees before the freeze event, creating ice on the tree. Water continues to be sprayed until the ice melts off the entire tree. The conversion of water to ice releases heat to save trees if the water is turned on early before a freeze.

Dr. Arnold's closing remarks focused on the value of retaining agriculture. He reminded that the majority of natural areas are already owned by the government, and there is not much agricultural land left. Whatever is proposed, it needs to be economically feasible for the agricultural landowner. Water is the common denominator and is really important to agricultural landowners. Cutting water supplies for agricultural operations will not be sustainable. Regulations are needed in society, but they need to be moderate and realistic for agriculture. Regulations have skewed to the unrealistic zone and balance is needed for agriculture to be economically viable.

An audience member asked the question, "What is the source of funding for IFAS?" Mr. Arnold responded that state funds, federal funds, and grants support the Center, and reiterated that IFAS is an agency of the University of Florida, which is an agency of the state of Florida. He said of the base budget is about 40% coming from higher education funding from the state of Florida to UF passed through to IFAS. Faculty has worked hard preparing grant proposals and contract proposals. Federal grants come from the United States Department of Agriculture and Florida Department of Agriculture and Consumer Services. Funds also come from private companies. Money from a private company must be compatible with the mission of the center. Approximately 60% of funding comes from private contracts and grants.

Another audience member asked, "In relation to water storage on farm lands, is the water then used for irrigation in dry season?" Dr. Arnold responded that normally the water would not be pumped back and used for irrigation. Depending on the design of the individual system, it is possible. He reiterated it not a big reservoir. He said it is also worth mentioning phytoremediation. Plants are used to improve the quality of water. The Water Management District tries to accomplish this through stormwater treatment areas, and agriculture does a lot of phytoremediation, or cleaning of the water, in addition to storage.

The final question asked by the audience was, "Is IFAS undertaking specific studies within the RLSA?" Dr. Arnold responded that the BMP research is conducted in the agricultural production fields. Ron Hamil added that a wildlife study was conducted, and Dr. Arnold said Dr. Frank Mazzotti is the UF wildlife specialist whose research team documented wildlife in the agricultural production areas in the late 1980s. Research was also done by Dr. Marty Main on the Florida panther in conjunction with agriculture.

IV Open Lands: Agriculture, SRAs and Baseline Zoning

Speaker: Kris Van Lengen, Collier County

Mr. Van Lengen noted that Mr. Paul Meador will have time to speak as a landowner about the future of agriculture, and time will be given for other landowners to share their perspectives. Mr. Van Lengen gave an overview, stating the 2008 Five Year Review findings were that the RLSA program lacked incentives to support agriculture. He presented a map of current agricultural activities (2012), which was also on display at the back of the room. Mr. Van Lengen noted the activities mapping should be updated, and he welcomed input on any aspect of data that can be updated. He clarified it is difficult to quantify grazing areas, but citrus and row crops are easier to quantify.

Mr. Van Lengen said the Overlay Map is the basis for the RLSA overlay and credit system. The colored areas are high value areas on the Overlay Map. More credits get derived from higher environmental quality areas than what is derived from Open Areas. A lot of active agriculture takes place in the Open Areas, so there is competition for land. The majority of high value areas are protected with easements, and the credits derived are being used to build towns and villages.

In Open Areas, less than 1% of lands are protected. This is a problem that the Five Year Review Committee reviewed and sought to better protect agriculture in Open Areas. In 2009 the recommendations focused on agriculture being an appropriate use in Open Areas. He noted the acreage for Towns, Village and Hamlets is an important topic that will not be covered today and will be covered at a future time. He said agriculture is the most appropriate use for Open Area lands outside of Towns, Villages and Hamlets. Incentivizing agriculture in those areas does not necessarily require easements. Incentivization can be through creation of other incentives or revising the underlying Agricultural zoning.

The existing Agricultural zoning allows agricultural use or residential use in five-acre ranchettes. Five-acre ranchettes are a concern. In an economic down cycle, a landowner might sell to a developer and subdivisions can be created. Ranchettes are not good for water or natural habitat and are very expensive in terms of infrastructure.

During the Five-Year Review, it was reviewed how the credit system works. Mr. Van Lengen gave an example of how 135 credits can be derived from a Habitat Stewardship Area (HSA), and 40 credits can be derived from an Open Area, which is not enough incentive for the Open Areas. It was recommended during the Five Year Review to substitute two credits per acre for the Natural Resource Index (NRI) to encourage retention of agriculture. The advantages include permanent preservation of agricultural land and prevention of subdivisions that degrade the environment. Disadvantages include more credits in the system and more development. The Five Year Review Committee suggested changing the use of the credits in the development areas and requiring that more credits be used. Then the system can be balanced and not create very much more Stewardship Receiving Area (SRA) development. Mr. Van Lengen said this idea was never acted

upon by the BCC, but it's worth considering whether the credit system should incentivize agricultural lands as one method to protect agriculture.

Mr. Van Lengen introduced Paul Meador and advised that any other owner or operator in the agricultural business is welcome to share comments and discuss incentives that makes sense to them.

V Landowner Perspectives: Past and Long Term Outlook

Speaker: Paul Meador, Local Grower

Paul Meador is a fourth generation grower from Florida. His family has farmed in the Lake Apopka area from the late 1800s until the 1977 timeframe. After 1997, his relatives started exploring other areas to farm and in 1983 or 1984 purchased farming land in the Southwest Florida area.

Mr. Meador highlighted that all land is not good for agriculture. Collier County had some of the best vegetable land in the world, but it no longer exists because it's been developed. Farmers cannot sell their land for a premium and move somewhere else. Immokalee is special for the ability to grow winter fruits and vegetables; it cannot be replaced. As an example, Homestead is not the fruit and vegetable growing area it used to be. After the growth of that area following Hurricane Andrew, farming is nearly non-existent in that area today.

Mr. Meador said having agriculture in proximity to residential and commercial development doesn't always work. Agriculture requires intense hours, heavy equipment, traffic, and employment, and is not always growth friendly. Residential area next to farms are not always compatible. For example, the loud noise of spraying late at night is not compatible with residential uses. The Meador family came to Collier County assuming the area would be rural forever, and they now have Ave Maria nearby. He said aerial spraying is not the ideal set of circumstances for everyone involved.

Mr. Meador said agriculture has all the risks of any business, plus mother nature, and this includes global competition. Agriculture in Florida is under attack since NAFTA was passed. The industry's main competitor is Mexico due to low wages and almost nonexistent food safety oversight. Pests and disease from all over the world impact the citrus industry. There were 900,000 acres a decade ago, and half that acreage today. He mentioned that Hurricanes Irma and Wilma add to how risky the business has become.

Mr. Meador said in the past a farmer could grow crops, suffer through a few bad years, but still make a living. In today's global market, dollars don't add up like they used to. To start a simple tomato or pepper crop, an investment of \$10,000 per acre is necessary. Banks will not finance this type of endeavor, so personal capital is required.

Mr. Meador said his family owns approximately 2,000 acres on Camp Keais Road and some near Corkscrew Swamp Sanctuary with a small cow-calf operation and some vegetables, but mainly citrus.

Mr. Meador said at some point Collier County will have a limited amount of developable land, and he asked what value will credits have at that time? He also asked what are options to liquidate land if it is tainted or burdened with a credit system that may or may not be workable in the future?

Mr. Meador added to the water farming discussion to say that water farming allows recharge of the aquifer. All of his properties have an engineered reservoir system to clean water and recharge the aquifer. The system produces cleaner water and is an accomplishment.

Mr. Meador is concerned about the influence of County and public policy on the value of his land now and in the future through the credit system. He wants to farm as many years as reasonable or feasible. If competition, risks, and misfortunes continue, it becomes desirable to go a different direction.

Mr. Van Lengen offered the opportunity for other landowners or operators to comments, but no others spoke.

VI Working Session: Ideas to Incentivize Agriculture

Speaker: Dr. Amanda Evans, FGCU

Dr. Evans reiterated that feedback from the prior workshop was that more information is needed before beginning the discussion group session, therefore more information has been presented this evening. She said three questions are provided for group discussions:

Question 1: The RLSA program promotes natural resources, agriculture and smart growth. On a scale of 1-10 (10 = extremely important), how important is agriculture within Collier County? Assume that you will be asked to rank natural resources and smart growth on the same scale, in future workshops. What are the reasons for your group's ranking?

Question 2: Is the Group 2 Goal statement still valid, or does it need to change? (see Group 2 Policies sheet)

Question 3: Brainstorm ideas to make agricultural stewardship work. Some options to discuss and expand upon based on your thoughts:

- Private stewardship through transfer of development rights (stewardship credits)
- Public stewardship through County purchase of easements restricting land use to agriculture
- Public stewardship through County-funded subsidies for agricultural operations
- Other

Dr. Evans asked the groups to designate a scribe to record the areas where the group reached consensus and where the group was not able to reach a consensus. Those comments will be captured to help identify themes that emerge in these discussions.

She said the point of the exercise is the dialogue and discussion of divergent opinions.

The meeting attendees convened in working group discussions.

Dr. Evans reconvened, and the group representatives reported on their discussions as follows:

Yellow/Green/Red Group

The Yellow/Green/Red Group reached consensus that the importance of agriculture ranks as a 10. In Collier County, conservation of agriculture is important for sustainability. The economic impacts of undeveloped lands, conservation of water, and minimal infrastructure are the main reasons why it is a 10.

A consensus was reached that the Group 2 goal statement needs to be changed. This group agreed to strike-through the word “premature” in the Group 2 goal, noting there are no other incentives to protect and preserve lands in the program goal.

An action item identified by the Group was: “Where does this actual conversion happen?” There is a policy need for protection and smart planning to prevent urban sprawl. Include details in the plan to incentivize agricultural land owners to keep their land.

This Group wants to consider tax benefits, cash incentives or credit incentives to preserve lands long term and create a generally higher value for the land.

There were no barriers to consensus for this group.

Blue/White Group

The Blue/White Group agreed that the importance of agriculture ranks as a 10. The Group reached a consensus that the goal statement is valid, except the word “premature” should be removed. The Group agreed that agricultural land should be protected from conversion.

All ideas weren’t crystallized in this Group, however, it was agreed to establish an agriculture advisory council (per policy 2.3) or establish a roundtable with broad-based multisector membership to advise the BCC on how to save agriculture. Mr. Meador should participate in that advisory board. The BCC should learn from the group of landowners, researchers and other related experts.

The Group felt the County should prioritize where infrastructure improvements should be to enable concentrated development in the RLSA at a higher density, noting that compact development will leave more land for agriculture. Ave Maria and Rural Lands West do not appear

compact. The Group indicated that the County could shape the RLSA by determining infrastructure where development will be concentrated.

Purple Group

The Purple Group reached a consensus that agriculture is a 9 or 10. The Group is concerned that adding more credits to a system awash in credits is not a solution to the density problem. The density problem must be solved first before determining the value of credits. Commissioners have the responsibility to decide where roads will go, and not determine infrastructure after towns are proposed. Commissioners should prioritize where schools, roads, and fire departments should go.

Pink Group

The Pink Group unanimously agreed that agriculture is a 10. It intertwines with two other qualities completely.

This Group also agrees that the goals in the Group 2 policies are valid. This Group also had a problem with the word “premature” for many reasons.

The Pink Group was also unanimous about incentivizing agriculture, but reached no solutions or answers to the issue.

Grey Group

The Grey Group also agreed that agriculture is a 10.

The goal statement should be changed to revise “premature conversion.” The Group agreed that the policies should preserve and protect agricultural lands from other uses.

The barriers to consensus were: 1) Who will pay for credits and how much? and 2) Are citizens willing to pay for credits or pay for the land?

VIII Next Meeting and Adjourn

Dr. Evans reiterated that comments are important. She referenced the schedule of upcoming meetings, noting there will not be meetings in June in July. She said if anyone cannot make it to meetings, the videos will be available, and Facebook Live from the Collier County Facebook page will allow participation. The meeting ended around 8:20 p.m.



Meeting Summary

RLSA Restudy Group 3 Policies Meeting Protecting Natural Resources

April 26, 2018, 6:00-8:00 PM, North Collier Regional Park, Exhibit Hall

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen went over the restudy process and stated that we are at the beginning of the process with public workshops to gather public input. This public input phase will last most of 2018 and likely into early 2019. He stated the County is looking to gather input and share facts and information in an efficient way. Once these monthly workshops are completed the County will circle back to readdress important issues like credits. The County staff will then make recommendations and present those recommendations to the public before bringing the recommended changes before the Board of County Commissioners in the form of a white paper to get their permission to move forward with a more formal proposal to the Planning Commission and the Board of County Commissioners. To amend the Growth Management Plan it takes two visits to each of those venues. This is the beginning a long process and everyone's participation is appreciated.

Mr. Van Lengen advised that May 24th is the next meeting at 6:00 p.m. The meeting focus will be environmental issues again, focusing on panther and listed species. David Schindle, a Florida panther expert from the U.S. Fish and Wildlife Service, is expected to speak. Mr. Schindle will be available for questions. Mr. Van Lengen invited the audience to provide input on other topics they would like to discuss during the May 24th workshop.

Workshops will resume in August at a new location and the topic of discussion will be infrastructure, who pays for it, and initial impacts. Water resources, aquifer health, stormwater health, quality, and quantity, and other water resource issues will be discussed in September. The topic in October and November is sustainable development, Group 4 Policies, SRA receiving areas including towns and villages, and non-SRA types of development that was discussed during the agricultural presentation. Mr. Van Lengen suggested that there will be opportunities for agriculture in open lands, which should be incentivized. He reminded that if the economy changes, landowners still have base underlying zoning rights.

Mr. Van Lengen described improvements in communication and outreach to get people in the door for workshops. The use of electronic messaging signage was a new addition for this meeting,

and by a show of hands the audience indicated that the message board was successful in encouraging attendance. Facebook Live is active for this workshop, affording those who travel a way to tune in. Mr. Van Lengen invited the audience to comment and ask questions on Facebook. He added that the public workshops are video recorded and accessible online, and a written summary and PowerPoints are available on the RLSA website. Writing or emailing to the RLSA email address is another way to comment. Every meeting also has comment cards available, and a record of comments from group discussions is maintained.

Mr. Van Lengen described that the agriculture workshop (Group 2 Policies) revealed that retaining agriculture within Collier County, not nearby, is a high priority. Every group rated the importance of agriculture at least a 9 or 10 out of 10. Each group also identified that “premature” conversion verbiage should be removed from the goal statement. Overall, the workshop participants suggested that reduction in agriculture is undesired. Mr. Van Lengen summarized that incentives for agriculture were suggested at the workshop, including cash incentives from the local government, tax abatement, short term easements, and creating an agriculture advisory board to evaluate agriculture incentives.

Mr. Van Lengen highlighted the library on the RLSA website and described how data sources have been suggested, including Closing the Gaps in Florida Wildlife Habitat Conservation System (1994), Fragmentation of Pine Flatwood and Marsh Communities (1997), 1000 Friends of Florida 2070 Water Report (2016), Technical Review – Florida Panther Protection Program (2009), and Florida Panther Recovery Program (2008). He explained that public comments also included references to “two other studies by panther experts” and a reference to “shallow wetland science.” Mr. Van Lengen asked for the audience’s insight and assistance to gather those resources.

II Protection of Natural Resources – Group 3 Policies

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen introduced the Group 3 Policies and stated that each policy in Group 3 would be discussed with more time spent on the important issues. He gave background information, including the genesis of the Rural Fringe and RLSA dating back to the 1999 Final Order that resulted from a lawsuit brought by environmental groups against the County. The result was the State required the County to devise a plan to protect agriculture activities and protect from unrestrained growth including protection of wetlands, protected species and wildlife habitat. There was also an intent to direct growth to appropriate locations through creative land use and planning techniques. The RLSA plan adopted in 2002 was the result, which has changed very little in subsequent years.

The program balances agriculture viability, environmental resource protection, and long-term economic prosperity goals. Mr. Van Lengen invited the audience to evaluate those goals, consider if they are being met, and identify areas for improvement.

Mr. Van Lengen read the Group 3 goal statement:

“(Policies to) protect water quality and quantity and maintain the natural water regime, as well as listed animal and plant species and their habitats by directing incompatible uses away from wetlands and upland habitat through the establishment of Flowway Stewardship Areas, Habitat Stewardship Areas, and Water Retention Areas, where lands are voluntarily included in the Rural lands Stewardship Area program.”

Mr. Van Lengen noted that this is a voluntary program and landowners are not required to participate.

The Overlay Map was presented depicting the flowways in blue, which are actually wetlands, and which are very important to protect. The green areas are habitat stewardship areas (HSAs) where uplands have high value for listed species. Water retention areas (WRAs) are helpful for the water management regime; these are also important areas to protect.

Mr. Van Lengen presented the Overlay Map Acreages. He advised the reason for two sets of numbers conveyed as acreages is because 195,000 acres is inclusive of publicly owned land and 182,000 acres accounts for privately owned land. The Habitat Stewardship Areas constitute the largest stewardship area, followed by the Flowway Stewardship Areas, and then Water Retention Areas and buffers. Open areas include approximately 95,000 acres. The Open Areas are the only areas where Stewardship Receiving Areas such as towns, villages and hamlets can be built. However, the locations where development may occur in Open Areas is not specified.

Mr. Van Lengen displayed a map of Public Lands and described that they include the Okaloacoochee Slough State Forest and the Corkscrew area which is owned by the Water Management District. Since the adoption of the Plan, Pepper Ranch Preserve and Caracara Preserve have been added to public lands through Conservation Collier purchases. There are also other areas of preservation under public ownership that need to be inventoried to ensure they are not counted as generators of credits in the long term.

Mr. Van Lengen highlighted the rules of engagement, which he noted relates somewhat to questions from the public that were received by his office earlier in the day. In Flowway Stewardship Areas in order to get credit you must remove the first four layers of land uses, and Mr. Van Lengen referred to the Stewardship Credit worksheet, noting it is difficult to understand. The natural resource index (NRI) values, which is the sum of a number of indicators of the land masses under consideration to get credits to put them under a conservation of some kind, or at least down to an agricultural use, including passive agriculture or cattle grazing. The NRI values are an accumulation of indices that indicate habitat value, soil value, water presence, vegetation value, proximity to like areas and potential for restoration. Mr. Van Lengen went on to explain the multiplier and how you can get a score from 0 to 3.4, and only a portion of that score is based on

how many land uses you remove. The incentivized program involves more credits generated for the removal of more land uses.

Mr. Van Lengen received the question: Why allow uses in Habitat Stewardship Areas that are not allowed in Flowway Steward Areas, such as recreation, mining, conditional uses such as churches, day care, and essential services? Mr. Van Lengen did not know the answer and suggested there should be a review of the past data and then an answer can be brought back.

An audience member asked: Who decides the values of the credit system ranging from 0 to 3.4?

Mr. Van Lengen said Wilson Miller was the consultant who designed the credit rating system and he was unsure if any sub-consultants worked on it as well.

Bruce Johnson from Stantec (formerly with Wilson Miller), responded to the question first by recognizing Brad Cornell and Nicole Johnson in the room whom were also involved with the credit rating system. Mr. Johnson went on to explain that Wilson Miller was hired by property owners, but the process was directed by County staff because the County was subject to the administrative order. The County pulled together stakeholders including property owners and environmental groups and had a series of public meetings. The intent was providing for economic development, the continuation of agriculture, and protection of natural resources. At the time it was deliberated that there must be a way of inventorying and categorizing. The method or overarching objective was to identify the areas to protect and create an incentive to protect them. The NRI scoring system was created as an objective tool. The land use characteristics, such as soils, were identified from USDA Natural Resources soils map. Land use cover was created on aerials and refined through the public review process. The scoring was a consensus approach among the consultant, property owners, environmental groups, County staff, independent observers, and members of the public.

Nicole Johnson then stated that all data layers were from year 2000 best available science. She also stated the Conservancy would like to see mapping updated with best available science. Dr. Evans reiterated that this restudy process is intended to make those updates. Mr. Van Lengen confirmed that the intent is to update the Plan, and it will be a consensus issue on how and when the updating would occur and he defers to scientific experts. Dr. Evans, noting that speaks as an outsider, requested that if the audience is drawing opinions or perceptions from updated science or studies that they provide that information via email, link or disclosure of the most updated source. She said any studies that are being referenced should be shared with the County.

Mr. Johnson stated that initial data was circa 2002 at the time of adoption. Each Stewardship Sending Area uses the best available science as of the current date. In other words, if a landowner applies today, they have to use today's panther telemetry and land cover data. It's important to update for purposes of calculating credit generation. Applying for a Stewardship Sending Area or a Stewardship Receiving Area uses current science.

Mr. Van Lengen said it's important to update the entire overlay area because of the credit implications.

An audience member asked: For the NRI figure of 1.2, how was it arrived at, and what percentage of Habitat Stewardship Areas score 1.2 and below? Those values are shown in Group 3 Policies for FSA and WRA and not HSAs.

Mr. Van Lengen responded that the County is going to find that data and put it on the RLSA website.

Mr. Van Lengen described Policy 3.8 which deals with compensation to landowners other than the creation of transfer of stewardship credits. Landowners can avail themselves with acquisition of conservation easements, acquisition of less than a fee interest (such as leasehold), and other willing buyer/seller programs. These opportunities have always existed, but are probably mentioned because people need to know it is a voluntary program. There are other opportunities to create conservation land without using the credit program.

Agricultural uses are referenced in Policies 3.9 and 3.10. When stewardship sending area is Active Agricultural (Ag 1) such as row crops and orchards, you can't increase or change other than minor squaring and access issues. Likewise, when credits are derived from a Passive Agriculture (Ag 2) SSA, you can't go back to Ag 1 and create areas of row crops, etc.

A member of the audience asked: At what point can you not go back and expand Ag 1 in an SSA; it is not clear in the policy. Is it when the SSA is first approved?

Mr. Van Lengen responded that it was intended that when Ag 1 is first approved, it's really the approval process. Since that time, there has been another layer of process and some of these SSAs are now in escrow. He said the question of what happens once in escrow should be considered in this Restudy.

The audience member clarified her question, stating: Once the SSA is approved initially, there's a long process of deciding whether to restore and there are pending amendments. Credits are awarded at all different times, so specifically at what date does the limit on expanding Ag 1 area apply? And for Ag 2, the policy says you can't go back to Ag 1 after the credits are awarded, but specifically what credits are we talking about because there are credits for all different things and they are awarded at different times?

Mr. Van Lengen said only base credits are being discussed here, and not restoration credits. This only applies to base credits.

The audience member asked: Are base credits awarded at the time the SSA is approved and the land use layer is specified to be removed?

Mr. Van Lengen responded credits are awarded at the time the easement document is recorded.

The audience member asked: Is the easement document recorded at the time the SSA is approved?

Mr. Van Lengen responded that it is true for SSAs #1 through #9. For SSAs #10 and after the answer is maybe. Some of those were put into escrow, which means they are not recorded, and it is up to the landowner to wait and see whether they want to pull out or not.

The audience member asked about pending amendments to approved SSAs #14, 15, and 16.

Mr. Van Lengen advised that the amendments relate to restoration, which is a different issue.

The audience member asked: Is an easement established already on SSAs #14, 15, and 16?

Mr. Van Lengen responded that he wasn't sure, but indicated those easements are in escrow. They could change, but the applicant would have to come back with new paperwork because the calculations would change.

The audience member asked: What policy allows escrow?

Mr. Van Lengen responded that the Board of County Commission policy allowed escrow.

Mr. Van Lengen described **Policy 3.11** related to Restoration. This provides additional credits, it is not the transfer of base credits from those areas designated as HSAs. This is a different type of credit called restoration credits. These provide a really good service, which is restoration and long-term maintenance by landowners in perpetuity with no public expense. Looking at the costs, such as mitigation of \$4,000 to \$5,000 per acre, or Conservation Collier costs of \$20,000 per acre or \$10,000 per acre in an endowment for perpetual maintenance and restoration. If these costs are multiplied by 1,000 acres, it equates to \$10 million. That money comes from landowners deriving the credits, and not the public funds, which is positive.

Functions of restoration include functional enhancement of flowways (which may be widening of flowways), widening and enhancement of wildlife corridors, enhancement of listed species habitat, and creation or enhancement of wading bird habitat and creation or enhancement of Caracara habitat. These are presented to the County as a separate application form. The process requires an ecological expert to provide the information, it's reviewed by County staff, GIS staff reviews for boundaries, and then County environmental staff does a field visit to verify conditions stated in the expert report. Mr. Van Lengen noted there is no third party review built into the system.

Nicole Johnson mentioned that restoration credits are for restoration, but some restoration credits are tied to not actually doing anything.

Mr. Van Lengen recognized that comment and said it will be discussed and not slip between the cracks.

An audience member asked: Once approved, do people go out to monitor how the land has been restored?

Mr. Van Lengen responded that there are two types of credits, R-1 and R-2. One is for dedication of restoration, and one is for performance of restoration. For dedication there are field visits to verify field conditions.

Mr. Van Lengen clarified that the discussion this evening is focused in the colored areas of the map. In the white areas of the map, the 5 year review committee recommended restoration credits or creation credits for panther corridors in the open areas. Mr. Van Lengen pointed to the locations which panther experts recommended as critical areas. He said this will be further discussed next month.

Mr. Van Lengen reiterated the two types of Restoration Credits are R-1 and R-2 credits. The R-1 credits are for dedication of land for restoration activities, but implementation of improvements is not required. Just for dedicating land for restoration, there are four credits in the Camp Keais Strand and two credits in the Okaloacoochee Slough. These areas were considered as needing more protection because of proximity to the Area of Critical State Concern overlay.

For restoration, once local, state, or federal permitting agency success criteria are met, which is typically five years out, the applicant gets the other four credits per acre. Then there is a perpetual maintenance requirement for those improvements.

Mr. Van Lengen gave a summary of lands proposed for R-1 restoration and displayed a slide with acreages, showing 11,576 acres approved and 5,418 acres proposed, totaling 16,994 acres for restoration of flowways, large mammal corridor, listed species, wading bird and Caracara habitat.

Mr. Van Lengen explained that 55% of all potential SSA areas are designated, or approximately 50,000 acres. Almost 1/3 of areas within SSAs are designated with R-1 restoration dedication status. Restoration Completion (R-2) acres is 428 acres. So, 2.5% of all acres dedicated for restoration have been restored, which means the County has been advised, credits have been awarded after five years, and the success criteria is met. County does not know why the delay for restoration efforts, but it could be related to cash flow or that the credits are needed at a later time. There was originally more interest by state agencies to buy or acquire land fifteen years ago when this program was initiated. The R-1 credit does include an easement for performing restoration and maintenance activities. The 5-year review committee recommended a schedule of those restoration maintenance credits that were tiered based on complexity and cost. The proposal is in the RLSA library. This is something to look at and could be pursued, or the R-1 / R-2 system could be looked at in a whole new way altogether.

Mr. Van Lengen gave the example of SSA #3, which was created in 2005. The land was a 250-acre old farm field and pasture that could be rehabilitated and made suitable for wading bird habitat. Due to soil types and hydrology nearby, wading bird habitat could be created with varied elevations, ditch and swale contouring, and the property would be maintained in perpetuity. The applicant received the dedication credits, but has not applied for restoration credits. The reason why is unknown to the County staff, but it's presumed that nothing has been done.

Mr. Van Lengen described **Policy 3.12** related to flowway buffers, which states Natural Resource Index (NRI) values in open lands within 500 feet of flowways get increased NRI values.

Policies 3.13 and 3.14 relate to water retention areas (WRAs). These areas can be used for development purposes. The acreages used for stormwater treatment does not need to be included in the hamlet or village areas, and landowners do not need credits to include those water retention areas within the functional area within a town or village. He advised this topic can be discussed further if the audience wishes. The 5-year review suggested that acreage should count toward villages.

Mr. Van Lengen concluded the quick run-through of policies and opened the audience to questions and the group exercise. He pointed out the worksheets and questions provided on the tables and offered to add more questions, such as WRA question or the HSA question in terms of allowing fewer than four layers to be removed.

Dr. Evans mentioned that questions were created for each group to discuss and then record the areas of consensus and areas of non-consensus. With divergent opinions on land use, Dr. Evans encouraged people to talk to each other to find the good ideas through conversation. Feedback forms can be found at the tables and there will be other opportunities to give feedback as well. Dr. Evans invited groups to reorganize as needed and allowed a forty-minute timeframe for group discussion before providing feedback.

III Working Session: Importance of Preservation and Restoration of FSAs, HSAs and WRAs

Dr. Evan invited each group to choose a spokesperson and present areas they were able to reach consensus and areas in which they were not able to reach a consensus.

Question 1

On a scale of 1-10 (10 being the highest), please rank the importance of preserving the following target areas:

Flowway Stewardship Areas (FSAs)

Habitat Stewardship Areas (HSAs)

Water Retention Areas (WRAs)

Question 2

(a) On a scale of 1-10 (10 being the highest), please rank the importance of restoration work within FSAs and HSAs.

(b) Given your understanding of restoration credits within the existing Overlay, what, if anything, would you change?

(c) Please identify any additional information that would help in your assessment, such as costs or standards.

Question 3: Please discuss and report on any other Group 3 Policy that your team feels is important to update.

Brown Group

The Brown Group reached a consensus for question 1 that HSAs, FSAs and WRAs are a 10. It's important to handle the development, protect the habitat, water flow and natural system and do it appropriately because WRAs are important. For instance, Rural Lands West will have WRAs and surround them with development, and it is important for the County to have a way to protect the habitats and water retention.

The Brown Group reached a consensus that restoration is a 10. Only 2.5% acres have been restored and something needs to be done to get more restoration accomplished. The LDC should be tightened up to require successful outcomes of restoration through metrics and parameters to show progress toward achieving results, such as the water flowing, wildlife returning and the presence of wading birds. The Brown Group also agreed that the model used for the restoration and all SSAs needs to be reevaluated and changed because the underlying assumptions have changed in last 18 years. The Brown Group also suggested to reevaluate the underlying credits, incorporate best available science, and a ratio of R-1 to R-2 should be reconsidered. Perhaps the R-1 credit is too high and should not be equal to the R-2 credit. Restoration Credits are out of balance. The Brown Group had no areas of non-consensus.

Orange Group

The Orange Group essentially agrees with the Brown Group, although they did not get too detailed. The group does not understand credits, incentives, or the market. HSAs, FSAs, and WRAs were all rated 10. The Orange Group wanted clear boundaries to maintain function of habitats and waterways. Isolated pockets of restoration are ineffective. The Orange Group suggested to not issue credits until restoration is complete. That might create a challenge relative to the market and valuation, but again there was a lack of market understanding amongst the group.

Grey Group

The Grey Group representative stated it was an agreeable group. Consensus items included that all FSAs, HSAs, and WRAs should be ranked high. Specifically, FSAs and HSAs were ranked 10, but WRAs were ranked 9 because they are manipulated with dikes around them, but still were considered valuable. The Grey Group suggested consideration of restoring WRAs.

The Grey Group found the restoration credit process to be unpredictable. Everyone wants everything to be restored, but what is the implication? The Grey Group also suggested adding the 5-year review recommendations on wildlife corridors and connection areas.

Action items identified included updating mapping techniques. Consider adding Critical Lands and Waters Identification Project (CLIP) data, which is state data, to map SSAs. Consider public restoration, such as Florida Forever, Amendment 1, or public tax dollar funded restoration.

Black Group

The Black Group had similar opinions as to the other groups. The group representative identified that they are a laypersons group of ordinary taxpayers.

Consensus was reached that FSAs and HSAs rank 10, but WRAs should be ranked 8.5 to 9.5 if they are manmade.

The biggest concern of this group is that the credit system is inordinately complex and maybe complex intentionally to be manipulated to benefit the group using it. It's so complex, it seems like funny money being generated to achieve predetermined goals. The group is not sure how to influence the process, but these citizens feel left out of the process.

This group had a very strong agreement on their suggested action item to completely revamp the credit system to be more clear, straightforward and honest. Using the updated science is important. The group also suggested possibly using a nationally recognized system.

Purple Group

The Purple Group reached consensus similar to other the groups. There was a consensus that FSAs, HSAs, and WRAs rank 10.

The Purple Group found a need to reevaluate the whole credit system. The current system usurps the original intention of RSLA with an incredible number of credits being created.

In terms of restoration, the group suggested to close the gap between R-1 and R-2. Very few lands have actually been restored. A time limit could be established for restoration to take place. Credits awarded before action taken is questionable. The Purple Group questioned criteria for restoration and determining how much needs to be restored in an area designated for restoration.

Blue Group

The Blue Group had a strong consensus that the group does not know a lot about the credit system. The group agrees with others that FSAs, HSAs and WRAs are important and rank 10.

Protection is important and essential, but who's going to pay for it? The credit system is an optional market, and no money is changing hands. Until a money market exists and there is a value, it's a lost point.

The Blue Group expressed that there should be oversight and timetable for the credits to be awarded, not necessarily before the work is done. There should be accountability involved with

an explanation for the restoration activity benefits. Look at land being lost to both conservation and development because it's no longer available for agriculture.

IV Next Meeting and Adjourn

Dr. Evans thanked everyone for their participation. She said that all the comments and feedback would be recorded and available. She invited the audience to provide feedback through comment cards and email if there the audience had items there were not able to discuss today or thought about later.

Dr. Evans gave a reminder for next month's meeting scheduled for May 24 at the same venue (North Collier Regional Park, Exhibit Hall) and mentioned that a panther expert will be speaking.



Meeting Summary

RLSA Restudy Group 3 Policies Meeting Protecting Natural Resources – Part 2 *Emphasis on Panther and Listed Species*

May 24, 2018, 6:00-8:00 PM, North Collier Regional Park, Exhibit Hall

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Kris Van Lengen, Collier County Planning and Zoning, opened the meeting at 6:10. He said the program will be different tonight because the working session will be sooner in the meeting to discuss thoughts about panthers and listed species. Mr. Van Lengen gave a brief introduction and welcomed Mr. David Shindle, Florida panther coordinator with the U.S. Fish and Wildlife Service (USFWS), and Dr. Robert Frakes, formerly with USFWS. He stated that questions for presenters can be fielded either during or after the presentations.

Mr. Van Lengen displayed the timeline for the Restudy process, stating this is the beginning of the process with workshop meetings scheduled through 2018, followed by Board of County Commissioners review followed by a public hearing process to the extent there is consensus on the recommended changes.

The next workshop meeting will be at a new location, at the South County Library (the address will be posted on the RLSA website). The topic of the August workshop will be Infrastructure and Fiscal Impact. For those who can't attend there is Facebook Live and Videos on Demand for remote attendance. The next meeting will bring in Florida Department of Transportation (FDOT), impact fee staff, people from the Metropolitan Planning Organization (MPO), and the Utilities Department staff to talk about how infrastructure works, how it gets extended to new towns and villages, and fiscal impacts.

Water Resources will be discussed in September, along with water quality, water quantity and the estuary health issues. Then discussion of sustainable development and the built environment (Policy Groups 4 and 5) will happen later in the year. Future meetings will be directed by the Growth Management Oversight Committee and ultimately the Board of County Commissioners. It is anticipated that the credit system will be trued-up and discussed at every single angle at that time, and facilitation and consensus building among stakeholders will be underway in order to make recommendations.

Facebook Live and video on demand is available for those up north or on vacation. Workshop summaries are available on the website. Workshop feedback is documented in the Feedback Tracker on the website, which captures all comments so far without attribution.

Mr. Van Lengen highlighted the outcomes of the last meeting. He said the last workshop revealed many 10s (i.e., high scores) in the importance of maintaining the integrity of the restoration sending areas, and the retaining and restoration of the habitat and flowway stewardship areas. Mr. Van Lengen highlighted comments received on the restoration program including: a rebalance of the restoration (R-1 and R-2) credit system, consider credits for water retention areas as part of the restoration program, base success criteria for restoration not only on water flow or exotic removal but also on desired wildlife outcomes, seek state and federal funding or grants, and create a timetable for restoration completion.

Mr. Van Lengen said the additions to the RLSA library are appreciated. He referenced the following literature that has been added: “How much is enough?”; Landscape-scale conservation for the Florida panther, R. Kautz et.al. (2006); Landscape analysis of adult Florida panther habitat, R. Frakes et.al. (2015); and Florida panthers v. Collier County, U.S. District Court (2012).

Mr. Van Lengen gave a reminder that the Rural Lands Stewardship Receiving Area (SRA) known as Rural Lands West is scheduled for a neighborhood information meeting on June 4 at 5:30.

Dr. Amanda Evans explained that the subject of panther habitat has come up frequently in recent months, so the group discussion session allows for discussion of the main comments and concerns of attendees. This helps make the best use of the speakers’ time because they will hear what the attendees’ concerns are and can address them in their presentations. Dr. Evans thanked the audience for rearranging seating to better distribute group size and diversity.

After a group discussion, the following comments were provided by representatives of each working group:

Blue Group

A primary concern is to preserve primary panther zone habitat. The group wants to identify where the primary and secondary areas of panther habitat are located. Preservation of sufficient and viable panther corridors for north and south movement is also a concern for the group.

The Blue Group is concerned about development currently planned in primary panther habitat. The Natural Resource Index (NRI) does not take into account the best available science. NRI science is based on 2002 data and needs to incorporate 2006 and 2015 studies.

This group asked three questions including: 1) Is there a commitment to panther recovery issues; 2) Are there enough wildlife crossings now and planned for the future; and 3) Will panthers survive the development in the rural lands stewardship area?

Wildlife crossings should be an important part of the environmental permitting process. Panthers being killed on the roads is a major issue. Wildlife crossings are not the only solution, other things can be done.

The Blue Group members want to know if there are pathways panthers have traditionally followed over the years. The permitting process should ensure that wildlife crossings are established, restored, and can be scientifically viable for the panthers and their paths. How wide must the panther corridor be to be viable for the panther, especially in the Rural Lands West development?

Grey Group

The Grey Group stated concerns about preserving habitat in Southwest Florida and Collier County with an emphasis on creating preserved lands that are contiguous and reducing fragmentation. This group suggested creation of buffers around habitats and planning for compatible land uses in proximity to habitats.

Multiple corridors should link major habitats instead of one main corridor. The group members questioned the adequate width of corridors and asked if corridors should be virgin or if other buildings and structures would be allowed in corridors?

Specific questions for the speakers include: 1) What are the specific parameters for corridors and human activities nearby; 2) What will motivate USFWS and other agencies to mitigate for habitat destruction; and 3) What is the difference between primary and secondary habitat?

The Grey Group presented two topics to address during public outreach and education including: 1) how to live with panthers relating to livestock and pets; and 2) how to react when encountering a panther?

The group stated that with eighteen listed species including birds and reptiles, wetland preservation should be a major consideration in the rural lands area.

Yellow group

The Yellow Group presented four topics of importance to the group including: preserving habitat, connectivity, road mortality, and human/wildlife interaction in Southwest Florida. Because Collier County is a core area for panther habitat, there are preservation issues in light of development and growth. The same four issues above pertain to specifically to Collier County.

During the permitting process, avoidance and minimization of panther impacts should be a priority. In addition to roadway underpasses, signage, fencing and onsite mitigation efforts are needed as protection measures.

Roadway design in the RLSA should consider other and smaller listed species besides the Florida panther.

Purple Group

The Purple Group identified their top three concerns related to the panther in Southwest Florida as: 1) connectivity, maintaining corridors, and increasing genetic diversity; 2) protection of appropriate habitat to support the species; and 3) advancing science, investigating predator-prey ratios, and preventing interactions with humans such as those involving starving cougars out west.

Issues relating to the Florida panther in Collier County include that the open lands designation should be revisited in relation to appropriate areas for development. Increase the amount of panther collars to increase data sets for analysis of habitat use and population levels as habitat changes over time so it can be adaptively managed.

The environmental permitting process should consider avoiding impacts through creating less towns and more density. The best biological data should be used during the environmental review process. Also, the environmental permitting process should be enforced, specifically regarding cumulative impacts.

Management and enforcement of invasive species management will subsequently support native habitat and wildlife.

Brown Group

The Brown Group's top concerns for the Florida panther include: preserving habitat, mortality, corridors, and genetic diversity. Primary and secondary panther habitat areas need to be recalibrated over time. These areas were defined over ten years ago and should be updated.

Collier County should expand the use of panther corridor crossings. Primary panther habitat should be off limits to development. Panther habitat should connect with the stewardship areas and corridors. Set the lands aside and dedicate that land so it cannot be developed. Collier County needs improved Stewardship Sending Area (SSA) linkages. What are the optimal solutions to the interface of development and wildlife?

The Brown Group further stated that protection of panthers aids in the protection of a large number of other listed species, with the exception of the Eastern indigo snake and Florida black bear.

The Brown Group advocated for following the USFWS Department of Interior recommendations on the Habitat Conservation Plan (HCP) by determining areas for wildlife crossings first and then

using a planning approach to locate towns accordingly. This approach is supportive of panthers and might extend the panther's life.

The Brown Group members asked when should Collier County reevaluate the primary and secondary habitats, and stated that development planned in primary panther habitat is at odds with the best science available.

Black Group

The Black Group identified these three main concerns: preserving panther habitat, decreasing road mortality, and providing education for new residents.

The Black Group presented questions for the speakers including: 1) How many panthers are typically radio tracked; 2) where are the panthers most concentrated; 3) What pathways do panthers use most often; 4) How do wildfires impact panthers; 5) How do they return to the area after wildfires; 6) Are new developments required to adopt infrastructure that addresses panther safety; 7) What is the most effective infrastructure at keeping panthers safe (fences, underpasses, signage, corridors); 8) Has there been any discussion or ideas on the interface between development and the remaining natural area and what makes a good buffer between those two areas; and 9) What are the best ways to create new preserves in the RLSA whether it be federal, state or local ownership?

Mr. Van Lengen introduced the presenters, noting they will do their best to address questions. Presentations have been prepared by the experts and the areas of concern presented from each group will be emphasized. The first speaker is David Shindle, a Florida Panther Coordinator with the USFWS. Mr. Shindle has 24 years of research experience involving cat species in New Mexico and Texas. He moved to Florida in 1998 and became the lead field biologist for panther research and monitoring associated with the Florida panther. Mr. Shindle has worked for the Conservancy and is a certified wildlife biologist.

Speaker: Mr. David Shindle, U.S. Fish and Wildlife Service

Mr. Shindle said he used to capture cats, and now he herds cats. He is able to touch on most questions that were asked. Mr. Shindle gave a quick overview of past and present panther recovery because perspective is important. He will talk about challenges and threats to the panther population any time development or conservation occurs. He will give a quick overview of the USFWS processes in place and what is being worked on.

Mr. Shindle gave perspective that the Florida panther has the widest distribution of any mammal in the western hemisphere. The range formerly spanned across the United States. They need large prey, large spaces, and the minimal human intrusion possible. The primary prey for the Florida panther is deer and hogs.

The question of taxonomy is a hot topic. Panther is a listed sub-species by the USFWS under the Endangered Species Act. The sub-species classification is based on earlier classifications and a low number of specimens (approximately 17), including skull morphology, pelt color, and things like that. New genetic science supports recent recolonization of the puma in North America. It may not be a sub-species classification under that analysis incorporating genetics. There is a proposal for a single North American sub-species. More recent work by a group of experts (Cat Classification Task Force) involved systematically looking at all cats even further and a revision is proposed for a single North American/Central American/South American puma. How the USFWS will address a new classification will be reviewed later in the presentation.

Historically, many large carnivores were subject to exportation by Europeans. The panther's prey was heavily exported including 250,000 pounds of deer hide from Pensacola and Mobile in 1771. Even with only a few panthers in existence, in 1968 the Florida panther was still considered a detriment to livestock.

In the early 1970's experts didn't know if panthers were still in Florida, but 10 individuals were surveyed south of Lake Okeechobee by the World Wildlife Federation (WWF). The Florida legislature named the panther as state animal in 1982.

The future of the Florida panthers was not looking good and showing signs of inbreeding and depression with only 20-30 animals in the 1980s. In 1995, cats were brought from Texas to enhance genetic diversity and it was a successful project. The panther population has been increasing with an upward trend. The project resulted in a healthier population and healthier animals, both genetically and physically. Mr. Shindle displayed a telemetry location map differentiating locations of male and female panthers which indicates geography of the well-studied panther population.

Mr. Shindle said a lot of the habitat questions can be answered by the next presenter. A lot of information is known on preferred panther habitat. Different models are based on different parameters and cohorts of the panther populations. He displayed a map depicting the Primary, Secondary and Dispersal Zones for panther habitat. He noted that panthers are really resilient animals. They use a wide variety of habitat types, and agriculture lands are important for panthers. The USFWS is figuring out how to use the best available science. Additional sources of data are also considered. Females and kittens show up outside of the Zones and although it's not ideal habitat, it does show where connectivity areas are where transient animals are supported.

Private lands, including working ranch lands, south and north of the river, provide excellent panther habitat. Balancing ranch property rights for owners who provide the habitat and finding a way to compensate for the panther impacts is a challenge. Being smart about the growth of Florida is important, and it's the undercurrent of all these workshops.

The Habitat Conservation Plan (HCP) is a hot topic and has impacts to the RLSA overlay and eastern Collier County. Bruce Johnson with Stantec can answer questions about the HCP. The USFWS role is to draft the Environmental Impact Statement (EIS). Chuck Kelso is the lead biologist on that project. You can contact Chuck or check the website for updates on the EIS. Questions on the HCP, which is a landowner plan, can be directed to Bruce.

Mr. Shindle noted that a lot of questions were asked about how to live with panthers. The increasing panther population trend tracks accordingly with the frequency of road kills. The frequency of road kills is not the best way to count panther population, but is an indicator of an expanding population. Expansion of the breeding range is illustrated by the expanding range of female road kills over time. Mr. Shindle noted it is surprising that the Golden Gate Estates area supports breeding female cats and their kittens. Vehicular mortality threats for panthers can be ameliorated and mitigated with wildlife crossings and innovative tactics. Mr. Shindle displayed a map depicting current wildlife crossings in place, with many south of the river along I-75. For example, modifications under an existing bridge along Alligator Alley, along with fencing, helps create wildlife crossing opportunities that are useful for panthers.

Challenges of future recovery and growth management include habitat loss and population growth. The 2070 human population projections are extreme, and it shows the challenges for Floridians in the future. Moving north will be tough for panthers, so keeping the landscape permeable is important.

In reference to grizzly bears but still applicable to panthers, Chris Servheen said "...habitat is more than just space on the ground. It's the level of human acceptance that exists for them."

Large carnivores should be part of any planning process when people are being placed in close proximity to large carnivores. How will people and large carnivores coexist? Workshops are presented about "living with panthers" and it's all about "living with people" in hopes that panthers will figure things out. If you build in panther habitat then expect to see panthers.

How the puma operates out west is no different, and there is a lot to learn from innovative approaches to puma management and interactions. Florida's approach is unique because the Florida panther is a listed sub-species under the Endangered Species Act.

Mr. Shindle explained that panthers have been documented to eat wildlife and pets. Panthers have not attacked people in Florida, however these cats have killed and injured people on the west coast. A lot of agency efforts are driven to make sure humans can coexist with the animals and be proactive.

An Interagency Florida Panther Response Plan is in place as a guide for how to respond to interactions, categorization of sightings, encounters, threats, or attacks. Categorization of human-panther interactions is in the eye of the beholder based on experience, but the Florida Panther

Interagency Response Plan does define interactions as sighting, encounter, incident, threat and attack.

Mr. Shindle displayed a map showing panther depredations in the Golden Gate Estates area, indicating a clear collision course of panthers and people. Many other occurrences are reported by private ranch owners that choose to report cat depredations more than others. The map does not display all depredations, and it's becoming more important to focus in the exurban zones.

Typical or basic fencing does not detour panthers. Securing pets and animals in predator-resistant enclosures is important. Defenders of Wildlife and the Conservancy of Southwest Florida contribute time, money and effort to reduce panther-human conflict through programs such as the Pen Building Assistance Program.

Innovative approaches are working. For example, Mark Danaher uses a Shepard that responds when carnivores come outside his fence.

The big issue in eastern Collier County is impacts on cattle ranches. Young calves are often prey for panthers. How panthers hunt, catch and kill their prey is a challenge for ranchers. When panthers catch their prey they hide it from scavengers and other predators, making it difficult for ranchers to document their losses. One example in the presentation depicts the path a panther dragged a calf across a pasture, road, fence, and ditch for 350 meters under dense cover. Efforts are underway to help with this problem. The current program relies on finding the animal to verify the loss was due to a panther, and finding the lost animal is difficult. USFWS is working with the Farm Service Agency (FSA) to pay a percentage of loss, but it is not going too well. The program was designed to compensate for the loss for a listed species. In the past, ranchers would take care of the problem on their own. An incentive is needed to provide for the loss in a different way.

Mr. Shindle showed example photographs of panther sightings and encounters in Corkscrew Swamp and Port Royal. He explained that not all panthers can be relocated. If a panther exhibits threatening behavior to a human, the cat cannot remain in the wild. For example, FP243, a panther in Farmworkers Village south of Immokalee frequently came out in the middle of the day and was taking cats and dogs. The panther was not showing threatening behavior, but it was not the behaviors people want to see. FP243 was relocated south to Big Cypress. He moved far south and settled in Big Cypress Seminole Indian village. He continued exhibiting similar behavior, going to people's homes and removing cats and dogs from people's front yards. That specific panther is now part of a zoo. Physical habitat is not the only factor; people must consider how to live with these animals with less space and more people.

Mr. Shindle summarized that social intolerance is a common theme for large carnivore recovery driven by the previously mentioned threats. Some panthers are found dead with multiple gunshot wounds. The Naples Zoo does an excellent job of educating the public on coexistence and the challenges of living with panthers, as well as opportunities for large carnivore restoration.

Mr. Shindle explained that the Florida Panther Recovery Plan has the same goal as most recovery plans: to achieve long term viability so the species doesn't need to be listed as a threatened or endangered. Achieving that goal is a challenge, but several measures are used including having three viable self-sustaining populations of at least 240 individuals established for a minimum of twelve years. More populations are needed outside of south Florida. The panther issues addressed in south Florida also need to be handled in north Florida and elsewhere. South Florida needs to improve on living with panthers, management, smart growth, setting aside habitat, and compensating private landowners who provide habitat.

The Florida Panther Recovery Implementation Team includes members that represent private land owners, sportsmen, ranchers, conservation NGOs, and federal agency representatives. The team also formed sub-teams with experts in various areas such as vehicular mortality, inventory and monitoring and recovery criteria. Vehicle mortality is always a hot topic.

The transportation sub-team is a group of experts that look at better ways to design wildlife crossings, where they should go, and they put data together that provides guidance so the USFWS can make good recommendations and consultation. This sub-team has identified roadway hot spots based on the number of roadway kill locations. When a crossing or fencing is implemented, the hot spots are cooled down or resolved.

Mr. Shindle referenced questions on how to count panthers. Existing recovery criteria proves to be challenging messaging because the Florida panther is hard to count, especially with any statistical precision. How do you know when you get to the recovery goal when the panthers are hard to count? Camera grids and spatial models are better ways to count panthers. The USFWS staff hope to get to the point of not needing to collar animals because they would rather do it less invasively. One of the published statistically-defensible range-wide population estimates by Dave Onorato is based on roadkills of panthers with radio collars and looks at collective information to estimate the number of panthers. The Recovery Criteria sub-team also estimates populations by looking at adult female survival or other measures to verify there is a viable population of panthers.

Another priority of the Florida Panther Recovery Implementation Team Work is making panther recovery compatible with ranchers and sportsmen by looking at incentive programs. When setting aside land for conservation and recreational access, sportsmen are an important stakeholder group. Mr. Shindle recalled earlier issues with access in the Big Cypress Preserve. Private owners, sportsmen or advocates may disagree, but there is a shared purpose. Finding the shared purpose is key. Sportsmen prefer large contiguous areas to recreate. A healthy deer population is a common goal for sportsmen and panther recovery. Working ranchlands are supportive of the common goal of panther recovery.

A five-year status review of listed species is required as part of the Endangered Species Act. The status review looks at the present state of the population, threats, and conservation efforts. At the end of the review, the USFWS makes recommendations about the classification status of the

panther (endangered, threaten, or delist). Delisting could be due to recovery or new information on taxonomy. The assessment is underway now. The science behind the five-year review is the Species Status Assessment (SSA), which looks at the species needs, current status of the population, threats, and conservation measures in place, and then projects into the future looking for scenarios to obtain a viable population. The goal is to meet objectives of resiliency, redundancy and representation. These documents inform all USFWS decision documents. The SSA will inform the five-year review that is being worked on now, and part of the SSA will assess best available science on the topic of taxonomy with considerations for morphological analyses and more recent genetic analyses. The SSA does not provide a recommendation, but provides all information on the best available science on this topic. Mr. Shindle said a petition to delist the panther based on taxonomic error is a likely outcome.

Range expansion and panther recovery is occurring naturally. Female panthers are documented along the Caloosahatchee River. The river is not a barrier, it may be an impediment but panthers do swim. Females don't disperse far from their mothers. A wildlife crossing was put in on State Road 80 and easements were secured to help facilitate crossing. Females are north of the river for the first time since 1973. Two female panthers are at Babcock Ranch, and one female has had two litters. It's encouraging natural range expansion. Other panthers have been documented at Platt Branch. Range expansion is occurring naturally and it's very encouraging. Cats have also gone outside of Florida. The book *Heart of a Lion* by William Stolzenburg is about a cat that traveled to Connecticut. Males can disperse a significant distance. Cougars have been documented in Tennessee.

There is a lot of support for the panther, which can be seen by the support in this room, Uno Ale brewery, the Florida Panthers hockey team conservation night and Protect the Panther license plates. Mr. Shindle concluded that globally, exurban areas are where the panther needs to be.

Mr. Van Lengen thanked Mr. Shindle for the abundance of information. He said it's important to move to the next speaker and then have time for questions, and if more time is needed the meeting can extend longer. He introduced Dr. Robert Frakes who has a PhD in eco-toxology and was the Maine state taxologist for seven years. Dr. Frakes was a wildlife biologist with the USFWS for 22 years starting in 1992. He worked with several listed species including the Florida panther, keydeer, snail kite, and peregrine falcon. He helped developed the original panther habitat assessment methodology panther tool in the early 2000s and more recently developed a new panther habitat model intended to provide better scientific basis for panther conservation decisions. Like Mr. Shindle, Dr. Frakes has also participated in many peer reviewed publications.

Speaker: Dr. Robert Frakes, (formerly) U.S. Fish and Wildlife Service

Dr. Frakes stated that the questions raised from the attendees were excellent. Some will be answered by the model, David can answer some of the questions, and some questions cannot be answered because no one knows the answers.

Dr. Frakes explained that the model being presented, PLOS One, was published in 2015 and the report is available online. The model is at the PLOS website for anyone wanting more details.

The Species Distribution Model (SDM) is specifically for the Florida panther in south Florida. The model cannot be used elsewhere as it is unique to this area's characteristics. The model is a random forest model which is a powerful statistical classifier used in a lot of applications outside of the USFWS. The model uses presence/absence design based on telemetry points to identify areas where panthers are present or absent. The model then analyzes the landscape characteristics in those areas to make predictions. The landscape scale model uses a resolution of one square kilometer which is a little over 200 acres. The scale is appropriate considering the large range of panthers.

There were fifteen explanatory variables in the model including land cover types, forest edge, human population density, road density, dry season water depth and wet season water depth. The model predicts the probability of presence in each grid cell.

Dr. Frakes said the model can be used for evaluating the impacts of proposed developments. The model can be used for prioritizing areas for panther conservation when acquiring land, putting an easement on the land or evaluate the best area for conservation. Another application for the model is identifying areas for possible panther reintroductions. A statewide model is in development to quantify panther habitat throughout Florida based on model results to help identify suitable places for the panther to be relocated. The model can be used to evaluate impacts by sea level rise and changes in hydrology.

The study areas extends to a ten-mile buffer around the panther primary zone. The study area was divided into one square kilometer grid cells, so there are 16,600+ grid cells in the area. The presence and absence part of the model is based on telemetry data from 2004-2013. The date range was chosen based on the available landscape data. Only adult panther data was used; transients, juveniles or subadults were not included. There are 25,000 telemetry points representing 87 panthers comprised of 55 females and 32 males.

Dr. Frakes showed a map of the ten land cover variables showing that the study area is two-thirds wetlands, which is unusual for cougar habitat. The model gives priority to wetlands because it better helps identify where the panthers are. Each cell in the study areas has a value for each of the land cover types. This data goes into a spreadsheet for the model to analyze. Other variables include forest edge, hydrology, human population density (from the 2010 Census) and road density. Most of the study area is uninhabited, but there are some higher density areas.

Dr. Frakes showed what the model output looks like. The model predicts probability of presence in each grid cell as a number ranging from 0 to 1 broken up into five intervals. He showed a map depicting the probability of presence from low to high. Using this output and a cutoff threshold, a map is generated to depict the remaining adult panther habitat in south Florida. The model

prediction matches up fairly well with a majority the primary zone. Some of the primary zone is not good panther breeding habitat, such as water conservation areas, Shark River Slough and Everglades National Park. The secondary zone contains very little panther habitat, but is still useful for transient panthers, connectivity to other areas and potentially for restoration. However, very little breeding habitat is available in the secondary zone.

Dr. Frakes explained that the software gives an estimate of variable importance based on accuracy and Gini index. Variable importance is highest for wetland forest per the model. The second highest variable importance was human population density, which helps conclude that panthers like forests and don't like to be near people. Dr. Frakes said it was surprising to see how important human population density is for determining panther population location. Forest edge was the next variable of importance, followed by hydrology variables. All fifteen variables were maintained in the model to retain accuracy.

Sensitivity analysis of the individual variables indicates the effect of each variable on the model's output. Dr. Frakes illustrated how population density was an important variable, showing that there is a dramatic drop or 20% reduction in panther presence probability as people are added to a grid cell. An increase in wetland forest increases the probability of panther presence.

Dr. Frakes presented a graph displaying the average probability of presence in Florida panther home ranges. The graph showing home range values of 87 panthers that were in the study. No panther home range had an average P value below 0.4, and about half the panthers had a P value above 0.8. This data is important in selecting habitats for panther reintroduction or protection. Good panther habitat is any area that scores a high probability value.

Dr. Frakes presented the summary of the model results. Over 5,500 square kilometers of breeding habitat was identified in south Florida, which is significantly less than previously estimated. The USFWS panther tool called Panther Habitat Assessment Methodology is based on how much panther habitat remains in south Florida. The tool assumes much more habitat exists, which needs to be changed. Dr. Frakes' model supports the current Primary Zone except for the three previously mentioned areas (water conservation areas, Shark River Slough and "witch's finger"). The Secondary Zone contains very little adult panther habitat, only 3.8% of the total. The most important factor to determine panther presence is forest cover, human population density, amount of forest edge and water depth. Panther home ranges have a probability of presence value of 0.4 to 1.0, with a median of 0.8.

Dr. Frakes said his report lists recommendations, and the most important conservation recommendation is protecting the remaining breeding habitat. Movement corridors also need to be protected. This was recommended in 2006 by Randy Kautz. Dr. Frakes said he is making the recommendation using density figures from literature indicating there may not be enough breeding habitat in south Florida to maintain a viable healthy population of panthers in the long

term. He said we need to protect the remaining breeding habitat because all future panthers will come from the existing habitat.

Dr. Frakes said the next recommendation is to revise or replace current Panther Habitat Assessment Methodology (“panther tool”). The tool assumes more habitat is remaining than what is available. The tool assumes that the Secondary Zone is two-thirds as valuable as the Primary Zone, and assumes another zone is one-third as valuable as the Primary Zone. Dr. Frakes argued that the Secondary Zone is not nearly two-thirds as valuable as the Primary Zone. When those numbers are calculated, there is an inflation in the amount of panther habitat available and an underestimate of the compensation needed. The calculation inflation and underestimation has been going on for years and needs to be investigated.

The third recommendation directly from the Recovery Plan is to establish additional panther populations north of the Caloosahatchee River. Dr. Frakes is working on a statewide model to identify good locations to establish additional panther populations north of the river.

Dr. Frakes ran a model focused on the RLSA and surrounding areas. The model predicted habitat values showing good panther habitat is left in the RSLA boundary. Dispersal corridors are seen on the model that link to CREW, which is marginal, and another dispersal corridor toward OK Slough. GPS data from Dave Onorato shows almost a perfect match with the predicted panther habitat from the model. About 97% of the GPS points fell within the predicted panther habitat areas estimated from the model. The best way to check model accuracy is to use data from outside the model.

Dr. Frakes ended his presentation and invited the audience to ask questions. Amber Brooks with the Conservancy of Southwest Florida asked about a timeline for the SSA and HCP because those efforts would be relevant to the County’s process. Mr. Shindle said the EIS and HCP is in process. Everything in the Service is on an accelerated schedule, including the EIS. The SSA and completion of the five-year review recommendations are anticipated generally in summer of 2019, which is a general idea of the timeline and can’t be guaranteed. The SSA will go out to peer review which adds a bit of time. The SSA is the body of the background of the five-year review and recommendations.

An attendee said the model and GPS points show a clear indication of the panthers and where they are located, and asked if this data is being incorporated in the process for decision makers to consider? Mr. Van Lengen responded that the restudy is to gather information, and all information will be considered regarding new standards and incentives. The map will definitely be part of the package.

Mr. Van Lengen asked about prey-based studies, noting that there are different prey species in the east zone, and will the different prey base raise a concern in the future? Mr. Shindle responded prey density and availability is a big issue. Prey availability is a component of panther

habitat. The big decline of deer population in the southern areas of Big Cypress National Preserve south of U.S. 41 is likely due to hydrology, water releases, and the increasing native (panther) and non-native (Burmese python) large predator population. Availability of prey is a social issue because people assume the issue is caused by the panther. Habitat improvement and burning can help ameliorate prey decline. Mr. Shindle added that the University of Georgia and FWC is conducting a south Florida deer study to examine deer dynamics in south Florida across three study areas to find better ways to monitor the deer, and to look at factors affecting deer survivability including impacts of the panther.

Brad Cornell asked about the issue with compensation to ranchers for depredation. Is the problem that ranchers are not interested in the program or funding sources? Mr. Shindle replied that the Conservancy of Southwest Florida will compensate for calf losses. The issue isn't funding, but rather the roadblock is the design of the system that requires verification of loss, verification it was due to a panther, and basis of the losses on a percentage criterion. Changes are required to the farm bill and down. The rules are tough and can change. It is required to establish a beginning inventory based on pregnancy checks which is costly, the inventory at time of sale, and then calculation of loss. In the past veterinary checks was an acceptable measure of inventory. Three applications were denied this year because the veterinary pregnancy verification method is no longer acceptable. This drives frustration and the program doesn't work for ranchers. Ranchers must provide so much documentation and then the payment is only 75% of the loss. It's necessary to design a new program. A collaborative approach might work similar to the coexistence councils. For example, the Mexican wolf livestock coexistence council is a group of stakeholders including agencies, NGOs and ranchers. They use funds from the Livestock Demonstration Project Fund allocated by Congress. The council makes their own rules and pays out based on the criteria they set. The new budget has language for the wolf livestock demonstration project legislation including the option to evaluate this program for the panther. This program involves collaborating with the state, which is not a problem.

Mr. Shindle added that the FSA Livestock Indemnity Program will always be available. The issue of the panthers snatching money from the ranchers' pockets needs to be addressed. Mr. Shindle advocates for building rancher receptivity. Ranchers north of the river are watching what is happening in south Florida with the lack of compensation and incentives.

An attendee mentioned water recharge, noting the panther preserve is already in an impaired watershed. There is so much development in the priority panther habitat. The information presented by Dr. Frakes suggests there is far less priority panther habitat than originally estimated. Issues with ranchers, development pushing panthers to ranches, and development creating less food sources is a recipe for disaster. The situation looks very grim.

Mr. Van Lengen ended the meeting at 8:15. He thanked everyone for their participation and invited attendees back for the next meeting at the South Library.



Meeting Summary

RLSA Restudy

Exploring Infrastructure and Fiscal Impacts

August 23, 2018, 6:00-8:00 PM, South Regional Library

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Kris Van Lengen, Collier County Planning and Zoning, welcomed attendees and opened the meeting at 6:10. He described that comment cards are distributed to ask attendees about their concerns about infrastructure. He asked for it to be filled out tonight or at home because it is good to have the feedback.

Mr. Van Lengen highlighted the items on the agenda, starting with Long Range Transportation Planning Concepts, noting that these topics are important to Group 4 polices, urban villages and design factors. He said Ann McLaughlin, MPO Executive Director, will talk about how the Metropolitan Planning Organization (MPO) conducts business, long range transportation planning, the evolution of costs and revenues (specifically technology and the status of eastern Collier County).

Keith Robbins, the District Freight Coordinator for Florida Department of Transportation (FDOT) District 1, was next on the agenda to provide perspective on agriculture and freight distribution on the roadways.

Mr. Van Lengen advised that Joe Bellone, Director of Operations for Collier County Utilities, will share the vision and strategy for water, wastewater and irrigation as populations move east. He noted that water sources would be addressed at the next meeting, but distribution was the subject for today.

Mr. Van Lengen added that Tindale Oliver was present to tie together the concepts of infrastructure costs to the public and the best way to grow with fiscal neutrality. He said that questions and answers will be addressed at the end of the meeting because it will be more efficient to move through the speakers' presentations and then have Q&A at the end of the session.

Mr. Van Lengen explained that this is the beginning of the restudy process with workshops throughout the fall, and there are plenty of opportunities to be involved. The upcoming workshops will be in the South Regional Library. Water Resources will be discussed in September,

and discussion topics will include surface water, basin rules, quality, quantity, Water Resource Areas (WRAs), aquifer health, potable water sources, and salt water intrusion.

Built environment will be discussed in October and November with an interactive approach similar to the format in previous meetings. Those two workshops will consider design components and process implications associated with Group 4 policies. Mr. Van Lengen added that a meeting with the Growth Management Oversight Committee (GMOC) meeting will be two weeks from today. This committee provides guidance on public interaction and will advise how to structure meetings after November, at which point it will become important to reach consensus and review Group 1 policies that tie all the elements of the RLSA program together.

Mr. Van Lengen advised that Facebook Live is one way to participate in these meetings. Video archives are available on the County main website, and workshop summaries and PowerPoint presentations are available on the restudy website.

Mr. Van Lengen noted that workshop attendance has been steady, and the County appreciates public input. Comment cards and emails have been captured in a feedback tracker by date. There has been a request to have emails in a discrete folder with attribution. Mr. Van Lengen asked attendees about their comfort level with posting emails online, and the consensus was that emails can be posted online with the email address redacted.

Mr. Van Lengen introduced Anne McLaughlin, MPO Executive Director with 35 years of experience in her field, noting she has served in her current capacity at the MPO since 2016.

II Presentations

Collier Metropolitan Planning Organization

Speaker: Mrs. Anne McLaughlin, MPO Executive Director

Ms. McLaughlin said the MPO coordinates closely with the Growth Management Department (GMD), even though the MPO is a separate entity. Transportation and land use are closely linked together. Ms. McLaughlin highlighted the MPO's transportation planning process governed by the Florida Department of Transportation (FDOT), the Federal Highway Administration (FHWA) and the Federal Transportation Administration (FTA). Continuing, cooperative and comprehensive, the 3-C's, are key words for the MPO. These words take on meaning during the 4-year review process. The MPO is data driven and must address federal and state performance measures. Ms. McLaughlin acknowledged Penny Taylor as an MPO Board member in the room.

Ms. McLaughlin described the make-up of the MPO as the County Commissioners and city representatives, noting that they address regional planning. She described the three major documents produced by the MPO including the Unified Planning Work Program that sets goals and budgets, the Long Range Transportation Plan (LRTP) has a 20-year planning horizon, and the

Transportation Improvement Plan (TIP) has a 5-year horizon. The LRTP must be updated and adopted every 5 years. The short-term outcome of the LRTP is the TIP, or 5-year spending plan. This is required for state and federal money to be used locally.

Plans are based on future growth, the current system, and future transportation needs. The LRTP is constrained by revenues and must reflect financially feasible projects. A list of needed projects is narrowed to a list of financially feasible projects. Now the MPO has a 2040 LRTP in place, which can be found online. As early as January, the 2045 Plan update should begin, which must be adopted by December 11, 2020.

Ms. McLaughlin explained that there are certain “givens” for MPO LRTP updates including BEBR population projections for Collier County. The population of roughly 360,000 in 2017 is projected to be 520,000 in 2045, reflecting an increase of 160,000 people over a 20-year timeframe.

FDOT revenue projections are \$776 million. The money is not guaranteed but is simply a planning figure. This is the primary source of funding for new capacity that serves new growth.

Statewide trends per FDOT include increasing population, increasing vehicle miles traveled (VMT), increasing congestion, decreasing transit ridership, increasing fatalities, and increasing serious injuries.

FDOT plans for the Strategic Intermodal System (SIS) and for freight are givens. The SIS cost feasible 2029-2045 funded items include: 1) State Road 29 right-of-way, and 2) preliminary engineering and managed lanes study on I-75.

Ms. McLaughlin described assumptions about the future. The growing technology of automated, connected, electric, and shared use vehicles (ACES) will have major impact on transportation planning, affecting capacity, the existing road system, safety, equity, access, and land use. FDOT indicates there is an unprecedented amount of change between now and 2045. The National Oceanic and Atmospheric Administration (NOAA) funded sea level rise study is underway showing vulnerable infrastructure including transportation.

Scenario testing is needed considering the impact of the ACES technology based on FDOT guidance, land use alternatives, higher density mixed use, bus rapid transit corridors, and transit-oriented developments. Efficiencies in the delivery of infrastructure is important. Additional items that haven't been extensively looked at, but should be, include travel demand management and alternatives to grade separated intersections.

Ms. McLaughlin posed the question, where is the majority of the growth heading? She said that eastern Collier County will see the majority of growth because it is where big land parcels are located that allow larger mixed-use projects, as opposed to smaller infill parcels in other parts of the County.

Ms. McLaughlin posed the question, where do we start? She said it begins with the current Cost Feasible Plan of the 2040 LRTP. An LRTP Amendment added back into the 2040 LRTP several projects including the Vanderbilt Beach Road extension to 16th Street NE and funding for the Randall Boulevard/Oil Well Road corridor study. Ms. McLaughlin added that the difference between needs and fundable projects is a huge gap. The huge gap is everywhere between perceived and forecasted need and the ability to fund. Modeling the cost feasible LRTP helps determine the best ways to make decisions about where improvements should be.

Ms. McLaughlin stated that the TIP is updated every year. The Bicycle/Pedestrian Master Plan is anticipated for adoption in the fall, and the transit development plan is also a factor. She reiterated that land use planning and vision are important considerations driving the transportation plan.

Ms. McLaughlin described that the County Interactive Growth Model (CIGM) and FDOT District 1 Regional Transportation Demand Model (D1-RTDM) are closely integrated. The growth model allocates population, employment and other factors according to transportation analysis zones that directly feed into the Transportation Demand Model (D1-RTDM).

The MPO advisor network is made up of several volunteer committees including the Technical Advisory Committee, Citizen Advisory Committee, Bicycle and Pedestrian Advisory Committee, Congestion Management Committee and Advisor Network. The MPO has an email Listserve and Ms. McLaughlin provided guidance to sign up for the advisor network. She also mentioned that summits and symposiums will be upcoming as part of the development of the 2045 LRTP.

Agriculture Shifts and Transportation Impacts

Speaker: Mr. Keith Robbins, District Freight Coordinator, FDOT District 1

Mr. Van Lengen introduced Keith Robbins, the District Freight Coordinator for FDOT District 1. Mr. Robbins has served 20 years as a US Army Officer and four years with FDOT.

Mr. Robbins said his presentation will focus on the Agricultural Shifts in Southwest Florida report by FDOT District 1. Mr. Robbins said he came to Florida four years ago and did not have an agricultural background, and he has found it interesting what a big industry agriculture is in Florida. He gave an overview that his presentation will include the changing face of freight vehicles, FDOT's role with freight mobility and agribusiness, and a report overview.

Mr. Robbins explained that rural infrastructure was built for smaller rail, ship and air vehicles. Today's freight vehicles are much larger, and infrastructure has not kept pace with this change. About four years ago, FDOT reached out to the agriculture industry, which is the #2 industry in the state, asking how FDOT could support their role in sustaining the economy in Florida. FDOT sought to identify improvements needed for the industry to address their concerns, such as areas of weak

infrastructure, for instance substandard turning radii. Mr. Robbins stated there is nothing in the agriculture industry that cannot be sourced elsewhere if produce cannot get to the consumer.

The twelve counties of District 1 were assessed to determine truck trips. Almost 500,000 truck trips were generated by harvesting in one year in District 1. Growth in coastal counties is continuing and is pushing east, where the corporate agricultural production land is located. As growth continues east, agricultural operations must move and the FDOT looked at the impact of that move. Mr. Robbins explained that the study included the assumption that the agriculture shift is not a 1:1 ratio. The shift may include a change of crop or change of size of agricultural land area. Mr. Robbins said the report is available online at www.freightmovesflorida.com, noting that it is not a definitive or authoritative document. The report is for planning purposes only.

Based on the shift of agricultural production from coastal counties to inland counties, Mr. Robbins said that shifts for Collier County will be from eastern Collier to further east in the County, which is already occurring.

Mr. Robbins summarized that production in the District will not have significant change, but change may be more significant on a county-by-county basis. Major corridors of agricultural truck traffic, such as U.S. 27, State Road 70 and State Road 80, will increase in agricultural truck traffic. Mapping of 2020 and 2035 truck volumes reveals large numbers of trucks will be on some roads in 2035. The numbers anticipated for production traffic does not include traffic relating to an increase in workers, commuters, or supplies needed to sustain agricultural operations.

Coastal counties are projected to lose 8-49% of their agricultural truck volume. The inland counties are expected to grow 8-10% in agriculture truck volume. The anticipated growth in truck volumes is more than 57,000. Towns like LaBelle, Moore Haven and Immokalee will become or are existing agricultural hubs. Immokalee is expected to flourish. Bridge restrictions, such as weight, number of axles, and truck length will impact freight movement patterns and agricultural shifts. Two-lane roads with deep ditches and swales are difficult for freight drivers to navigate. These roads were not built to sustain the current volume and weight of the freight traffic.

Inland state and county roads have potential to become SIS corridors. The shift corresponds to smaller rural roads becoming major roads to accommodate large numbers of trucks. Mr. Robbins explained that these findings can be incorporated in the District 1 transportation model.

Mr. Robbins said another finding is that freight movements are switching from northern counties to southern counties. Polk County will remain a major generator of agriculture. The traffic seen today on U.S. 17 will shift to U.S. 27. More agricultural hubs will develop, specifically in Hendry and Glades County. Collier and Okeechobee hubs will connect major facilities as freight movement flow changes. Small towns will have more packing centers and distribution centers that are located closer to the agricultural operations.

Mr. Robbins explained that the Caloosahatchee River is a barrier to the citrus industry because the U.S. 27 bridge is the only bridge able to support heavier trucks. Trucks weighing over 80,000 pounds must use the U.S. 27 bridge, which can be nearly a 60-mile detour. Bridge replacement projects for the Wilson Piggot Bridge (State Road 31) in Fort Myers and State Road 29 Bridge in LaBelle are scheduled far out, but they are planned to be upgraded, and bridge upgrade plans have been advanced by two years.

Mr. Robbins concluded by stating that his work product is a Southwest Florida study by transportation specialists, not agricultural economists. The study intention was for planning purposes, and it does not account for traffic or growth shifts from the east coast coming to the west.

Water and Wastewater Utilities Going East

Speaker: Mr. Joe Bellone, Director of Financial Operations, Collier County Utilities Department

Mr. Van Lengel introduced Mr. Joe Bellone. Mr. Bellone joined Collier County Public Utilities in 2003, serving in different management positions up until his current role as Director of Financial Operations.

Mr. Bellone said he will speak briefly about who supplies water to eastern Collier County and the County's vision and strategy to provide economically feasible service. The Board is scheduled to consider a resolution to serve the eastern area to serve four future developments on September 11, 2018. Rural Lands West, Collier Lakes, and Immokalee Rural Road Village have requested service from Collier County. Providing utility services in these areas prevents proliferation of package treatment plants.

The engineering required to move wastewater is substantial. Mr. Bellone showed a map depicting where properties and distribution lines are planned by the Utilities Department. The County purchased approximately 200 acres of land in the early 2000's intended to be used as a wastewater treatment plant and produced water treatment plant. The map he displayed showed the Trust lands and the current 16-inch force main that extends east to the Rural Lands West area. He identified that an interim wastewater treatment facility and deep injection site will be built on the land to serve through 2024. The facility will initially have capacity for 4 MGD and will eventually expand to 12 MGD through 2029. Mr. Bellone described the growth needs for constructing facilities and capacity through future decades.

The next map he displayed was the regional water model. He described how the existing 36-inch water main serving Orange Tree and Twin Eagles will be extended, and a 6 million-gallon storage facility will be built. All water through 2028 will come from the regional facilities in the southern and northern part of the County. He explained that there is current capacity of 200 MGD which is

adequate to meet demands through 2020. A 52 MGD capacity will be adequate through 2028. Pumping will serve lands to the east, and a water treatment plant will be needed in the late 2020s.

Mr. Bellone advised that the Collier County Water and Sewer District (CCWSD) provides raw materials including wells, mains, treatment facilities, transmission mains, and collection force mains. Developers provide service lines within a community, and improvements such as lift stations, valves, and hydrants. All internal lines, valves and lift stations must meet Collier County utility standards including new rules for storm resiliency. Once the infrastructure is built, the developers' assets are conveyed to the Water and Sewer District to own and operate.

Mr. Bellone explained that user fees pay for service, operating and maintenance, non-growth debt service, repair and interim production facilities. Impact fees fund anything related to growth including transmission mains, growth-related debt service, and capacity expansion in plants. Collier County is working with new developments in the northeast to advance a portion of their impact fees.

Fiscal Impacts of Infrastructure from Growth

Speakers: Ms. Nilgun Kamp and Steve Tindale, Tindale Oliver

Kris introduced Nilgun Kamp and Steve Tindale of Tindale Oliver. Collectively they have 66 years of experience in transportation planning, long range planning, impact fees, community development, and budgeting.

Ms. Kamp said the first step in fiscal neutrality is to understand the demand and cost of infrastructure compared to tax revenues. This is a focus on the numbers and quantitative variables, not sustainability or environmental impacts. The purpose of comparing potential developments is to understand the impact on the community over the short term and long term.

National research provides lessons learned and best practices. Some of the lessons learned include that models are not perfect and do not capture everything. It's important to be accurate with data and provide reasonable assumptions upfront. Ms. Kamp added that fiscal models exclude other important factors.

Revenue must be considered over the life cycle of development, and allocation is important. It is not the sales point, but rather the people participating. For example, it is not the gas station development, but rather the people purchasing from the gas station that generate revenue. Drivers of revenue are income and wages. Growing communities tend to generate more taxes. Transportation and schools are the highest capital costs, constituting 70-85% of infrastructure costs. The cost of transportation is very expensive. The highest operating costs include public safety and schools. Public safety, such as police and fire support, are the majority of this cost. Schools have their own separate funding. The operating costs must be accurately assumed. These are the types of costs looked at for capital funding.

Ms. Kamp pointed out that demand changes over time and is different for new development in contrast to the average for the entire county. New development typically generates more students and traffic. The cost differential is driven by geography, such as urban versus rural, and persons per household. In Collier County the coastal areas have older and fewer people. Inland Collier County is younger with more families, requiring different facilities.

Ms. Kamp said that some of the issues revealed in this research effort included area variations, density, mix of use, design of compatible uses next to each other, market rate of growth, balance of mix in the market, and inflation rates that examine revenues and costs.

It is important to understand a communities' characteristics and framework before evaluating. Ms. Kamp displayed a graph representing population growth of Florida and Collier County from 1975 and projected through 2045. In earlier years the growth of Collier County was higher at 5.4%, because the base population was lower. As the base population gets higher, the growth rate is more moderate.

Ms. Kamp gave an Orlando example, pointing out the difference in absolute growth and the growth rate. Population data from three areas of Orlando were compared. Plan Area 1 had the highest base population of 211,600 with a projected growth of 35,000 people which is about a .5% annual growth rate. This area has the interstate and infrastructure to support growth. The low annual growth rate of 1.68% in Plan Area 2 can be accommodated. Plan Area 3, the medical area, anticipates a population increase of 40,000 people. The annual growth rate is 4.06% because the base population is low at 17,900 people. This area does not have supporting infrastructure or facilities, creating a great impact, which will affect the actual growth rate versus absolute growth. The growth in the medical area is a higher rate and more challenging to accommodate.

Ms. Kamp displayed age range distribution for Collier County, noting it has a denser population of residents age 60 and older than the overall Florida average. The student generation rate is lower for older counties like Collier County. The age range distribution determines the facilities needed in an area, thus Collier County doesn't need to build as many schools.

Ms. Kamp displayed income per capita and wages per job in Florida and Collier County. Collier County ranked 1 out of 67 counties for income per capita. Income is high in Collier County, but wages are not as strong because Collier County is lacking in commercial mix.

The Collier County tax base is 90% residential properties, and 8% is non-residential. This is likely because Collier County has a lot of valuable waterfront residential area and less commercial opportunity for jobs. Most counties have a tax base of 80% residential and 20% non-residential. Urban counties like Orange County are 60% residential and 40% non-residential.

Ms. Kamp noted that property tax value per capita is healthy, and it's important to keep up that value. The sales tax per capita is productive but losing some ground over time. Income drives revenue, and education drives income. Collier is high in educational attainment and high in

income. This translates to high taxable value per capita. The community should aim to keep the productivity up and pursue productive types of development with a mix of residential and nonresidential uses, parks, open space, interconnected with pedestrian. Well designed development tends to be more valuable.

Ms. Kamp said that fiscal neutrality considers growth rate versus absolute growth, marginal costs versus average cost, productivity and level of revenues generated, required level of service, and quality of life and cost/benefit over time. Urban development is able to use existing infrastructure and reduces cost compared to outlying areas that require more facilities.

Ms. Kamp highlighted the key characteristics to reduce development costs, reduce environmental impacts and enhance revenues. These include destination accessibility, design, diversity, distance to transit, and density (the 5D's).

Ms. Kamp displayed a typical example of a less dense area with a high cost of infrastructure at the beginning of development, and then the cost decreased over time. She explained that the public revenue stream is low at the beginning of development and increases as the community builds out. She added that developer contributions are also a factor, giving a design example of 6 square miles with a density of 2 dwelling units per acre. This community would need the following support facilities: 1/3 fire station, 1/2 elementary school, 1/10 middle school, 1/10 high school, and it would not trigger transit service minimum threshold levels. However, doubling the project density and design to 4 dwelling units per acre in the same 6 square miles affords more: 1 fire station, 2 elementary schools, 1/2 middle school, 1/2 high school, and it meets minimum transit service density thresholds. Once again, if you double to 8 units per acre then the development can afford and support more facilities.

Ms. Kamp explained that sharing facilities can reduce costs, such as designing public school playgrounds as parks during after-school hours. Fire station locations are critical to response times. Compact development makes facilities more efficient, and the operating and maintenance costs can decrease over time. Public expenditures increase for operating costs as facilities get older. If taxes grow, they could outpace the costs.

Ms. Kamp concluded that Collier County has a high income and high tax value. The waterfront development is healthy, but developing inland is a challenge. Rural lands should be developed productively due to the limited initial infrastructure and density. She noted that earlier years of development will have a higher cost, and the right type of development will generate significant revenues over the long-term.

III Questions for Presenters

Dr. Amanda Evans, facilitator, FGCU

Presenters convened in the front of the room for questions and answers, and Dr. Evans facilitated questions from the audience.

An audience member said we have talked about RLSA in a theoretical sense, but let us shift to talking about the RLSA in a practical sense. It is time to understand how the costs will be paid. For instance, there are two state roads in the rural lands, State Road 29 and State Road 82. Will federal and state funding be only for federal and state roads? Will new roads be county roads? How will those be funded? How does the gas tax work?

Ms. McLaughlin said State Road 29 and State Road 82 are on their way with primary funding by the state FDOT. Not all phases are funded yet, but it's moving along with positive expectations from FDOT. The interplay of available of federal, state, county and impact fee funding is complicated off the state system.

Mr. Bosi said generally Rural Lands West gets evaluated by each of the infrastructure providers. At the beginning of a project everyone gets a seat at the table and the applicant presents their plan. Transportation models are used to model the demand associated with the project. All development associated with Rural Lands West will be subject to impact fees to address costs of new roads. They also identify all road segments impacted beyond the local area. The proportionate share of needed improvements must be paid through impact fees. A Developer Contribution Agreement is drafted and the developer fronts money to the County to start a project, and they are paid back with impact fee credits. Utilities, Parks and Transportation use this model.

Steve Tindale, the County's impact fee consultant, said impact fees cannot pay for prior investment, but rather must be proportional and reasonable. Impact fee credits are for right-of-way but not for other types of projects. Location, timing and sequence of a project are all a factor.

The audience member asked for more information about the money that developers "front" for improvements and Category A facilities. Mr. Bosi said that is part of the Developer Contribution Agreements (DCAs), which the public will be able to weigh in on during the Stewardship Receiving Area (SRA) public hearing process. The audience member asked if there is a formula, standard or criteria for the DCAs. Mr. Bosi said a proportionate share ratio is used. Mr. Tindale said the money that is paid up front by developers is considered a credit toward impact fees at time that building permits are pulled.

The audience member asked about the written criteria for impact fees that are considered reasonable and proportional. Mr. Tindale said there is case law. The audience member asked who decides what is proportional and reasonable? Mr. Tindale replied that most of impact fees were once associated with utility companies. The utility companies were requiring big chunks of money to upgrade utility systems. Judges ruled that you can't take care of existing problems, but the fee must be proportional. The audience member asked how "reasonable" is determined. Mr. Tindale said impact fee studies are performed to calculate what is a reasonable fee without overcharging,

and then the County Commissioners adopt the calculated fee at 100%. Collier County has consistently adopted the recommended impact fee at 100% because the County believes that growth should pay for growth. Tindale Oliver has calculated impact fees for the last 25 years. Tindale Oliver only reviews water and sewer fees. Utility rates are calculated by other firms. About two-thirds of the parks, fire, schools, roads, and administrative building impact fees were calculated by Tindale Oliver over the last 25 years.

The audience member asked how Tindale Oliver calculates impact fees. Ms. Kamp said the legally accepted impact fee formula looks at the cost of providing service, how the county is funding infrastructure through taxes, and the balance is the amount that needs to be funded by new growth. The cost is distributed among different land uses. Mr. Tindale said measuring demand and costs is part of the process. The County's numbers are compared to statewide numbers.

An audience member, Brad Cornell, asked about Ms. Kamp's slide depicting the high cost of starting development and then mentioned Policy 4.18 that says all rural lands development must be fiscally neutral or positive. Mr. Bosi said the fiscal neutrality or positive outcome is required at the completion of the development. From a land use perspective, a single-family home uses \$1.20 of every dollar generated in taxes, commercial consumes 65-75 cents on the dollar, industrial uses 30-40 cents. Residential land use is costly. Mr. Bosi said land use budgeting is required in the rural lands with a minimum commercial mix, noting that a top-heavy residential land use pattern at build out is undesirable. A balanced land use pattern including job-creating commercial and industrial uses is preferred. He noted that Rural Lands West proposes 10,000 dwelling units and two million square feet of nonresidential, which will be a better revenue mix over time and should result in a higher internal capture. The premise of the Rural Lands Stewardship Area is for towns to be self-sustaining. Ave Maria was viewed as a bad deal in the first few years due to the poor economy combined with the higher initial costs at the start of a project. But projects with the right land use mix start to have positive or neutral fiscal outcomes toward the end. The land use mix is important to have the balance to be self-sustaining.

An audience member asked if Ave Maria is at that point now? Mr. Bosi said the code requires them to update their fiscal neutrality analysis. They are well on the road to fiscal neutrality. Arthrex medical manufacturing and associated businesses are improving the equation. The internal trip capture has improved since the first five years. Groceries, restaurants, and entertainment are contributing to more internal capture. Ave Maria is reaching maturity and the economies of scale and diversity is forthcoming.

A Facebook Live question was recited about impact fees, specifically, is it correct to say that a developer pays for the development and conveys it over to the County, and then homeowners pay impact fees that pay back the developer? Mr. Bosi said financial obligations with the original developer are typically required to be resolved before turnover to the Homeowners Association.

An audience member asked if agriculture is moving east and north? Mr. Robbins responded that agriculture is moving east and south within FDOT District 1. The audience member asked, “What do you attribute that to?” Mr. Robbins said the eastern shift is due to residential and commercial growth pushing agriculture east. The north to south move within the district (for example, Polk County agriculture moving south) is due to similar development growth and partially because of land, temperature and better suited land in the south for citrus crops. The audience member said that it is concerning about the availability of food and losing food growing areas, noting that California is suffering wildfires, and Florida is a food basket for the country.

The audience member asked what is going to happen when the population shifts from 300,000 to 700,000+ people? Are seasonal factors considered in transportation planning? Mr. Bosi responded that the Annual Update and Inventory Report (AUIR) associated with the Capital Improvement Element is updated annually to assess population growth and what is needed to serve population growth. Developments are required to provide infrastructure needed to satisfy populations moving forward. The Capital Improvement Element is directly tied to concurrency. The County puts a 25% mark up on population to address seasonal influx, and water and sewer puts a higher safeguard mark up because seasonal visitors do tax the system. Waiting for a parking spot is an inconvenience, but needing water to flush your toilet is of primary importance.

Ms. McLaughlin said the population figures are from BEBR. The travel demand model does have a seasonal factor built into it. A specific corridor may be studied, and counts may be taken during high season. The audience member asked if the population coming from the east to the beaches are taken into consideration. Ms. McLaughlin said the current plan and projection is for 160,000 people over a 20+ year timeframe. The complexity of the question is hard to answer in a quick Q & A period. The County is trying to build more complete communities in the east that are intended to capture more internal traffic.

An audience member stated that smart growth and new urbanism is supported, but developers are not catching on or developing in this manner. Developers are creating gated communities, with no support services nearby and everyone has to drive everywhere. A concern of new development in the eastern lands is that it should be contained in new urbanism style development.

An audience member asked out of the total infrastructure costs, what percentage is paid by Developer Contribution Agreements (DCAs)? Mr. Tindale said location, size and rate of development determine the negotiation. The County’s intent is to take these revenues and apply them based on the location, size and rate of development.

The audience member asked, what if developer doesn’t perform? What if the model doesn’t work or if the County has tied up money and someone else wants to come in or the developer wants to renegotiate? Mr. Tindale said if the situation is risky, the money is required to be paid up front by the developer.

The audience member said the biggest concern is roads and schools, stating that the County is putting up money for roads and schools. When the curve is not at the right angle, do you renegotiate? Does the developer not pay everything back? How does it work in this County? Ms. Patterson with Collier County explained that the DCA is not one-sided. The developer either gives the County money, donates land or builds something. There are parameters and restrictions on how DCAs can be done and what projects can be included.

An audience member said there are a number of developments that would like to come on line in the next 10-year period, and asked if the County has a budget for putting in infrastructure. If so, does the county tell the developer to wait? Mr. Bellone said that utilities are different because they are not funded by taxes; user fees fund utilities. If the developer hasn't developed yet, there are no customers. The audience member said that is not the answer to her question. Her question is: does the County make developers wait based on the County's infrastructure budget? She knows that concurrency is in place, but money is finite. Mr. Bosi said concurrency measures the capacity in the system. If a developer wants to move forward now and there is not enough revenue to pay for it, the developer would be asked to pay their proportionate share upfront to move forward now and be credited later.

An audience member asked Mr. Robbins about agriculture shifting from coastal urban areas to rural areas, noting that his study was based on a regional area, and inquired about Mr. Robbins' data of where agriculture will go in eastern Collier County by 2035? Mr. Robbins said projections were not based on a parcel by parcel analysis, just a land use pattern and trends of where shifts would go to the closest available area. Mr. Bosi said two restudies of the Rural Fringe Mixed Use (RFMU) area and the RLSA are addressing the topic of credits to incentivize permanent agricultural production. He said three scales were considered in the original adoption, including property rights, environmental protection and agriculture protection. A suggested amendment from the RLSA 5-Year Review was creating an agriculture credit system to provide for long term viability of agriculture in the eastern lands, noting that most people do not realize the significant economic impact that agriculture has on the County. Mr. Robbins said the shift is not just happening within the district, but some of the shift is happening from the east coast to the west coast. An example of this shift is the new farms near the Seminole Reservation.

The audience member said the reason she is asking the question is because landowners are saying that agricultural production is becoming less viable. Mr. Robbins said some of the land is not viable, and sometimes the crop is not supportable. The study represents an overall trend of land use patterns.

Mr. Van Lengen voiced appreciation for the audience's input and noted the time remaining for the meeting allowed for a few more questions. He added that the County can better identify the population numbers more clearly. The population for the Golden Gate Estates area is projected to double in population from 45,000-50,000 to 90,000 people by 2040. In contrast, the Rural Lands is projected to be 40,000-47,000 people by 2040. The congestion on the roads currently is

primarily from Golden Gate Estates. People are concerned about traffic from the growth in Rural Lands, but growth will not be coming in a concentrated wave like a freight train.

An audience member made a personal observation. She inquired with moving companies and learned that a lot of people are moving north out of Collier County. She noted that the County anticipates growth of about 6,000 people per year and asked if the growth projections consider outmigration? Mr. Van Lengen said yes, growth projections do factor outmigration.

An audience member said agriculture lands are diminishing rapidly in the County. If you are going to develop land, is it a lot easier or cheaper to develop agriculture land? Mr. Bosi said the open lands or agriculture lands are considered the most prime for compact urban development, and that is why an agriculture credit is suggested. Overall the allocation of agricultural land is protected within SSAs. The SSAs create credits based on a formula that considers acreage, the Natural Resource Index score, and land use layers. Most SSAs are brought down to AG-1 (active agriculture activity) or AG-2 (passive pasture activity). The program does try to perpetuate agriculture in the future because we know it is a presence we need in the County.

An audience member asked from the RLSA initial adoption until the 2009 Restudy, what was the acreage loss in agriculture, and what is that number in 2018? Mr. Bosi recognized that there has been significant loss in agriculture. There are macroeconomic issues impacting farming. The farming production from South and Central America and international markets have undercut the ability for some farmers to have a profitable and successful operation. He said there are some factors beyond what we can influence locally, but we can try to make the best regulatory framework possible. Farmers need to be profitable to sustain their business here. Farmers are looking at new strategies to fill the gaps, such as growing specialty products.

Mr. Van Lengen asked the audience for any remaining questions and then thanked the panel for their participation. He reminded the audience of the next meeting on September 27, 2018. The meeting concluded at approximately 8:15 p.m.



Meeting Summary

RLSA Restudy Water Resources

*September 27, 2018, 6:00-8:00 PM, South Regional Library
8065 Lely Cultural Parkway, Naples, 34113*

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen, Collier County Planning and Zoning, welcomed attendees and opened the meeting at 6:05. He described that comment cards are provided and asked attendees to fill in their concerns and comments at the start of the meeting, noting that this will be requested again at the end of the meeting.

Mr. Van Lengen introduced the panel of professionals with the overview that Jerry Kurtz will talk about watershed issues, basin rules, storm and surface water, where the surface water goes and how long it takes to get there, and the County's role. Brad Cook, Section Leader at South Florida Water Management District (SFWMD) will give a regional perspective on water supply planning and permitting through the SFWMD, and the water uses that occur agriculturally and domestically. Steve Messner, Collier County Public Utilities Department, will talk about how water gets from well to faucets and the impacts associated for the Collier County Water and Sewer District as services move east. Kirk Martin, Hydrologist, will discuss how all of these concepts come together, permitted use versus actual use, and an overview of the entire water cycle.

Mr. Van Lengen reviewed the meeting schedule and noted that the presentations at the August and September meetings have a focus on facts related to infrastructure, fiscal impact and water resources. The intent of these meetings has been to provide information that will apply to future meetings and discussions. October and November meetings will be more interactive with topics of sustainable development, what the building environment should look like, lessons learned, Group 4 policies, and Group 5 policies for baseline development in the form of 5-acre ranchettes if time permits. Future meeting content will include the review of Rural Lands policies that the Growth Management Oversight Committee (GMOC) and Board of County Commissioners (BCC) conducted previously. The credit system from Group 1 policies and consensus building will be part of future meetings. Public comments, the 5-year review recommendations and responses from advisory boards will be reviewed as the workshop series wraps up. He noted that January and February may not be the last two meetings, because it may take longer to work through the consensus building phase.

Mr. Van Lengen highlighted that Facebook Live is available for communication during this session, and that Dr. Amanda Evans will facilitate the Q&A portion of this session. Presenters will give their presentations followed by time for questions. Video archives of these sessions are available at colliercountyfl.gov. The RLSA workshop website has summaries and the PowerPoint presentations available, and Mr. Van Lengen noted that all participant feedback and emails are appreciated.

He then introduced Mr. Jerry Kurtz with a brief biography outlining that Mr. Kurtz is an engineer and has been with Collier County for 20 years.

II Presentations

Speaker: Mr. Jerry Kurtz, P.E., Collier County Stormwater Management Section

Mr. Kurtz began his presentation describing the importance of stewardship of water and land and people that make up a watershed. Mr. Kurtz gave an overview of his discussion topics, which include stormwater management rules, basins and each basin's flow, the rural land flowways, and rural land water retention areas (WRAs).

The County's stormwater management program once focused on drainage improvement and now focuses on watershed health management. It's about managing the resource, not just nuisance flooding. Mr. Kurtz's group in the Growth Management Department in the Capital Management group helps keep the County systems up to date and functioning while planning, building, and designing capital improvement projects for the County.

Mr. Kurtz explained the SFWMD manages the larger water systems, and Collier County manages smaller water managements systems such as lakes, canals and ditches. The Big Cypress Basin is managed by both SFWMD and Collier County. Mr. Kurtz's group provides long range and short range planning and maintenance, area master plans and implementation of the watershed management plan, which was finalized in 2011. As funding and resources become available, improvements will be done on the basis of that plan. Staff also reviews rezoning at a high level, considering regional waterflow issues as well as impacts to canal systems and structures. He noted that stormwater management rules of the SFWMD apply in Collier County, and using these rules is good for efficiency and consistency.

Mr. Kurtz displayed a map of the stormwater basins, also called sub-watersheds, identifying there are 22 basins on the map, and there are 51 total basins in the County. In 1990 the County assessed water running off the land, and the rate of release (or discharge) became controlled. In this case, the local County rules supplement the SFWMD rules. The County restricts the discharge rate by ordinance, and the County has added areas to these restrictions over the years. The watershed scale planning effort showed that 16 more sub-basin areas need to be controlled with a discharge rate. These rates apply to all new development. Relative to rural lands, most of the area is

unrestricted, or the base discharge rate of 0.15 cubic feet per second per acre applies. The rates could be reduced by as much as half in the urban area.

Mr. Kurtz said that canals and ditches are more predominate in the urban area compared to the rural area. He displayed a map showing the natural flowways in the rural lands. The Flowway Stewardship Areas (FSAs) will function like canals, meaning the water will be guided to these areas as receiving waterways. As development occurs, the flowways will be studied. The flowways will deliver water to the sensitive receiving areas to the south, the Panther Refuge, Big Cypress Preserve, Ten Thousand Islands, and ultimately the Gulf of Mexico. Mr. Kurtz stressed that this is an entirely different scheme compared to the urban area, adding that the resulting regional flow patterns and water quality must be studied over time to help better understand and manage conditions in the future.

Mr. Kurtz explained that the Camp Keais Strand and the Okaloacoochee Slough are currently used for water management, and as long as this is acceptable and working, then this condition should be kept the same or improved as needed as land uses change. As more information is gathered, the County can adapt and adjust to new needs. Mr. Kurtz has recently heard from a property owner about water building up in the northern part of the Rural Lands Area, which may have resulted from changing water flow through the Okaloacoochee Slough during the rainy season. Mr. Kurtz added that he believes the flowways should have management plans.

Mr. Kurtz said the Water Retention Areas (WRAs) are great features, noting they are designated for current and future water management functions. Water could be guided through them to flow toward sensitive receiving waters. This is the current condition for the most part and is successful. In contrast, the urban environment has natural features that were impacted many years ago, and the situation for the rural lands is better because the watershed approach to water management can incorporate natural features and systems.

Mr. Kurtz described that agriculture operations were historically accustomed to pumping water into massive retention areas, and he participated in some monitoring about 25 years ago and saw how much water can be managed. He concluded that these are good areas to use for water management today and into the future.

Speaker: Mr. Brad Cook, South Florida Water Management District

Mr. Van Lengen introduced Brad Cook with a brief biography. Mr. Cook joined the South Florida Water Management District (SFWMD) in 2012 and has 25 years of environmental and water resources management experience.

Mr. Cook introduced his two main topics: water resource planning (water supply planning that the District conducts and the Lower West Coast Water Supply Plan) and water use and consumptive use permitting. Water resource planning is determining if there is enough supply to meet the demand. He explained that the SFWMD has five regional areas, including the Lower West Coast, for which water needs are assessed over a 20-year planning horizon. The timeframe

for the recently completed 2017 plan is through 2040. The plan evaluates strategies and sources to meet future water demands and is updated every five years.

Mr. Cook displayed a general hydrogeologic cross section of water sources in the area. The water table and Lower Tamiami aquifer are called the surficial aquifer system. Sandstone and Mid-Hawthorne are intermediate aquifer systems. The deepest aquifer typically tapped for water supply is the Floridan aquifer system.

Mr. Cook displayed a chart showing the use of each aquifer system. Every five years when the Lower West Coast Water Supply Plan is updated, the demand projections are updated for six different types of water use including public supply, domestic and small public supply, agriculture irrigation, industrial/commercial/institutional, recreational/landscape irrigation, and power generation. Agriculture has the highest demand of water supply.

Mr. Cook explained that the population growth projections have been slightly reducing over the past ten years. As population increases, the demand is increasing at a lower rate due to conservation measures, reduced per capita demand and use of reclaimed water. Conservation measures are through Block rate structures, efficient fixtures, and irrigation restrictions. Reuse water is also known as reclaimed or irrigation quality (IQ) water. Reuse water can also be used in place of other sources, such as potable water. Reduction in per capita demand has been noted since 2000. Currently in the Lower West Coast area, around 80 million gallons per day (MGD) is reused for irrigation of residential lots, golf courses, parks, and other green space.

The 2017 Lower West Coast Water Supply Plan concluded that 2040 demands can be met by the proper management, conservation and implementation of additional water supply projects. Future demands through 2040 can be met through implementation of projects identified in the plan. Mr. Cook noted that the SFWMD website provides extensive information, and the plan, which is about 400 pages in total, can be found at sfwmd.gov/lwcplan.

Consumptive use permitting is based on Florida water law, which gives SFWMD the exclusive authority to regulate consumptive use of water. There are no property rights to water. Users must obtain a water use permit to have a water right, and permits must be renewed. The water use permitting rules are found in Florida Statutes Chapter 373 and Rule 40E-2 of the Florida Administrative Code (FAC), and the Water Use Applicant's Handbook is a supplement to the rules and regulations.

Mr. Cook explained the permitting process beginning with the application for a water use permit, which is subject to a "three-pronged test." The water use request should be reasonable, beneficial and consistent with public interest. Common water use permitting is for public water supply, mining, industrial, and irrigation. Private single-family homes, fire protection, and reclaimed water are exempt from consumptive use permitting.

Permit types are based on the amount of water needed for a particular purpose, or the allocation. The Noticed General Permit is for the smallest allocation, and permits are issued for twenty years.

There are three tiers of Individual Permits, which can require reporting. These are issued for five years for new uses to evaluate if there are issues with the permit, and up to twenty years for renewals.

Mr. Cook explained that the SFWMD evaluates water use permits by determining how much water is needed for a particular project. The Blaney-Criddle spreadsheets have several input parameters used to calculate water demand for irrigation permits. While public water supply is based on population and per capita use, other types of uses are based on project specific calculations. An applicant must provide a site map with pumping facilities, details on the well, proof of legal control, reclaimed water availability and water use accounting for projects over 100,000 MGD and an application processing fee. For projects with proposed uses over 3 million gallons per month, an impact analysis must include analysis of existing users, availability, and other factors. Mr. Cook elaborated on the methods of performing the water resource availability analysis, describing how the Maximum Developable Limit (MDL) is evaluated. The top of the aquifer and historical water levels are determined. MDL monitoring is performed on an ongoing basis, especially in dry season when water levels are at their lowest. He referenced that United States Geological Survey (USGS) hydrographs show water levels since 1976 for some wells.

Mr. Cook explained how modeling is done to assess drawdown, and he displayed an exhibit based on aquifer hydraulic parameters and pumpage rates. Mr. Cook explained how saline water intrusion or migration is assessed. Wetlands are evaluated to ensure water use won't affect the hydroperiod or affect water levels in wetlands. Some permits can include conditions for water level monitoring. Soil and groundwater contamination are also evaluated during water use permitting review.

The water use permit outlines the allocation with annual and maximum monthly allocations, duration of the permit, facilities, and permit conditions like monitoring or other restrictions. Mr. Cook concluded by sharing that the website sfwmd.gov contains a lot of related information.

Speaker: Mr. Steve Messner, Collier County Public Utilities Department

Mr. Van Lengen introduced Steve Messner, Director of Collier County Public Utilities Department, noting Mr. Messner's impressive understanding of the logistics and current system in Collier County.

Mr. Messner provided an overview and stated Collier County provides potable water services to 73,400 service connections. Collier County has two water treatment plants, four water storage and re-pumping stations and three wellfields.

Collier County water treatment plants have 140 full time employees with an annual budget of nearly \$30 million and capital budget of nearly \$43 million. The service area is 240 square miles. There are over 800 miles of water main in Collier County. Nine billion gallons of water is distributed or 24.5 million gallons per day (MGD). The highest day demand this year was 32.9 MGD. The treatment capacity is 52 MGD so there is room to grow.

Mr. Messner explained that raw water sources include fresh water from the Tamiami aquifer, which the County accesses with 36 wells located 60-110 feet below the ground with 30 MGD capacity in that wellfield. The brackish water is sourced from the Hawthorn Aquifer zone 1 and lower zone with 65 wells located 300-900 feet below the ground with 60 MGD capacity. Mr. Messner pointed out that brackish water is not seawater.

Mr. Messner displayed a map showing the two water treatment plants in Collier County referred to as the North Plant and the South Plant. The North County Water Treatment Plant was constructed in 1993 with 12 MGD using fresh water and a membrane softening water treatment process. The North Plant was expanded by 8 MGD in 1999 with reverse osmosis treatment, and average production is 12 MGD for this facility. Mr. Messner explained the treatment processes, noting there are two different treatment processes under one roof, making the treatment plant “hybrid.”

The South County Water Treatment Plant located on County Road 951 was constructed in 1984 with 4 MGD with a conventional treatment process or lime softening process. The plant was expanded to 12 MGD in 1998. In 2004 the plant expanded again, adding 8 MGD with reverse osmosis treatment. In 2009 the reverse osmosis treatment process added 12 MGD for a total 32 MGD. Average production in fiscal year 2018 was 12.5 MGD. The plants are targeted to produce a 50/50 split, keeping the water fresher and maintaining compliance. Mr. Messner explained the plant’s treatment process, noting it is also a hybrid plant.

Conservation methods include the use of irrigation quality (IQ) water. Five billion gallons of IQ water is used for irrigation annually for golf courses parks, some residential communities and roadway medians. This represents 90% of water used in Collier County, and Mr. Messner noted that IQ water can also be used for potable water.

Speaker: Mr. Kirk Martin, Water Science Associates

Mr. Van Lengen introduced Kirk Martin, Senior Hydrologist with Water Science Associates. Mr. Martin consults for the Rural Lands West project, and he has been a consultant for the Collier Water and Sewer District for many years.

Mr. Martin’s discussion topics included improved water resource management in rural lands, existing systems, and saltwater intrusion. He began by explaining how the Collier County Water and Sewer District is a progressive public water, wastewater and irrigation water utility. The County is a leader with early adoption of reuse, desalination, and aquifer storage and recovery (ASR). The County’s integrated resource management is innovative. The County’s system is 1/3 fresh, 1/3 brackish, 1/3 reuse. He explained the differences in saline, brackish and fresh water. He explained the water table and the Tamiami Aquifer, which is very productive in Collier County. With 52 MGD installed capacity and 30 MGD in use, there is capacity available in the system.

Mr. Martin said the future Northeast Water Treatment Plant is planned for a brackish water source. Collier County capped the use of fresh water as brackish and reuse water sources increased. He noted that brackish water comes at a more expensive cost.

The IQ system consists of reclaimed plus supplemental groundwater. This accommodates the dry seasonal needs. Currently over 95% of the water used is going to reclaimed reuse. He described how there is a north and south facility currently and a planned facility in the northeast.

The IQ system reduces competition for limited resources, reduces demands on the potable system, removes surface water quality impacts, and provides aquifer recharge every day, particularly providing aquifer recharge near the coast which helps keep saltwater at bay. The IQ source is brackish or inland, providing advantages to the coastal developed area.

On the topic of saline water, Mr. Martin said saline water is considered water with over 10,000 chlorides. The SFWMD map is wrong in that the City of Naples wellfield is fresh water, not salt. Mr. Martin displayed a second map that he said is also inaccurately labeling salt water. Mr. Martin displayed a third map showing topography from sea level to 12 feet above sea level, indicating where the coastal ridge and lower lying areas are in the County.

On the topic of connate water, Mr. Martin said this is water that was entrapped in the ground and did not get flushed out. He said 120 thousand years ago, the Collier County area sea water was 25 feet higher than it is today. Mr. Martin explained the dynamics of hydraulic entrapment of connate water. He explained that a modeling effort is underway for wellhead protection in Collier County showing net recharge up or down among the water table and the aquifers.

Mr. Martin said that most water considered saline in the Lower Tamiami aquifer is not saline but very mildly brackish (approximately 300-500 mg/l chloride). Saline water in the Lower Tamiami aquifer is not intruded, but trapped connate water from the last high sea level stand.

He went on to say there is no apparent movement of saline water in Collier County. Use of the connate water is actually good for the resource, and sea level rise is not projected to increase saline water intrusion. Groundwater and sea level are on a continuum. As sea level rises, the entire system will rise. A model is being developed for Palm Beach County, revealing the issue with sea level rise is not saline intrusion, but rather flooding.

Mr. Martin said the RLSA provides owner incentives for preservation, restoration, connectivity of wetlands, flowways, and wildlife habitat. Water use reduces significantly when agriculture converts to new communities. Mr. Martin described the Rural Lands West project and the components of the 4,000-acre new town. He pointed out the historical agricultural water use compared to the planned demands. He displayed that water levels vary between 10-15 feet in the aquifers, and there has been no decline in the aquifer over several years.

Mr. Martin described the plans for utility services in northeast Collier County. He pointed out four projects that equate to 7 or 8 MGD of potable water demands, noting there is a lot of capacity in

existing County facilities, and there will eventually be a permeant plant in the northeast part of the County.

Mr. Martin explained that conversion of agriculture acreage will significantly reduce current water demand. Collier County will provide potable water and wastewater services to Rural Lands West. Rural Lands West will meet reduced irrigation demands from onsite wells, and it will provide additional fresh water to the County system.

Mr. Martin summarized that Collier County has a long and highly respected history of prudent and progressive water resource management. The County provides an area-appropriate mix of fresh groundwater, brackish groundwater and reclaimed water to meet total water demands. Conversion of RLSA lands in eastern Collier County provides a new opportunity for improved water supply management. Development of proven sustainable freshwater supplies in the RLSA for public utility use will provide flexibility in County water sources, reduce concentration and impacts of freshwater withdrawals, reduce reliance on expensive and high maintenance brackish sources, expand opportunities for provision of critical IQ water supplies, and provide new resources for coastal aquifer recharge.

III Questions and Comments

Dr. Amanda Evans, Facilitator, FGCU

Mr. Van Lengen called the presenters to the front table to allow the audience to ask questions. He explained Rural Lands West is an application that is already under review, and it makes sense to discuss aspects of the Rural Lands West project for illuminating questions.

Dr. Amanda Evans said Facebook Live questions are welcomed.

Brad Cornell asked if the County or the SFWMD is doing any modeling on a regional basis to demonstrate water resource or wetland impacts? Do we have enough monitoring wells? Mr. Martin said the permitting process is rigorous and a regional perspective is important. Large wetland areas are in beautiful shape and the resources are proven. Mr. Cook said the SFWMD is doing some Lower West Coast modeling that takes into account the entire service area. In reference to the monitoring wells question, he said the District is looking at the Maximum Developable Limit (MDL), however there is restriction in the number and location of monitoring wells. He concluded that the SFWMD would always like to have more data.

An audience member asked Mr. Martin if converting agricultural land to residential is a good thing, then why keep agricultural land? Mr. Martin said there is push back by the agricultural industry on conversion of agricultural land. The agriculture industry has changed a lot over the last 20 years to minimize fertilizer and water use. The Rural Lands West project is one particular project in which the conditions will be better after development. He is not suggesting that residential use is better than an agricultural use, but it is just different.

An audience member asked Mr. Martin, if Rural Lands West develops the optional 50-hole golf course, is there an analysis for the water withdraws for the golf course irrigation? Mr. Martin said the original plan did not have the golf course, and the result of adding an 18 or 36-hole golf course holes offsets houses, and it was not a significant change.

An audience member asked when you compare Rural Lands West agriculture withdraws are you looking at actual use or permitted use in the water use studies? Mr. Martin said both; 30 MGD permitted and the use has been historically that much.

An audience member stated that the history of water use is intriguing, but the addition of 300,000 people will have implications and much of the problems along the coast are due to runoff. Can the County take another 300,000 people? Mr. Martin said the volumes, rates and points of outfall will be exactly the same. There is room for more storage and more controlled discharge in the rural lands. Mr. Kurtz said the impact will be less in the rural lands. Impacts are generated in the urban area and the County is always playing catch up with the runoff since areas built before regulations were in place in the 1970s and 1980s. Mr. Kurtz said there are lessons learned from the urban area and it's exciting to use the natural lands in the rural areas by doing proper water management at no expense to the natural lands.

An audience member asked a question about the two flowways and Camp Keais Strand. With Rural Lands West to the west and Ave Maria on the east, is there a flowway management plan for Camp Keais Strand? Mr. Kurtz said he does not know, and Rural Lands West is still under review. Mr. Kurtz said he thinks there should be a flowway management plan because the flow should be monitored at a minimum and managed if needed. He does not know if there will be a management plan in the future. Mr. Kurtz doesn't have first-hand knowledge if there have been management plans in the past, but doing land use changes should involve County, state and federal consideration of how the flowways are managed. Tidal receiving waters don't have a management program or policy, but now downstream receiving waters need a water management plan. The first phase of a management program would be annual inspection, but there are a lot of areas without any type of inspection.

The audience member voiced concerned that Corkscrew Swamp is draining more rapidly and losing water, and considering the new development, the lakes can draw water faster and cause Corkscrew Swamp to drain sooner. Mr. Kurtz said it's a common concern. Flood protection level of service has to be balanced with resource protection so there is no over-draining. Stormwater used to be considered a nuisance, and it is now an important resource and will someday become a drinking water source. The question of the Corkscrew Swamp draining involves a regional approach to water management. Assessing the flow in the watershed is a concept that water managers deal with every day.

An audience member commented about retaining agriculture and asked if water reduction is a benefit to wildlife habitat and connectivity? Second, on Mr. Kurtz' reference to a management plan, the audience member suggested that this can be an initiative that the County goes forward with by creating and implementing management plans. She had a question for Mr. Martin on how

Rural Lands West will provide additional fresh water? Mr. Martin said the reduction in agricultural water use will provide fresh water to Collier County, not to the system.

Mr. Van Lengen asked for an explanation of the costs for production of water. Mr. Messner said of the three water treatment options (lime softening, membrane filtration, and reverse osmosis of brackish water), reverse osmosis is the most costly. It takes power to drive the pumps to make the reverse osmosis work. The lower the water quality, the higher the cost of treating the water. Technologies are getting better but there is additional cost for treating brackish water supply.

An audience member commented that solar panels should be included on these plants. She asked if development is allowed on the County's 51 stormwater basins? Mr. Kurtz said yes, the basins cover the whole County. The audience member asked when someone wants to develop in the basin, do they have to do certain things? Mr. Kurtz said the maximum discharge rate determines how the designer designs the project. This applies to remaining parcels that are yet to be developed, and the resulting water management system is more robust and the runoff is released at a reduced rate. This controls adverse impact on the existing system, so the burden goes on the parcels yet to be developed to do a more robust water management system. Low impact development forces treating the runoff on the site to relieve the burden of conveying the water rapidly off the property.

The audience member asked if the County will require more pervious systems? Mr. Kurtz said that is a growing trend and mentioned that the upcoming sports center and Rural Lands West projects should be considered relative to perviousness.

An audience member referenced that farmers are upset about retaining water south of the lake and asked how did farmers determine they would convert their land? Mr. Kurtz said the decisions by property owners are based on their own reasons.

An audience member asked how to access the projects being referenced in the eastern lands? Mr. Martin said Oil Well Road, just east of Golden Gate Estates. The audience member asked if Vanderbilt Road is going out that way? Mr. Van Lengen said access is off Oil Well Road just past the Estates. The audience member asked if the developer is going to pay for the road? Mr. Van Lengen said that is a topic for another workshop.

IV Adjourn

Mr. Van Lengen thanked everyone for their participation and encouraged the audience to complete the comment cards. The meeting ended at 8:05.



Meeting Summary

RLSA Restudy Public Workshop Sustainable Development

*October 25, 2018, 6:00-8:00 PM, South Regional Library
8065 Lely Cultural Parkway, Naples, 34113*

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen, Collier County Community Planning Manager, opened the meeting at approximately 6:05 p.m. stating that the discussion will be about the built environment. He explained that the presentations will be in sections, allowing for questions and answers before each presenter. Sustainability, smart development and some of the Group 4 policies will be the main concepts. Then the audience will be asked what they would like to discuss at the next meeting. Mr. David Weeks will present and discuss population concepts. Mrs. Laura DeJohn will discuss growth patterns and how development has occurred in Southwest Florida. Mr. Van Lengen will discuss selected provisions of Group 4 and Group 5 policies. Finally, Dr. Amanda Evans will facilitate the group discussion.

Mr. Van Lengen explained that the next meeting on November 29th will further explore sustainable development. David Genson representing Barron Collier will discuss successes, challenges, and lessons learned in developing Ave Maria. The Growth Management Oversight Committee (GMOC) meets next on December 6th and the Committee will be discussing the direction for future meetings that will be aimed at building consensus on any proposed policy changes. The public is encouraged to participate at the GMOC meeting. The first meeting in 2019 will include revisiting Group 1 policies and consensus building.

Mr. Van Lengen highlighted opportunities for participation, noting that Facebook Live is available for anyone not able to attend meetings in person. Past meeting archives including workshop summaries, PowerPoint presentations and videos can be accessed at www.colliercountyfl.gov/gmprestudies. Feedback can be emailed to RLSArestudy@colliercountyfl.gov. Comment cards are collected at the end of the meeting and are appreciated.

II Population Concepts

Speaker: Mr. David Weeks, Collier County Comprehensive Planning Manager

Mr. Weeks introduced statutory requirements that apply to every county in Florida, including the requirement for a growth management plan (GMP). The County must have population projections and estimates, both permanent and seasonal. The County is required to use the state's population figures unless otherwise approved by the state to use an alternative methodology. Collier County uses the medium range projections provided by the state. When the GMP was adopted in 1989, population growth was explosive, and the high range of population growth projections were used. Growth eventually slowed down, and the mid-range projections are now used. Collier County determines land needed for future growth that far exceeds a 10-year period. Mr. Weeks explained that the latest population estimates available are for 2017. For the Rural Lands Stewardship Area (RLSA) the population for 2017 is 5,000 people and the projected 2040 population is 47,000. The population is concentrated in Ave Maria or small communities north of Immokalee along State Road 29, State Road 82, and in small farms south of Immokalee. The population difference anticipated between 2017 and 2040 equals an average increase of 1,800 people per year over the 23-year timespan.

Historical growth for Collier County dates back to the 1930 census, with fewer than 3,000 people. Over time, there have been explosive ten-year periods of growth ranging from 65% to 126% increases in population. From 2010 to 2018, there was a 16% change and growth is now tapering off. Mr. Weeks summarized that population projections and estimates in 2018, 2013, and 2008 portray a rather steady growth rate for Collier County.

Collier County's permanent population projection methodology is from the published estimates and 5-year increment projections received from the University of Florida Bureau of Economic and Business Research (BEBR). The County uses census ratios in small geographic areas known as Traffic Analysis Zones (TAZs) that consider dwelling units and permanent population, divided to identify the ratio of persons per household, and then certificates of occupancy are monitored each year for determining annual population growth in the TAZ. This gets aggregated based on geographic area and then officials arrives at population estimates. The estimates are published in April, and then converted in October considering the County's fiscal year cycle.

Mr. Weeks said that Collier County's peak season population is 20% more than the October permanent population. The 2018 projected population is 442,420, which reflects a 74,000 person increase due to season. Some areas of the county experience greater seasonal influx than others. Areas such as Immokalee have seasonal influx due to migrant laborers and trucking industry employees associated with agriculture activity in and around Immokalee.

The concept "build it and they will come" is a spin-off from the movie Field of Dreams. In reality, before development occurs, the developer considers demographics, the national, local and regional economy, infrastructure capacity (available water, wastewater, roads, fire and police protection), regulatory changes that could impact the success of the development, and competition. Other considerations include events like red tide that could impact decisions by people who might relocate to this area. Unless causes of issues are addressed, the issues can deter development. Mr. Weeks explained that regulatory matters also impact development, such as County land use allowances

including the RLSA program, state and federal permitting, and subsequent County approvals and development of the infrastructure and building permits, before vertical construction can begin.

To wrap up the topic of development absorption, Mr. Weeks explained that when a project gets approved it may be a year or several years before necessary permits are obtained to allow construction of infrastructure and buildings. When a project is approved, it doesn't mean immediately it will be developed or that there is demand for the development. Some PUDs have obtained approval and sat dormant for 10-12 years. For example, Lely Resort at US 41 & Collier Boulevard was approved in 1985 with 10,150 dwelling units; today the residential units are about halfway built out and the commercial components are about halfway built out. The developer estimated a 40-year absorption, which would conclude in 5-7 years from now.

Mr. Weeks said that experience shows the larger the project is, the less likely it is that the approved number of dwelling units will be actually built. Lely Resort might be built out as far as the land is considered at 6,500 dwelling units although it has approval now for 8,946 units. The theoretical approval is what is approved, and the actual buildout is what is actually built. While it might be feasible in the future to redevelop or replace existing development with new or higher density development, it is typical for larger projects not to build all units they are authorized to build. Remaining units are called ghost units by the County. Ave Maria was approved in 2004 with 11,000 dwelling units. These projects take time even after the permitting is obtained. Rural Lands West will take decades to build.

Mr. Weeks then opened discussion and questions from the audience. An audience member asked how many units have been built in Ave Maria? Mr. Weeks said there is a regulatory glitch. Ave Maria is not required to submit an annual report to the County. Annual reports are required for Planned Unit Developments (PUDs). Ave Maria was a Development of Regional Impact (DRI), but the Florida legislature did away with DRIs a few years ago. The audience member asked if communities in the RLSA will have to submit an annual report? Mr. Weeks said no, RLSA communities will not submit an annual report, and that is something the County should fix. An audience member asked if a Development Order (DO) count is available? Mr. Weeks said the County could get a DO count, but it is not prepared for the meeting tonight. Mr. Van Lengen said he would obtain the requested Ave Maria information and post on the website.

III Growth Patterns

*Speaker: Mrs. Laura DeJohn, Director of Planning and Landscape Architecture,
Johnson Engineering, Inc.*

Mrs. DeJohn introduced herself and indicated she has been working on behalf of Collier County in support of the RLSA public workshops. She said that she will present a high level review of the Group 4 policies, and quoted that the Group 4 policy objective is to enable conversion of rural lands to

other uses in appropriate locations, while discouraging urban sprawl, and encouraging development that utilizes creative land use planning techniques by the establishment of Stewardship Receiving Areas (SRAs). To gain perspective about growth patterns and community development, look nearby to downtown Naples and the early mid-1900s large-scale platting of Golden Gate Estates. From a planning perspective these developments were not sensitive to nature because the homogenous grid did not accommodate any existing land or water features.

The outcomes of historic Collier County land development plans can be seen in Collier County today. She depicted piecemeal land development examples such as two-acre Estates lots and PUD communities that have been pieced together across the County's landscape over time. Developers can anticipate the type of people that want to move and live here and can design land to accommodate these people.

She pointed out an example of development proposed to fill in where very limited space is left to develop. The piecemeal development pattern is being perpetuated, and is also seen moving further east into Lee County along Corkscrew Road. Residential development projects displayed along Corkscrew Road illustrate how a large scale outcome results from several individual projects being approved over time, based on their own individual merits. These developments aggregate to form a 6,000-acre area where 6,000 single-family homes will be built, with no consideration for commercial uses or services.

Relating this information back to the study areas, the RLSA was originally agricultural land subdivided into 5-acre tracts where individual homesites would be allowed across the landscape. What came about from the RLSA program was an effort to do something better. If you want to do something to protect rural lands, it should be well planned, creative and not piecemealed. Geographically the RLSA is a very large area that will not be built in a short amount of time. There are multiple private interests involved in the RLSA, family legacies, land values and property rights that need to be protected. Public interests include ecological values in this area, fiscal impacts of growth and community sustainability.

Mrs. DeJohn explained that the design with nature concept is a fundamental planning theory. The evolution of Babcock Ranch is an example of designing with nature. This community evaluated and identified the most valuable land areas, displayed as green areas on the map, and then determined the areas for development as seen in the gray areas on the map. The footprint for developable areas is based on protecting the most valuable areas. This concept was the same foundation for RLSA. High quality environmental areas were the areas set aside for protection first, then the remaining areas are available for property owners to use as allowed per their property rights, such as agriculture or other types of development. As described previously, individual owners doing what they want with their property results in piecemeal development. The RLSA approach is a much more difficult formula than the piecemeal approach. The RLSA requires more intense collaboration with property owners to plan smarter growth.

Mrs. DeJohn queried, do RLSA strategies accomplish this balance as described? Is the development being done sustainably? Are green development goals met? Are sustainable design standards implemented? Are smart growth and compact walkable communities available? Sustainability is making sure that development meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability also protects the environment, including maintenance of agriculture, and upholds the rights of property owners. Mrs. DeJohn cited the American Planning Association Policy Guide on Smart Growth that this approach to growth and planning can not only deliver dynamic attractive communities with greater choices for consumers but can be a powerful tool for farmland, open space and habitat preservation.

Policy 4.6 includes these sustainably concepts, including protecting the environment, maintaining agriculture and being cost-efficient. Mrs. DeJohn said the Restudy effort is an evaluation of whether there are better methods to accomplish the objectives. As a member of the Development Services Advisory Committee (DSAC), she said efforts are underway to explore green development options through the Florida Green Building Coalition. This is an example of how Collier County is continually looking into sustainable development concepts.

An audience member said it was useful to see the history and the development overtime which were not of best practice. He said we are now looking at projects in this area which are huge in scale, and asked if designing or thinking of things so large in scale is the appropriate thing to do? Mrs. DeJohn said the alternative to large scale planning is the piecemeal style. She said we have to ask what is the best way for Collier County to move forward with growth because growth will continue. Large scale planning is a thoughtful approach. Piecemeal development is a less thoughtful approach. The audience member agreed, but still thinks Rural Lands West is too large of an area for planning. He worries that communities and their needs are evolving, so it does not seem logical forecast for something so large.

Another audience member said it seems the proposed development concepts are aspirational, but are you actually working with developers to achieve these ideas? Mrs. DeJohn said she is not a consultant for developers in the County's rural areas. However, other consultants have the same information and follow the same program and the goals outlined in the GMP. The purpose of this Restudy is to make sure the RLSA goals are being met. Do the current goals outlined in Policy 4.6 protect our natural environment, maintain economic viability of agriculture and discourage sprawl? If not, the purpose of this Restudy is to look for improvements and alternatives to meet the outlined goals.

Another audience member recommended to provide the following information to DSAC. She said we should look at how we can force higher density planning and mixed-use development planning to actually get walkable and bikeable towns. That didn't happen in Ava Maria and it's a random sprawl town. She said in Ave Maria you cannot get everywhere with a baby carriage. A better idea is to plan a community with one or multiple town centers with the right amenities and density highest at the town center, then density should reduce as it goes out. The audience member stressed the need to rework the rules to maintain high density in town centers. She said in terms of

planning communities, one of the problems is developers build giant golf communities here, and we need to do more community planning like Mercato. The audience member said we need shops, churches, restaurants, daycares, and things communities need to thrive located where people can access within the community so residents do not have to leave their community. Ava Maria residents must drive so far to reach a food store. Mrs. DeJohn appreciated the thoughtful comments and indicated that density is not going to be a matter fully addressed by the DSAC. She also indicated that Mr. Van Lengen will discuss density and requirements next, which may help address her ideas.

Another audience member asked where does stormwater runoff go and where are detention ponds located? What happens to the water? Mrs. DeJohn said we had a great presentation last month from the County Stormwater Manager, Jerry Kurtz, and he described historical methods to channel water off of properties through canals efficiently, but how the RLSA is different because of lessons learned. In the RLSA, there are areas that allow for continuing the natural stormwater drainage patterns of the area.

IV Selected Development Provisions

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen said the Group 4 policies are broad with 28 policies and topics that include program goals, location, compatibility, credits and infrastructure. He noted that comments cards are on the tables, and he encouraged participants to suggest policies to discuss at the next meeting. He referred to the paperwork that was provided on the audience tables outlining Group 4 policies. Also provided was highlighted material reflecting the five year review recommendations. He encouraged the audience to review all of the material, and indicated the highlighted goals and others are equally important. Group 4 policies include location of SRAs, method of approval, administration, master plan requirements, goal statements, compatibility, transportation requirements, SRA components, public facilities, coordination with the School District, infrastructure, fiscal neutrality, credit requirements, public benefit uses, Area of Critical State Concern (ACSC) special provisions, historical resources, and lighting.

Mr. Van Lengen summarized that the Group 4 policies as they exist today, the recommendations from the five year review committee, and Attachment C are the printouts provided on the tables. Mr. Van Lengen said his presentation will focus on the forms of development referenced in Policy 4.7, and that Attachment C shows the level of goods and services required for towns, villages, hamlets and Compact Rural Developments (CRDs). He said the Congress of New Urbanism was a source for determining sizes of required goods and services, and a more recent tool is the (Collier Interactive Growth Model (CIGM)). He noted that Ave Maria and Rural Lands West provide more goods and services than the minimums required.

Mr. Van Lengen highlighted that towns are defined as areas 1,000 to 4,000 acres, villages are 100 to 1,000 acres, hamlets are 40 to 100 acres, and CRDs need to be better defined. Some elements, such

as public schools and parks, are not counted toward the acreage in towns and villages. Benefits of compact and mixed-use development provide a diversity of housing, housing affordability, internal mobility, external mobility, scaling for goods and services, economic development, community character and fiscal benefits to local government and taxpayers.

Towns, as described in Policy 4.7.1, provide an urban community level of goods and services, human scale, balance of land uses, mixed-use town center, bicycle and pedestrian facilities, parks, full range of schools, and corporate offices. The Land Development Code has provisions and detailed requirements to regulate development. Collier County welcomes suggestions for improvements. He clarified that towns cannot be located in Areas for Critical State Concern (ACSC).

He said that Land Development Code Section 4.08.07 more specifically provides for transects from core to edge. Architectural standards, landscape, streetscape, lighting, building heights, setbacks, parking and environmental standards are also provided in the Land Development Code.

The five year review provided ideas for improvement on Policy 4.7.1 including the requirement for a more formalized "Mobility Plan" to address transit, park and ride facilities, and increasing the town size range to be 1,500 to 5,000 acres. The Rural Fringe Mixed Use District Restudy has suggested to add a housing analysis requirement to address workforce accommodation in the towns and villages so they are more self-sufficient.

Villages are smaller than towns with a lower threshold for goods, services and parks. Villages still require a village center focal point, interconnected sidewalks, parks or public green space, and are an appropriate location for schools. The five year review provided ideas for improvement in village criteria, including an increase in the size range to 100 to 1,500 acres, requiring a mobility plan similar to towns, and allowing corporate office and light industrial as an option in villages.

In the discussion of hamlets, Mr. Van Lengen said that these could be eliminated. An example in the vicinity of Brantley Boulevard was shown. The structure for hamlets is similar to the piecemeal growth pattern. Mr. Van Lengen said he thinks hamlets should be eliminated but is open to discussion on why they should be kept.

Compact Rural Developments (CRDs) support concepts like eco-tourism and accommodate transient lodging facilities. Mr. Van Lengen said that uses in CRDs need to be better defined. The CRD designation is generally a catch-all to accommodate different uses in the future. An audience member said a concern is trailer communities. Mr. Van Lengen agreed that it is important to look at the definition of CRDs more closely.

The requirement for goods and services is at different levels for towns, villages and other forms of development ranging from 10 to 65 square feet of gross building area per dwelling unit. The idea is to have dynamic levels of activity within the towns and villages. The mix of uses formula requires residential development to be supported with goods and services and employment and civic uses that in turn contribute to mobility, efficiency and character.

Mr. Van Lengen pointed out that Group 4 policies are about SRAs, which is where development goes if and landowner opts into the RLSA program. Group 5 policies are for landowners outside of SRAs who do not choose to own, buy or spend stewardship credits. Underlying zoning is still in effect, and Group 5 policies provide tightened restrictions and requirements when landowners develop without invoking RLSA Overlay. Mr. Van Lengen noted that the policies are structured such that an owner cannot petition the Board of County Commissioners for development of a gated community unless they go through the stewardship program and develop according to the criteria applicable to SRAs.

When not developing through an SRA, various uses are allowed within the baseline zoning of Agriculture including farming, mining, recreation, cemeteries and other conditional uses. Residential uses are allowed at a density of one unit per five acres under Agricultural zoning.

Mr. Van Lengen summarized that Group 5 policies impose strict environmental rules and restrictions for development, including that site clearing and nonpermeable surfaces are restricted and an Environmental Impact Statement is required. Property within the ASCS is subject to even tighter restrictions. Wildlife surveys and habitat management plans are also required for non-residential development.

V Group Input

Mr. Van Lengen initiated the question for the audience to discuss: Do Towns, Villages, Hamlets and Compact Rural Developments provide the right pattern of development within the RLSA? If not, what changes would you recommend?

Dr. Amanda Evans said comments on Facebook Live will be included in the feedback tracker and encouraged the audience to continue participating. Dr. Evan reminded the audience that all comments are recorded in the feedback tracker.

An audience member asked if any information is available on the number of people needed to support specific uses, like a gas station, hospital, or grocery store. Mr. Van Lengen said the CIGM models what is needed in terms of goods and services to support certain uses. Developers know that projects like Ava Maria need a Publix and that it will not be profitable for a while, but that need must be fulfilled. Roughly 12,000 people are needed to support such a use.

Dr. Evans followed up linking this discussion to the group question, guiding the audience to provide a consensus on what policies work and which need improvement. Dr. Evans encouraged the audience to provide suggestions for improvement, noting that it is difficult to make recommendations without specific suggestions for improvement. Understanding that some people are not comfortable speaking within the group, she mentioned the comment cards provided on the table for written feedback.

Dr. Evans pointed out to the Facebook Live audience that this meeting is not about the Rural Lands West project, and is about the Rural Lands Stewardship Area restudy. While the public's comments

on the Rural Lands West project are important, she said they are not applicable for the restudy effort being discussed at this meeting.

After the audience work session, the feedback of the work groups was presented, starting with the Purple Group. The Purple Group reached a consensus that villages and towns make sense, and hamlets and CRDs do not make sense. Action items included: requiring rules for high density at town centers and cores, with variable density moving outward; offer incentives to get more open land; certain essential services are needed before occupancy; and stronger zoning laws are needed to fill in gaps, such as rules on pervious surfaces. The Purple Group supported variable affordable housing options and green building standards. This group wanted to see developers that are experienced in town center development. Finally, the Purple Group expressed concern and wants the Board of County Commissioners to hear the recommendations presented and pass them.

The Yellow Group reached consensus that hamlets do not make sense and require too much supporting infrastructure and services. The AARP self-sustaining livable community model was recommended for villages. The group said a provision should be provided for wildlife to travel and use their natural habitat without crossing streets and major highways. Questions included: what demographic is anticipated and what services do they need? Are they transient, seasonal, elderly, or aging in place?

The Green Group reached consensus on requiring a ¼-mile radius for walkability for all neighborhoods with amenities at the center. Mobility efficiency should be considered, and cars may not even be needed. Minimize automobile centrality. Government support should be provided for amenities. Streamline the process to make sure people have what they need. Increase minimum densities and increase clustered development. The separation between SRAs should be defined so they are not sprawling together and rather so that they have edges. Amenities must be put in developments even if the services must be subsidized, and maybe tax dollars can be provided to support the town center at the beginning stages of development.

The Pink Group had consensus items including: staging permitting so that not all developments are constructed at once; do not permit new developments until current residential projects reach a defined level of development buildout; and the developer should be on the hook for infrastructure during all the years of buildout. The group inquired will this zoning overlay bring new urbanism or more sprawl? Will the overlay bring the green space desired? Who is the target audience? Consider development placement relative to HSAs and other sensitive areas. The groups recommended action items include: restudy the credit methodology and the RLSA worksheet to take into account best available science for panthers and other habitat; the ¼-mile average walkability radius is important; green space and smart growth patterns are desired.

The Blue Group reached consensus that: SRA policies should include requirements for new urbanism principles to encourage compact and walkable towns; towns that are six miles long with golf courses should be held to requirements that make them compact and walkable; adopt more criteria to guide the development of towns, villages and hamlets; require architectural standards for

towns and villages; the minimum density should be increased to encourage walkability; landowners should not earn credits for impacting habitat in WRAs or primary panther habitat; the master mobility plans should be more detailed in SRAs to show interconnected street networks; SRAs should not be built in primary panther habitat; and the best available science needs to be used.

Dr. Evans said reoccurring topics, such as panthers and other protected species, will be revisited in future meetings. Mr. Van Lengen said the wrap up discussion of Group 1 Policies will cover the credit system and panther habitat scoring and that the County needs to consider a third-party opinion on the best available science on future panther viability.

VI Adjourn

Dr. Evans said the comments and discussion has been very valuable and encouraged additional comments to be provided by email or on comment cards. The meeting ended at approximately 8:10 p.m.



Meeting Summary

RLSA Restudy Public Workshop Discouraging Sprawl and Encouraging Responsible Development

*November 29, 2018, 6:00-8:00 PM, South Regional Library
8065 Lely Cultural Parkway, Naples, 34113*

I Introduction

Speaker: Mr. Kris Van Lengen, Collier County

Mr. Van Lengen opened the meeting and welcomed the audience at 6:10, making note of an accident on US 41 that might cause delay in attendees arriving. He welcomed newcomers to the meeting and invited them to contact him if they have any questions or want more background information.

He outlined the evening's agenda, which will include his introduction, followed by an explanation of case studies of new towns and villages by Laura DeJohn, and a presentation of lessons learned at Ave Maria by David Genson. Questions will be welcomed after each speaker, and an opportunity for discussion at the end of the meeting will allow for more input if time permits.

Mr. Van Lengen explained that the County audio/video staff could not attend this evening, and audio of the meeting will be available on the County website. Summaries and PowerPoint presentations can be found on the website also. He added that the RLSArestudy@colliercountyfl.gov email address can be used for sending comments, and comment cards can be filled out and returned during the meeting as well.

In January the venue will change to North Collier Regional Park, however space is not available January 24 and is available January 31. The date of January 31 is also a conflicting time for the audio/video staff. Mr. Van Lengen advised that the Growth Management Oversight Committee mentioned they would like to see a meeting held in Immokalee or Ave Maria, and he asked if a night meeting in Immokalee or Ave Maria is favorable. An audience member commented that previously meetings in the eastern part of the County were held in the morning. By a show of hands, about half of the audience was in favor of an evening meeting in Immokalee or Ave Maria and about half the audience was opposed.

Mr. Van Lengen described that the February and March workshops will be consensus building meetings held at North Collier Regional Park. The consensus building process will be reviewed with

the Growth Management Oversight Committee, and feedback is welcomed from the audience members.

Mr. Van Lengen said that feedback from the October workshop was great. He mentioned the following items that were suggested by the audience members at the last workshop: density and sustainable town centers, minimum density requirements, ¼-mile radius walking distances per neighborhood, tax incentives for earlier commercial phasing, requiring wildlife crossings where appropriate, separation between towns and villages, addressing decreased habitat value of Stewardship Sending Areas (SSAs) adjacent to towns, not approving too many projects in close timeframes, attracting visionary developers, and considering emergency evacuation planning.

Mr. Van Lengen highlighted questions from the October workshop. The first question was about the Area of Critical State Concern (ACSC). Mr. Van Lengen explained the base zoning in the Rural Lands area is agricultural zoning, which allows certain conditional uses such as mining, recreation, and schools. Residential development is allowed at one unit per five acres. He explained that the ACSC covers 750,000 acres, and roughly 60,000 acres of the RLSA is in the ACSC. The rules for the ACSC restrict uses and limit site alteration to 10% for any kind of development. The maximum density is one unit per five acres. The State of Florida must review any zoning change, regulation change or building permit. The State review is a double protection to make sure rules are followed.

The second question from the October workshop was about population. Mr. Van Lengen said approximately 1,600 certificates of occupancy have been issued in Ave Maria out of the maximum of 11,000 units allowed within the project. This maximum does not include assisted living or dormitory units.

The rate of growth was also a question at the October workshop. Mr. Van Lengen displayed figures from the Collier Interactive Growth Model (CIGM) showing population growth in five-year increments. The data revealed approximately 47,000 people are projected in 2040. By 2070 when the Habitat Conservation Plan expires, the area will be halfway to buildout. Golden Gate Estates currently has 45,000 people and is anticipated to be 90% built out by 2040. That number is a concern for traffic, which illuminates the need for places for work, shop and play.

Another question Mr. Van Lengen addressed was about the cost burden of RLSA development. Displaying slides from the Tindale Oliver presentation from the August workshop, Mr. Van Lengen explained that when a new development begins, the total cost for infrastructure is greater than the revenue generated by impact fees and ad valorem taxes. Public subsidy and developer subsidy are greater than revenues at the beginning of the project. At a certain point in time, the revenue starts to exceed the expenditures. He said that the RLSA program requires that fiscal neutrality must be demonstrated at the time of development application for approval by the Board of County Commissioners.

Mr. Van Lengen referenced a final question from the October workshop about the market for towns and villages, and he said Mr. Genson's presentation will address this.

An audience member asked about revenue neutrality or positive revenue, which can usually only be achieved through industrial or commercial development, because residential property cannot usually generate enough to cover the cost of services. Mr. Van Lengen agreed that that non-residential development is an important part of the fiscal neutrality equation and planning process.

An audience member said that it would be nice to show Ave Maria's actual fiscal data for today's conditions and projected future conditions. Mr. Van Lengen said the conditions of Ave Maria were discussed at the June 26th BOCC meeting as item 11B (around the 4:46 mark on the meeting video) and encouraged the audience to listen to the tape. Mr. Van Lengen said he cannot answer where the balance of reaching fiscal positivity is for Ave Maria.

Commissioner Taylor asked how to plan for fiscal neutrality if the financial details are not known. Ave Maria has been there for ten years and it would be important to know if the fiscal goals are being met. The Tindale Oliver presentation is so subjective, and there are so many variables that cannot be controlled. Mr. Van Lengen said it is important to know the answer, and the experts must be relied upon at the time of application. It's the Board's duty to make sure the models do work out. In the past, the Fiscal Impact Analysis Model (FIAM) was jettisoned because it was assumed to be subject to manipulation.

An audience member asked if the timeline of fiscal input and output has been prepared or provided for Ave Maria, and how much has the County and the developer contributed by year, and the payback? Mr. Van Lengen said it was a great suggestion to find out more information on Ave Maria.

An audience member asked since this meeting is not filmed, whether the PowerPoint slides will be available online, and if the meeting is being taped. Mr. Van Lengen said yes, the presentations and the audio of the meeting will be posted on the County website.

An audience member said many states including northern Virginia have been through this, and it would be helpful to see the fiscal neutrality data from those other communities. Mr. Van Lengen asserted that Tindale Oliver does such studies, and such information was presented at the August 23, 2018 RLSA workshop. He added that another consultant, Urban3, is scheduled to perform a return on investment analysis for Collier County in 2019. An audience member commended the County for bringing Urban 3 onboard to provide a return on investment analysis.

An audience member said Smart Growth America does work on fiscal neutrality all over the country. As to build out periods, the audience member noted that Rural Lands West proposes a 20-year build out period and questioned if 20 years should be used as the fiscal neutrality timeline for Rural Lands West. An audience member from the town of Columbia, Maryland said that community started developing in 1965 and was near build-out but had not reached build-out in the 2000s. She concluded that large urban developments do not get built out, for example, Reston is still not built out, and the timeframe for buildout will likely be longer than 20 years.

II Survey of Sustainable New Towns

*Speaker: Mrs. Laura DeJohn, Director of Planning and Landscape Architecture,
Johnson Engineering, Inc.*

Ms. DeJohn gave an overview that she'll present case studies focused on development standards as defined in the RLSA program and as they are being developed in actual towns and villages. She noted that comparing and learning from other communities is helpful, and she asked the audience to write down standards that they like and dislike during the presentation to compile suggestions and feedback. Mrs. DeJohn presented five different town examples, based on the RLSA definition of a town per the Attachment C handout provided to the meeting attendees at each table.

She noted that towns are the largest development type allowed in the RLSA, and the first example of a town to be reviewed was Ave Maria in Collier County. The RLSA town size criterion is 1,000 to 4,000 acres, and Ave Maria is at the top of the size range with 4,000 acres excluding public benefit acres. The allowable residential unit range for RLSA towns is 1,000 to 16,000 units, and Ave Maria is approved for 11,000 units. The density range allowed for RLSA towns is 1 to 4 dwellings units per acre, and Ave Maria is permitted with 2.75 dwelling units per gross acre.

An audience member asked how the density figure was calculated. Ms. DeJohn said it was calculated by dividing 11,000 units by 4,000 acres. She noted that some areas of the project will have clustered development with a higher density, and other areas will be large open areas. The density is calculated according to the project's gross acreage. Standards are not in place to mandate higher densities or minimum densities near town centers.

Ave Maria was approved for non-residential development including: 600,000 square feet of retail; 510,000 square feet of office; and 600,000 square feet of business/employment. The RLSA town criterion for open space is 35% of the entire project, and Ave Maria provides 45% of the project as open space.

RLSA towns are to include a full range of housing types, and Ave Maria includes single and multi-family housing types. The minimum goods and services ratio (restaurants, shops, etc.) for an RLSA town is 65 square feet per dwelling, and Ave Maria has nearly double with 112 square feet per dwelling. The minimum park ratio for an RLSA town is 200 square feet per dwelling, and the proposed community parks for Ave Maria provide 294 square feet per dwelling. Civic and institutional type buildings must be provided with at least 15 square feet per dwelling in an RLSA town. Ave Maria exceeds this standard with 367 square feet per dwelling, attributable to the university, church, government buildings, and school sites. Water and wastewater services must be centralized for RLSA towns, and this is achieved at Ave Maria through its own private utility provider. Transportation requirements for RLSA towns include connectivity, an interconnected sidewalk system, and connection to transit, which are all addressed by the Ave Maria plan.

Mrs. DeJohn said she will highlight four more towns, followed by a side-by-side comparison of the communities.

She explained the next example is Rural Lands West, which is proposed but not yet approved by the Collier County Commissioners. The size of this project is at the high end of the allowable range with 3,964 acres excluding any public benefit areas. Similar to Ave Maria, 10,000 units are proposed which equates to a density of 2.51 dwelling units per gross acre. Proposed non-residential development includes: 800,000 square feet of retail; 450,000 square feet of office; 250,000 square feet of business/employment; 132,000 square feet of hotel; and 250,000 square feet of medical office and hospital. The minimum 35% open space for RLSA towns is proposed to be met in Rural Lands West.

The standard full range of housing types is also proposed to be met in Rural Lands West, with one-third of the housing units proposed to be multifamily and two-thirds proposed to be single family. Rural Lands West proposes more than doubling the minimum goods and services ratio for RLSA towns with 138 square feet per dwelling proposed. Parks are proposed to be more than double the RLSA town standard with 518 square feet proposed per dwelling. The civic and institutional provision is proposed to be met with 21 square feet per dwelling for civic uses plus 106 acres for public school sites.

An audience member asked if golf courses were considered parks. Ms. DeJohn said that golf courses are counted towards open space, but are not counted as parks.

The water and wastewater systems will be centralized according to the Rural Lands West application, and transportation systems are generally proposed to meet RLSA criteria, however transit service is still to be determined.

Ms. DeJohn introduced the third example, Babcock Ranch, noting it is in Charlotte County. She said that development is underway following initial approval in 2007. The expected build out date is 2045. This project is 13,631 acres and therefore much larger than the standard town size for Collier County. The project contains areas designated as villages, hamlets, and a town center. Preservation areas like those classified as Habitat Stewardship Areas or Flowway Stewardship Areas in the RLSA are located inside the Babcock Ranch community in the form of greenways. Roughly 6,500 acres of greenways are within the 13,631-acre Babcock Ranch project boundary.

Nearly 18,000 units are proposed at Babcock Ranch. Given the open spaces and preserves within the project boundary, the gross density is brought down to 1.31 dwelling units per gross acre. Density is allowed to be up to 24 dwelling units per net acre in the town center and up to 16 dwelling units per net acre in villages and hamlets. Non-residential development is proposed to include: 1.4 million square feet of retail; 3.5 million square feet of office; 650,000 square feet of industrial; 360,000 square feet of hotel; 177 hospital beds; and 418 assisted living units. The minimum open space to be provided at Babcock Ranch is similar to the RLSA town standard at 35%.

The full range of housing types proposed in the community include accessory dwellings, such as garage apartments and guest houses, which are important for providing more housing choices.

There is a commitment that 10% of units will be affordable or workforce attainable, and satisfaction of this commitment is addressed through the developer performing and submitting a housing analysis.

The minimum goods and services ratio for RLSA towns is 65 square feet per dwelling, and Babcock Ranch is permitted for 294 square feet per dwelling. Parks are proposed in the form of community parks, mini-parks, neighborhood parks and community/regional parks at three times the Collier County standard of 200 square feet per dwelling.

Ms. DeJohn pointed out that Babcock Ranch is a Development of Regional Impact (DRI). DRI's are subject to a regulatory process through which specific developer commitments are determined. Substantial detail is provided for civic and institutional uses in the DRI approval, such as the number and size of school sites, educational service centers, law and fire rescue buildings, sheriff substation site, EMS vehicles, and library contributions. These contributions are eligible for reimbursement of impact fees. Civic uses do not count toward the maximum allowable non-residential development.

For Babcock Ranch, central water and wastewater must be provided at time of Certificate of Occupancy. Transportation requirements are defined in detail within the DRI approval, and an internal capture goal of 55% to 70% is identified in the traffic analysis. An elaborate trail system of sidewalks and on- and off-road multiuse paths is provided, and an internal autonomous vehicle program is being pursued by the Babcock Ranch developer.

Additional commitments for the Babcock Ranch development that are not addressed in RLSA town criteria include: pattern books to establish development standards at each phase of development, low flow fixtures, one zero energy model home, and compliance with Florida Green Building Coalition or equivalent standards.

The Babcock Ranch Community pattern book is aspirational in nature, and it conveys to the regulatory agencies, the county and to the public what is envisioned for the community. A pattern book is pictorial including diagrams, development standards, and examples of how the development is intended to look and feel.

Ms. DeJohn provided a series of the Florida Green Building Coalition standards, noting that achieving compliance with the standards is based on a scoring system. For full review of all the standards and program criteria, Ms. DeJohn referred the audience to the organization's website FloridaGreenBuilding.org. She summarized the program criteria, noting the environmental protection category contains the most standards. Circulation is a separate category with ten standards for measurement and scoring. The Utilities category has nine standards including green power, irrigation standards and a conservation approach to utilities provision. Amenities is another category that addresses features such as golf courses, landscaping, and community gardens. The category of Covenants and Deed Restrictions has standards to help engage homeowners in maintenance of the green aspects of their homes and community. The category

of Education addresses the need for education through provision of materials or educational staff members within the community.

An audience member asked if compliance with Florida Green Building Coalition standards is required. Ms. DeJohn affirmed that compliance with Florida Green Building Coalition Certification or equivalent standards is a condition of the Babcock Ranch DRI approval. Another audience member asked how all this information relates to sustainability. Mrs. DeJohn said that having a development that complies with Florida Green Building Coalition standards is a way to be closer to achieving the objective of sustainability, which is to see that resources are protected in a way that future generations are ensured to have the resources they need.

Another audience member asked if the County Commissioners or the final report from these restudy workshops would recommend to include green standards because it would be a progressive move. Ms. DeJohn replied that the audience input and feedback help to drive recommendations. Dr. Amanda Evans said that these workshops are structured to provide information and get audience input, collect feedback, and ultimately use it to arrive at a meaningful outcome for the RLSA Restudy.

Another audience member requested a show of hands by those whom agree that the County should require compliance with green development standards, and a majority of audience members raised their hands.

Mrs. DeJohn introduced the fourth town of Haile Village Plantation in northern Florida near Gainesville, noting that the community was approved in 1992 and comprises 1,700 acres with approval for 2,700 units. The gross density is 1.6 dwelling units per gross acre, however townhomes are allowed at a density of up to 16 dwelling units per acres. The town is approved for 160,000 square feet of retail and office space, which manifests in 48 different businesses.

The community's open space is increased because it includes 54 golf holes. A takeaway from this exercise is that marketing drives perception on what is good new urbanism planning practice. New urbanism makes up a limited part of this larger golf course community. But having been developed for over 20 years and having seen success, it is worth comparing how this community has developed against the RLSA towns criteria.

Haile Village Plantation has a variety of housing types including live-work units, accessory dwellings, and units within a 50-acre mixed use village center. There is no calculation provided for the square footage of community parks; a village green anchors the village center. The civic and institutional components of this development are limited, with a 3,200-square foot town hall owned and operated by the developer as a for-profit event space. Space is also provided for a post office, sheriff's office and homeowners association office.

Ms. DeJohn said she did not find water and wastewater utility information, but it can be assumed that public utilities are available given the site's close proximity to Gainesville. The transportation system is characterized by narrow streets to promote slower traffic and walkable conditions. The

developer has measured internal capture, finding that 23% of single-family home trips are captured internally. There is also a system of alleys and lanes with an emphasis on pedestrian passageways from neighborhoods to the village center.

Ms. DeJohn presented Abacoa as the final town example. Located in Jupiter, Florida, Abacoa started developing in 1995 and is anticipated to build out soon. Measuring 2,055 acres, Abacoa is roughly half the size of Ave Maria and of the proposed Rural Lands West project. Abacoa was originally approved through the DRI process, with 6,325 units permitted and density range of a minimum of 3 dwelling units per acre and a maximum of 16 dwelling units per acre in the urban residential areas. The allowable non-residential development includes: 1.75 million square feet of workplace; 841,000 square feet of retail; 217,720 square feet of office; 130 hotel rooms; a 4,009 seat movie theater; and the 7,500 seat Roger Dean Baseball Stadium.

The open space in Abacoa is just under 25%, and this includes golf course area. Common use areas are required at a rate of 3%, or minimum of three acres, per neighborhood, and a minimum one-acre public square is required per neighborhood. This form-based approach helps achieve the desired outcome of visible and accessible green space versus the unpredictable outcome of applying a general acreage threshold.

A full range of housing types is provided in Abacoa; a minimum of 10% of all units must be multifamily. The RLSA town criteria of 65 square feet of retail and office per dwelling is exceeded with 167 square feet per dwelling. Additionally, Abacoa has 277 square feet of workplace per dwelling.

A community parks ratio could not be calculated, nor could the civic and institutional square footage, however institutional assets include the Florida Atlantic University Honors Campus and other school sites. Abacoa has centralized water and wastewater systems, and transportation connections are provided given the community's adjacency to Interstate 95 and other main roads, along with a system of connecting sidewalks and paths. A Tri Rail station is also proposed.

Ms. DeJohn summarized the towns with a display of the attributes of each example compared to the RLSA town criteria. She noted the presentation will be online for those that want to study or compare in depth at a later time.

She then focused on RLSA criteria for villages. Villages are a smaller in size than towns, and there are currently no villages in the RLSA. The first example she presented was Habersham in South Carolina. The RLSA standard for village size is 100 to 1,000 acres, and Habersham is 266 acres with 950 dwelling units, which yields a density of 3.6 dwelling units per gross acre. Non-residential development includes 77,895 square feet of retail, restaurant and office space. The minimum open space is 27%. A full range of housing types and parks are provided. The ratio of goods and services provided per dwelling units exceeds the RLSA village standard by nearly three times.

Neighborhoods in RLSA villages must have a minimum of 1% of gross acreage in parks and public green space. Habersham requires parks and public green space in the forms of: parks and squares

in the neighborhood center, parks and playgrounds in neighborhood general areas, and parkways in the neighborhood edges. Civic and institutional space is also required in the neighborhood center and encouraged adjacent to forests or wetlands at the neighborhood edges. Habersham has a centralized water and sewer system, and the transportation system is characterized by narrow streets, on street parking, and walking trails.

The second village example was I'On, also in South Carolina. This community is 243 acres with 750 dwelling units, and a density of 3.1 dwelling units per gross area. Non-residential development includes 30,000 square feet of retail and office space. Open space acreage data was not available; open space is provided in natural open areas, a wetlands corridor and creek, lakes and recreational facilities, and pocket parks.

I'On has a range of housing types including dwellings as small as 950 square feet and as large as 6,000 square feet, which provides flexible and affordable housing options. The square footage of goods and services provided exceeds the RLSA village standard of 25 square feet per dwelling, and the village center includes a mixed use main street and a central square. Eight sites are reserved within the community for civic and institutional buildings such as community meeting hall, school and church sites.

I'On is a suburban infill site with available central utilities. Streets are narrow, and the "marshwalk" is a trail that provides connections through the community's natural areas.

Baldwin Park in Orlando, Florida was presented as the third example village. The site is 776 acres and approved for 3,500 dwelling units. The density of 4.5 dwelling units per gross acre exceeds the maximum density for RLSA villages of 4 dwelling units per acre. Baldwin Park is approved for 200,000 square feet of retail, one million square feet of office, and a 54-acre mixed-use village center. Ample open space is provided with 250 acres of lakes and 200 acres of parks and green space.

Baldwin Park's variety of housing types includes a range of units including some within a vertical mixed-use context. This community has a high ratio of goods and services with 343 square feet of retail and office per dwelling. No data was available for civic and institutional uses. Baldwin Park was formerly the Orlando Naval Training Center, and utilities are centralized. The transportation system is characterized by a grid network and an extensive trail system.

Ms. DeJohn summarized with a side-by-side table comparing the three example villages, which can be viewed in the PowerPoint presentation available on the County's website.

Ms. DeJohn concluded with a series of take-aways learned from the examples. She said the Collier County standards are quantified, formula driven and measurable as provided in Attachment C. The outcomes from the example communities reveal there are aspects of placemaking that are not formula driven but rather are more qualitative and subjective, such as the placement and form of green space in the community.

Ms. DeJohn reviewed some potential options for adjustments to improve RLSA town and village criteria. The RLSA density standards may be adjusted to require concentrated densities in core areas such as town or village centers. The RLSA housing type standards may be adjusted to require housing market analyses or to establish minimum thresholds for multifamily housing or affordable housing if a mix of housing types is desired. Locational standards could be added for non-residential development based on a critical radius in proximity to housing for a more walkable and bikeable environment. The minimum goods and services per dwelling could be increased based on the evidence of the case studies.

An audience member asked if imposing certain standards would cause developers to stop building gated communities. Ms. DeJohn said that Mr. Genson can address this question based on market conditions during his presentation. She added that she has not seen standards such as increased density or connectivity requirements result in fewer gated community projects. The gated community phenomenon exists because history has proven that these are a community type where homebuyers choose to buy homes.

Another audience member said the examples provided have low density, yet are somehow walkable. She suggested shrinking the size of the towns and increasing density.

Another audience member agreed with higher densities concentrated at town centers and gradually reduced densities at $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ mile radius distances, because this would make towns more walkable.

Another audience member asked whether the example communities have been successful. Ms. DeJohn said the examples were considered successful case studies from organizations such as the Urban Land Institute, American Planning Association and the Congress for New Urbanism. She said success is measured relative to the community, its context and the people living in the community. This is a good question to ask, but there is no scoring system to determine success and no single model that can be replicated with any guarantee of success.

Another audience member asked why the Seaside community was not presented? Ms. DeJohn said she did not present Seaside or Celebration because they are unique projects that were not developed organically, and she purposefully researched examples that would be relevant to the type of development that goes on in Collier County.

Ms. DeJohn said another take-away is the concept of adjusting RLSA standards to add locational criteria for green space. Also, an impact fee reimbursement for developer-funded civic, government or institutional facilities such as schools or an EMS station is a tool to get those facilities established. She said that mobility standards can be improved by adding a requirement for multimodal analysis that considers bicycle and pedestrian paths between residential and non-residential areas, an off-road greenway/trail system, and other non-auto oriented transportation modes. She added that Pattern Books can be implemented to improve the review and approval process and provide more opportunity for innovative designs. Another option is to add a

requirement for compliance with Florida Green Building Coalition Certification or equivalent standards. Finally, she said imposing a system for monitoring performance and annual or biennial reporting would help ensure that standards are implemented and maintained.

III Ave Maria Lessons Learned

*Speaker: Mr. David Genson, Senior Vice President and Director of Development
Barron Collier Companies*

Mr. Genson said he has been involved with the Ave Maria project since 2002. He explained that his presentation will cover how the project started and the current conditions, and he'll address some of the questions that were brought up during the evening. Ave Maria is entitled as a 4,000-acre town, with approval for: 11,000 homes; 1.2 million square feet of office and retail; 600,000 square feet of light industrial; and a 6,000-student university. The population is estimated to be 30,000 people at buildout. Mr. Genson said Ave Maria is considered a self-sustaining town with a private water and sewer utility system, four privately developed parks, and 15 miles of privately developed roadways. The roads within Ave Maria are privately owned and maintained. He said by the end of 2018, roughly 2,000 homes will have been purchased, and those homes amount to \$44 million in impact fees paid to Collier County.

Mr. Genson gave the site's history beginning in April 2005 when the Ave Maria lands were farm fields. In 2009, development was underway and the current population is 6,000 people. Home prices range from \$200,000 to \$450,000 with an average price of \$320,000. The homebuilding trend equates to an average of three hundred homes constructed per year. Mr. Genson cited that Ave Maria has been ranked as the #1 selling community in Southwest Florida for four years. Also, this community has been ranked as one of the Top 40 Selling Master Planned Communities in the United States for the past three years.

Mr. Genson described the progress of the community as of 2017, including development of Coquina at Maple Ridge which is a denser neighborhood at approximately six units per acre. He described how Publix was an important business to establish early for residents, and showed images of the town center. He explained how Arthrex has been a major impact with 400,000 square feet of building area supporting 1,500 employees. He said that several hundred of those employees have purchased homes in Ave Maria, resulting in short commutes for employees. The Park of Commerce now has a gas station and medical office buildings in place, and the university will have the largest incoming freshman class ever in the coming year.

Mr. Genson described the range of neighborhood types within Ave Maria, including estate homes, condominiums, and neighborhoods that are oriented toward families, active adults, and the workforce. The market for Ave Maria is not just a single demographic; it serves everyone including retirees, young families, and active adults. Amenities include parks, water parks, softball fields, and soccer fields that constitute a \$17 million investment by the developer. A fitness center and

other amenities are also provided. Tours are offered to the general public for exploring wildlife in preserved lands around Ave Maria.

Mr. Genson addressed topics raised during the meeting. Regarding mixed use development, he described how Ave Maria has 70 units above retail ground floors in the town center, and this development type has been problematic. The idea of residential units over commercial ground floors seems appealing, but in reality people do not want to live above establishments that generate odor and noise. Based on experience with the mixed use development form in Ave Maria, Mr. Genson said it is not desirable to most people in the general marketplace, and it has not been very successful. He said new urbanism concepts with front porches and alleys are nice, but they are not working in Ave Maria because that form of development is too expensive. Enticing people to travel 20 miles from Naples to live in Ave Maria cannot be successful if the costs to live there are too high.

Mr. Genson explained that Ave Maria offers housing that is affordable. Many buyers are coming from Lee County, and roughly half of buyers are from the east coast because the commute to work along I-75 is easier than the experience of commuting on the east coast. Ave Maria is a more convenient, safe and affordable place for this commuting population.

Mr. Genson gave an overview that Barron Collier Companies has 80,000 acres in the rural lands of Collier County. The town of Ave Maria constitutes 4,000 acres and 1,000 additional acres are public benefit area. In order to develop Ave Maria, roughly 16,000 acres of stewardship sending areas (SSAs) were dedicated at no cost to the County or the taxpayer. The terms of the easement on the SSAs ensure that nothing can be built or developed on those lands. This balance of environmental protection in exchange for development of communities is what makes the Rural Stewardship Lands Area program a success for the whole County.

Mr. Genson addressed the notion that higher densities should be concentrated to promote the idea of a walkable community. At Ave Maria, there are 300 to 400 homes within ¼-mile of the town center. He said the higher densities are not feasible everywhere because the development pattern becomes too costly and overbearing. He said neighborhood centers outside the town center provide some degree of convenient access to services.

An audience member asked if any of the neighborhood centers have been built with retail uses. Mr. Genson affirmed that the Del Webb community clubhouse includes restaurant space that is open to the public.

On the topic of buildout, Mr. Genson said that a 20-year horizon is not realistic. At the rate of 300 homes per year, it would take roughly 30 years to build the remaining units in Ave Maria.

On the topic of fiscal neutrality, Mr. Genson said that Oil Well Road is always mentioned as a negative issue. He gave an explanation on the history of Oil Well Road, noting it was a two-lane congested road prior to development of Ave Maria. He said the widening of the road was needed for many years regardless of the addition of Ave Maria. He said Oil Well Road did cost the County

money upfront. The original developer contribution agreement contemplated that all the impact fees of Commission District 5, including Golden Gate Estates and Ave Maria, were supposed to fund Oil Well Road. In 2012 the County Manager said that many other projects are in need of the District's impact fee funds, therefore it was limited so that only Ave Maria impact fees became the funding source for Oil Well Road improvements.

Mr. Genson highlighted that utilities infrastructure at Ave Maria is private and not County funded. Community parks are private, yet community park impact fees are paid to Collier County. He emphasized that the developer has not made money on Ave Maria. At one point, Ave Maria was costing the developer \$30,000 per day to subsidize.

On the topic of green development standards, Mr. Genson was in favor of incorporating such standards in the RLSA program. He mentioned that some people express concern about impacts of Ave Maria on the water table, and he explained that the prior use as farm fields consumed greater amounts of water than the permitted level of water use for Ave Maria.

Mr. Genson supported that the County should examine Ave Maria to help formulate ideas during the restudy process, noting that examples of what does and does not work can be gathered from experience at Ave Maria. He concluded that Ave Maria is a long term project, and the developer will continue for many years to see the project through.

An audience member asked if a small gas station, basic food store, and drug store should have been established in the community earlier. Mr. Genson said the community started in 2007 and the Publix and gas station opened in 2009. The recession impacted the community, evidenced by the fact that the gas station closed and only 30 homes were sold in 2009.

The audience member said that Reston, Virginia started with a successful town center. The developer did not collect rent from the grocery store vendor for the first five years, and the store provided an important service to the community for those years. Mr. Genson said Barron Collier Companies also subsidizes the Ave Maria town center, noting the commercial lease rate of \$5 per square foot versus \$40 per square foot in other areas of the County during the recession. The developer still helps tenants with subsidies during the summer months.

An audience member asked if it was a good business decision to build in eastern Collier County, and will Rural Lands West have the same problems? Mr. Genson clarified that Rural Lands West is proposed by Collier Enterprises which is a different entity from Barron Collier Companies. He said that people will continue to move to Collier County and the growth should be accommodated through developments that embody sustainable, smart growth principles. This restudy is about determining how to develop correctly and with foresight.

Mr. Van Lengen asked Mr. Genson to clarify his statements about mixed use development. Mr. Genson clarified that vertical mixed use has not been successful, but horizontal mixed use with housing, retail and employment opportunities in proximity to one another is good for balance

within the community, and it supports a healthy internal capture rate to reduce vehicle miles travelled.

An audience member asked about Mercato as an example of vertical mixed use development, noting that affordability is key to securing residents for a vertical mixed use project. She suggested that marketing to the right population and providing units at densities that make them affordable would be a more successful model. Mr. Genson said increasing density is the best way to help make units more affordable, especially in coastal Collier County. He said leaders are starting to recognize and understand this issue. He cited examples of an apartment building developed with a density of 100 units per acre in St. Petersburg, and another development with a density of 75 units per acre in Sarasota, noting that these examples are aesthetically pleasing additions to those communities.

An audience member asked if it would be more economical if the vertical mixed use building was taller, making units more affordable? Mr. Genson said the Oratory is what drove the proportions and building heights in Ave Maria's town center. He affirmed that buildings with more stories help make the units more affordable.

An audience member asked why apartment buildings are not in place where parking lots currently exist near the Oratory? Mr. Genson said there are townhouses planned in the vicinity of the referenced parking lots. He added that bicycles and golf carts are the popular transportation method when Mass is held at the Oratory.

Commissioner Talyor complimented Barron Collier Companies for how they resolved the controversy over the Jackson Labs project. She said that the efforts taken to bring Arthrex to the Ave Maria community speaks to Barron Collier Companies' business acumen. Mr. Genson acknowledged the significance of the efforts to secure Arthrex as part of the community.

IV Adjourn

Mr. Van Lengen said that the County will be interested in working with Barron Collier Companies to further understand the fiscal aspects of development in the RLSA. He welcomed the audience members to return and participate at the next meeting in January, noting that the meeting date and location will be posted online once confirmed.



Meeting Summary

RLSA Restudy Public Workshop Requested Review/Input: Group 1 and other Policies

*January 31, 2019, North Collier Regional Park, Exhibit Hall
15000 Livingston Rd., Naples, 34109*

I Introduction

Speaker: Kris Van Lengen, Collier County

Mr. Van Lengen, Collier County Community Planning Manager, opened the meeting at approximately 6:10 p.m. and gave appreciation to the audience for attending. He offered assistance as needed to access information on the Collier County website.

He explained the meeting is a revisit of Group 1 Policies, and that audience members also provided some suggestions on topics to cover at the meeting, which have been incorporated in the agenda. These added topics address policies on the credit system and easements related to Stewardship Sending Areas (SSAs). He highlighted that Policies 3.11 and 3.13 were requested for discussion, and they address restoration and water retention areas. He noted that listening to the audience is the goal of the evening, and that the final item on the agenda is for Dr. Amanda Evans to talk about the process for consensus building meetings going forward.

Mr. Van Lengen described that the County's RLSA webpage has a library and summaries from past meetings. He noted the audio/video team is not present, so Facebook Live and video are not available this evening. The audio/video team will be available at the next meetings. He pointed out that group discussions and comment cards provide opportunities to be heard, and that participation is encouraged.

For next steps, Mr. Van Lengen said the upcoming February 28 and March 28 meetings will be consensus building sessions. Collier County staff is charged with completing a white paper, and staff's white paper will convey the public input gathered through the workshop series. The white paper will be publicly available in the timeframe of early May, and the public may provide written feedback to the paper. The feedback provided will be added to the packet that goes to the Board of County Commissioners. Staff recommendations and the public feedback will be presented to the County Commissioners, at which time the Board may vote to advance to policy amendments which will be then subject to the transmittal public hearing process, followed by State review, followed by adoption public hearings; or the board may vote for the staff to perform more data collection and analysis.

II. Policy 1.6 – 1.9 (SSA Approval, Environmental Assurances, and NRI Values)

Mr. Van Lengen began revisiting Group 1 policies with Policy 1.6 regarding SSA approval. He explained that property owners petition the Board for approval, and beginning with SSA #10 the Board allowed escrow agreements in five year periods, eligible for renewal for five year periods. The 5 Year Review Recommendations were for SSA approval to be conditional subject to expiration in five years if credits were not used or sold, or if the owner canceled. Use or sale of credits in any amount was proposed to lock in the SSA designation, meaning that the credit agreement and the easement agreement get recorded and are in full force and effect. The 5 Year Review Recommendation was similar to Board policy since SSA #10.

Mr. Van Lengen described that Policy 1.7 relates to environmental assurances, or the ensuring that SSA commitments are fulfilled. He said that consensus was observed in earlier workshops that more than one easement holder should be required. Currently the regulation allows for the County or other agency to be the easement holder, and the 5 Year Review Recommendation was to require three agencies as easement holders.

Mr. Van Lengen read an example of an easement agreement from a standard SSA agreement, highlighting that land management measures will be those customary measures of ranching in Southwest Florida. He referenced that Johnson Engineering has researched a list of Best Management Practices (BMPs) for a variety of land and agricultural management techniques, and the list with links will be available on the RLSA Restudy library webpage.

Audience member Meredith Budd asked about the intent of the BMP list. Mr. Van Lengen said the potential for using BMPs is open to the audience's recommendations.

Mr. Van Lengen described Policy 1.8 and 1.9 regarding Natural Resource Index (NRI) Values. He said the applicant submits updated or adjusted values at time of application, and County staff reviews and verifies the values. He displayed all the layers that make up the NRI values, noting the overlay designations of Flowway Stewardship Area (FSA), Habitat Stewardship Area (HSA), Water Retention Area (WRA), or open areas which were adopted in 2002; and the proximity index within 300 feet of certain overlay designations. He said that these two factors can be accessed from Collier County because they are part of the Collier County Geographic Information System (GIS) at this time. Species scoring is primarily related to panther habitat, but other listed species are also included. He said the standard is based on a prior standard used by the United States Fish and Wildlife Service (USFWS) called preferred and tolerated habitat. That standard was based on the land use and land cover index that is part of the USFWS matrix and an overlay of the indication of wildlife appearing at particular sites. Wilson Miller refined this using District data and telemetry points based on preferred and tolerated land covers, and this is open source information. He described that soils and surface water data is from the United States Department of Agriculture (USDA), which is also open source information. He said restoration potential and the land use/land cover index is an open source from the South Florida Water Management District. He said that some people want all the

data that went into the NRI scoring, and the County has a composite number for each acre, and the subdata would need to be re-created.

Mr. Van Lengen asked the audience for feedback on two discussion questions:

1. What ideas do you have concerning natural resource factors that measure the value of conservation?
2. Do you agree with the land management standards for SSAs?

An audience member asked about the index, particularly the listed species habitat index, which starts with panther habitat including preferred and tolerated habitat. Is the landowner valuing the score? Mr. Van Lengen said a qualified biologist consultant would value the score for the landowner. She asked how each acre is determined if there has been value assigned based on the Wilson Miller score? Mr. Van Lengen said he is not sure if scores are updated with new telemetry the same way that others have been updated.

When asked who does the updating, Mr. Van Lengen said the consultant for the landowner provides all the background information, and the County reviews and does ground truthing and aerial reconnaissance. When asked if the County knows the original scores for panther habitat, Mr. Van Lengen said he is not sure.

The audience member said the main question has been about the NRI values done in 2000-2002 with the understating it would be updated with completion of more panther studies. Has each acre been updated based on newer studies? Does the County get information on updated panther data? Mr. Van Lengen said there has not been a move to recalibrate scores based on primary and secondary habitat; the scoring is still based on USFWS preferred and tolerated panther habitat.

When asked if Stewardship Receiving Areas (SRAs) are evaluated in the same manner, Mr. Van Lengen said the SRAs are evaluated through a different process, and they are subject to the Environmental Resource Permit (ERP) process.

Dr. Evans suggested that it is wise to spend more time understanding this topic if the audience is still unclear. Discussion ensued about the standards set in 2002, and the concern that new research has become available and the scoring of acreage has not been updated. Audience member concern was that old data should be reassessed. Dr. Evans summarized the question and asked if the scoring is updated, or can it be updated?

Audience member Al Reynolds said he is a planning consultant who originally put together the methodology and the scoring system with assigned values. The data was the best available at the time. When an applicant seeks to establish an SSA, the applicant would find the current and best available data and apply the methodology of the scoring system. In 2002, the panther telemetry available was used to set a starting point from 2002. Any scoring today would reflect the most current data, which is more accurate and voluminous. The new data showing more current panther telemetry helps define panther habitat for scoring purposes.

Audience member concern was raised apart from the SSAs, because the open area can be developed, and the open areas of primarily farm lands are essential habitat for survival of the panther. Concern was that SRAs develop in open areas, and there is no requirement to look at NRI scores for open areas to see if they need to be updated. Mr. Reynolds said that is not correct; an SRA application requires scoring all land in the SRA using the same methodology used to score the SSA. He said that every acre in the SRA is scored the same way a score is applied to an SSA. If the SRA reaches a certain threshold, it has to be set aside for protection within the SRA. The most current data available must be used to determine if an area within the SRA must be set aside for protection.

Audience member April Olson said approximately half the acres in open lands are in primary panther habitat and adult breeding habitat. She stated that 2006 science used by the USFWS for the Panther Recovery Plan is an example of data, and sites like Rural Lands West have about $\frac{3}{4}$ of the site in primary panther habitat, yet the site scores under 1.2, or not environmentally sensitive. Therefore, she concluded, SRA lands are not be updated with the best available science. Mr. Reynolds said he respectfully disagreed stating the comprehensive planning level of the scoring system has successfully been used for nineteen years. He said the system is a tool that does not take the place of the Endangered Species Act or a permitting process.

Ms. Olson said the listed species habitat data is from 2000, and Mr. Reynolds responded that primary panther habitat is not a part of the scoring system. Ms. Olson suggested that it should be a part of the system because it is best available science, and Mr. Reynolds responded that the system was adopted and is used as a planning tool, noting that new data indicating listed species occupy habitat does get scored as habitat. He added that the innovative aspect is that this encourages owners to manage the land well, citing that an owner of SSA land is incentivized to manage land well to get a higher NRI score.

Ms. Olson said the use of primary habitat as a scoring measure would allow owners to earn credits on those lands and be compensated. Mr. Reynolds responded that the system is not designed in that way, noting that there are different opinions on whether primary panther habitat is the latest greatest science. Ms. Olson said the County program should be consistent with the USFWS method.

An audience member asked when an application is submitted, is the environmental rating of the land updated, and is the information available to the public? Mr. Van Lengen said the information can be made available to the public. The County's environmental group and GIS group work together on the review effort, and any work product can be made available.

An audience member said that SRAs might not all be properly classified. He asked should a serious wildlife area even be in a SRA? Mr. Van Lengen said such a philosophical question has to be reconciled with practicality. He said this planning tool is subject to information and opinions offered by the public. He said suggestions to make changes are welcome, and declarative statements with recommendations are most useful in the progress of this Restudy.

Meredith Budd commented that the notion is being raised that areas within the SRA can be pulled for generating credits. For example, 45,000 acres will increase to over 50,000 acres. She said she does not believe it is the intent to pull out SRA areas that are sensitive and give credit. Mr. Van Lengen said that is correct, and the idea is a hypothetical, not necessarily a recommendation.

An audience member said the NRI index has been used for nearly twenty years, and asked from an adaptive management standpoint, has the measurement tool been evaluated as to if its working or not working, and how it may be improved in the future? Mr. Van Lengen said there have not been any formal studies, however public feedback helps contribute to a sense of how well it is working.

The audience member asked if the threshold of a 1.2 score has been verified as being the right threshold? Mr. Van Lengen said such a recommendation is a good one to take to the Board to see if they want to evaluate that measurement.

An audience member said she spent years at the World Bank, and it is customary to do evaluations every five years. Mr. Van Lengen said the 5 Year Review was an exhaustive effort, and the Restudy that is underway constitutes another review. He suggested looking at the 5 Year Review effort outcome, and comment on whether more needs to be reviewed.

An audience member said the County claims all the data is available, however he has been informed that the data resides in the hands of the original consultants that were hired by the landowners. Mr. Van Lengen said both statements are true, and explained that the original data created as part of the system resides with Wilson Miller, which was purchased by Stantec, and they are still looking for it. Mr. Van Lengen said the data is open source, and it can be recreated by anybody. The audience member suggested the original data may be manipulated by landowners who have a vested interest and said it seems strange the County would not have the data. The audience member asked if it is publicly available? Another audience member said that data can be compiled from various sources, and it can be obtained by Googling.

Dr. Evans interjected to address the concerns being debated between audience members about the data and its availability, and she summarized that the NRI scoring system is a tool that has data inputted, and that data gets updated when it is inputted.

Mr. Reynolds said the agencies have data that is the most current. The data from 2002 was a starting point for a map, and anyone can find the public sources for all the data available online and come up with a score. He said anybody can create an index map with today's data using the NRI scoring tool.

Dr. Evans said the credibility of the data sources is a question, and there seems to be suspicion among some audience members. Mr. Reynolds acknowledged there are concerns about whether the system is transparent, and the County website has a report with all the sources of data, and scoring can be derived using data from 2002.

An audience member asked if landowners come in with a score for the SSAs and SRAs at the time that the landowner seeks to do an application; is each acre scored by the landowner's consultant? Mr. Reynolds replied yes, at the time of application, a biologist generates a map that scores the lands, and puts the data on a disk and gives it to the County for review and quality assurance. He said every acre in an SSA approved today has a disk with the data submitted to the County.

Ms. Olson said the Conservancy has done a lot of research, and she said the County wasn't given all the data in 2002. She said there is information that Mr. Reynolds is not sharing. She said that every acre of land was given a score in 2002. She said based on the score given in 2002, anything over 1.3 is considered environmentally sensitive and under 1.3 is considered not environmentally sensitive. She said the data from 2002 should be shared with the public because it's the starting point. She said this is the information that Mr. Reynolds says can be changed, but she would like to know where the original scores come from.

Mr. Reynolds explained the scoring to get to 1.2 is done the exact same way. Ms. Olson said technology and science has changed, and the 2002 data should be available for analysis. Mr. Reynolds said the map is a tool to look at.

Ms. Olson said data should be available to the public to know the starting point and how it was derived. Mr. Reynolds summarized that all the data was given to the County, and the old records are being collected in an attempt to recreate the 2002 map. He said everything shown on the x-ray map that had a score of 1.2 in 2002 is subject to the processing of a current application requiring rescoring with current data. Because there seemed to be confusion about whether the scoring is all based on data that only Wilson Miller has, Dr. Evans offered that the scoring system is the tool, but the data behind the tool is updated.

Ms. Olson said the updating for an SRA or SSA application starts with a base number in order to generate new scoring. She said the tool and the data itself is a concern. Dr. Evans asked what information is needed to resolve the concern, and Ms. Olson said the baseline data from the 2002 data needs to be publicly available.

Mr. Reynolds explained that until a private property owner comes to the County seeking SSA or SRA approval, nothing has changed on the property. The system is used when an applicant asks to be designated SSA or SRA. The applicant must submit current data at the time of submittal to score it according to the system. For instance, he said, if the Conservancy bought 100 acres and wanted to conserve the land, they would gather biological data, score it, and the County would review and assign credits, and the land would be put into conservation.

Dr. Fritz Roka of the Florida Gulf Coast University Agribusiness Center added to the conversation, acknowledging there is confusion about methodology and data. He said he did not believe that the old data is of value today. If there are panthers are in a certain area today, then the score would be different than twenty years ago. He suggested having a workshop to work through a scoring exercise to help illuminate that there is no secret to the methodology or the data. Mr. Van Lengen said the

workshop is possible by either the County or a private group, because the scoring is based on publicly available information.

An audience member asked when a biologist does the assessment, does the County have a trusted list of approved biologists who can do the rating? Mr. Van Lengen said a qualified biologist with certain credentials provides the scoring in the application. Mr. Van Lengen said the audience could suggest and make a declarative statement if they think a third-party reviewer should be involved in reviews of the submittals.

An audience member said that computers are used to do these exercises, and asked why is there no evidence that the material we are working with is updated? As an example, the audience member said Rural Lands West would not be allowed to develop as the applicant requests in panther habitat. She asked why the material does not indicate where can you build, where can you not build, and how many acres can you build on? Information developed since 2002 should dictate less areas suitable for development, not more.

Ms. Budd offered that she thinks the audience concerns over original data is really a desire to reevaluate where open lands, SSA and SRA boundaries are designated. She asked how much does preferred or tolerated panther habitat with no other resource value score? Mr. Van Lengen said the score is 0.5 for just panther habitat with no other listed species. She said that explains how a score could not rise to the threshold for protection. She said in 2009 experts reviewed the RLSA and opined on the 5 Year Review and found it is better for the panther than the current system; they provided additional recommendations to make it even better as well. She added that panther biologists may be needed to do another technical review.

An audience member asked if it possible to update the indices? Mr. Van Lengen said it is a difficult question to answer, and there are legal implications. The beauty of the 5 Year Review was that there were several parties working together. If the Board wants to proceed, and the landowners do not agree, the legal experts need to weigh in.

An audience member asked if the xray map reflects scores from the NRI worksheet? Mr. Van Lengen said the map's colors represent HSAs, FSAs, WRAs, and the intensity of color represents the number of points. Mr. Van Lengen said the threshold of 1.2 was derived to identify where preservation should occur within an SRA.

An audience member said there are more panther incidents in Golden Gate Estates since buildings have been developed in the area. She suggested that the Fish and Wildlife Agency should investigate because there have been many pet kills. She urged protection of the panther, or people will get hurt. Mr. Van Lengen responded that there is a panther recovery implementation team headed by USFWS with others from universities who are constantly studying the issue. He said the differences may be related to the pace of growth within Golden Gate Estates as opposed to outside of Golden Gate Estates. The initiative to build in the RLSA has only been realized in one town, Ave Maria.

The audience member reiterated that panther habitat is being lost. Mr. Van Lengen said literature indicates the incidence of human panther interaction has been slightly on the increase in Golden Gate over the past decade. Dr. Roka said in terms of data, there has been an increase in number of panthers in 22 years from thirty panthers to over 300 panthers. The audience member said the panthers are peaking in houses and endangering children.

III. Policy 3.11 (Restoration)

Mr. Van Lengen summarized Policy 3.11 by explaining that the purposes of restoration include: functional enhancement of flowways, widening and enhancement of wildlife corridors, enhancement of listed species habitat, and creation of wading bird habitat. He explained that the process includes evaluation by wildlife professionals, review by County environmental staff, and monitoring by County staff and possibly other permitting agencies.

Mr. Van Lengen advised that some SSAs have restoration within them, and some do not. The R-1 credits are for dedication of restoration and do not require any activity other than dedicating the area. Four credits per acre are granted in Camp Keais Strand, and two credits per acre are granted for the OK Slough on the east side in the Area of Critical State Concern (ACSC). The R-2 credits are for completion of the restoration, and success criteria must be met. Four credits per acre are granted if the owner completes the restoration.

Recommendations from the April 2018 workshop included: recalibrate the credits granted, consider stricter mandate for completion before credits are given, consider stricter success criteria, and monitor and verify for restoration success. Mr. Van Lengen said the 5 Year Review recommendations included reducing the R-1 dedication credits to two credits per acre. He said a cost-centric idea was used for the R-2 credits. For example, restoration for caracara was proposed at two credits per acre, exotic control/burring was proposed at four credits per acre, flowway restoration was proposed at four credits per acre, native habitat restoration was proposed at six credits, panther corridor creation was proposed at eight credits, and shallow wading bird habitat was six credits. Mr. Van Lengen then asked the audience for ideas with respect to environmental restoration within the RLSA program.

Ms. Olson alluded to the 5 Year Review recommendation adding more credits to the system. Mr. Van Lengen clarified that the 5 Year Review recommendation would add less credits to the system.

Ms. Olson said that all the credits that landowners are receiving are for the potential for restoration, and only 200-400 acres have actually been restored. If the owners are gaining credits for removing land use layers, and then also getting credits for the potential for restoration, the landowner is double dipping. Mr. Van Lengen agreed, and said the R-1 credits ensure there is no intensification of use on the property, and there is a slightly elevated maintenance requirement. He confirmed that a vast majority of credits granted are for potential restoration without having the restoration completed.

Ms. Budd agreed with the concern about credits for potential restoration. She asked who can do the restoration other than the property owner, given the restrictions of private property rights? She suggested the R-2 restoration credit will only be sought and restoration will only be performed when additional credits are needed.

An audience member said that Rural Lands West removed four or five layers of use, kept Ag-2 on a small portion, and got 10,000 credits for use removal. An additional 14,000 credits were granted for the potential for restoration. She said it seems excessive to get more credits in that fashion. She expressed concern that Group 3 policies only reference restoration credits; the Growth Management Plan (GMP) and the Land Development Code (LDC) do not provide direction on the actual restoration. Some of the restoration plans do not have a start date, and no metrics for progress, milestones or timelines. Instead the LDC says when success criteria are met, then the credits are awarded. She described an example of SSA 15, where the goal was to restore the flow way and wildlife habitat corridor in the Camp Keais Strand area. Success criteria included removal of two road grates and a pinch point farm road and restoration of native habitat. She said nothing mandated that the flowway gets restored. She said the GMP needs stricter guidance for restoration, including start dates because once construction begins, the habitat is impacted. She said SSA 15 is in an important corridor for panther habitat, and Collier Enterprises was not going to start restoration until they had a certain number of committed developers, and restoration would take ten years. She said that restoration needs to start at the beginning of construction or sooner because the wildlife will be impacted.

Mr. Van Lengen responded that timing of the restoration in relation to development and tying the success criteria to the goals are both good comments.

An audience member said there is a need for monitored review points of the restorations, and credits should not be granted until complete, which could take three years or longer. He said hydrology, herbaceous area, and shallow wetland restoration for wood storks can take a long time. He said giving the credits up front makes no sense, and we need to monitor and determine the final results. Mr. Van Lengen said the restoration plan contains success criteria, and it typically takes five years to determine if criteria are met. He agreed that granting credits upon designation of areas for future restoration is an issue. The audience member said nothing is done in return for the incentives. Mr. Van Lengen said when the R-2 process begins, there is monitoring and success criteria in place. However, R-1 credits are awarded for restoration dedication, and R-2 credits are awarded for doing the restoration. The audience member said granting of the credits is the issue, because there are about 16,000 restoration available credits, making it is the single largest source of credits in the system, and it has the loosest standards.

IV. Policy 3.13 (Water Retention Areas)

Mr. Van Lengen summarized Policy 3.13 stating water retention areas (WRAs) were originally subject to South Florida Water Management District (SFWMD) permits and eligible to be used for water management in new towns and villages. They are not required to be designated as part of towns and villages. The 5 Year Review recommended they consume credits and become part of the SRA.

An audience member said the WRAs were important to water retention and water quality. The policy currently allows the WRAs to be used for stormwater management systems. The Environmental Advisory Committee (EAC) and Collier County Planning Commission (CCPC) commented that WRAs should not be used for stormwater management systems, and she hopes the county leaders will consider that. If WRAs are going to be used for water management systems, then she recommended considering a requirement for filter marshes as part of the treatment systems. She added that Camp Keais Strand is impaired for nutrients, and Rural Lands West proposed using the WRA for stormwater management, with discharge into Camp Keais Strand. She summarized that filter marshes have been used successfully around the state to reduce nutrients, and more information can be provided if desired.

Mr. Van Lengen acknowledged water management, pretreatment and a flowway management plan as recommended by the County stormwater staff are important to support water quality and quantity.

Ms. Olson said some WRAs have high ecological significance such a Shaggy Cypress Preserve. When that is surrounded by development, the habitat value is reduced for the panther. She said landowners should not receive credits for SSAs when development chokes off a preserve, noting the habitat functionality would be reduced significantly by development in those areas.

An audience member said maybe someone from the County environmental department could speak to the group to help give confidence that restoration is being done well. He suggested it would be nice to have an ecologist, USFWS and/or SFWMD representative speak on restoration practices.

V. Consensus Building and Conclusion

Dr. Evans said she will be working on the consensus building process. The issue of consensus building is not an ideal, it is a process, and this group will not reach consensus on every issue. What is helpful in the process are the type of comments on the Policy 3.11 slide presented earlier which are statements of recommendations such as: recalibrate the credits granted, stricter mandate for completion before credits are given, stricter success criteria and monitor/verify restoration success. Dr. Evans said she is hearing mistrust of past data and processes and concerns about transparency on whether what is said is being done is being done. She reiterated that the group's input will go into a white paper that will go to the County Commissioners, and tangible recommendations are most useful.

She pointed out that the members of the County's team are keeping records. She noted that recordings and meeting notes document all the meetings. Collection of the public comments are captured by tape recorders, desktop discussion worksheets, Facebook comments, and emails have all been collected and recorded for the past year. The collected data will be used and collapsed into topics. The intent is to take lots of data and capture in a way that is agreeable to the people making the statements, to be sure that the ideas are being captured properly.

At the next meeting sticky notes will help align comments. The tracking of comments has been done, and the input will be organized. The process will be interactive. Something specific can be prepared for future meetings, such as tangible recommendations; otherwise the year has been futile. The County staff wants recommendations to take to the County Commissioners. She advised that if there is mistrust, get the message clear so there can be actions taken. At the end of this process there will be topics of agreement, and other areas may not reach consensus. These non-consensus items will be captured, and barriers will be identified for non-consensus items. Dr. Evans noted that two County Commissioners were present (Commissioner McDaniel and Commissioner Taylor), to which Commissioner McDaniel responded that he would not be offering comment or feedback given the provisions of the Sunshine Law. Dr. Evans acknowledged that the Commissioners must observe the Sunshine Law and be quiet observers, and she reiterated that a County Commissioner would want clean and concise recommendations.

An audience member said he understands the audience does the work and then a white paper goes to the Commissioners. He thanked the two Commissioners for being present at the workshop, and said he is inclined to go directly to his Commissioner with recommendations rather than going to all the public work sessions for his input to be collected by staff, and then into a white paper that will then go to the Commissioners. Dr. Evans affirmed that a voter should be speaking to his or her Commissioner, but the point of this activity is to get public input on the Restudy of the RLSA. He asked if the Commissioners will make the final decision on the Restudy of the RLSA? Dr. Evans said the actions being taken through the workshops is to bring together a group with divergent opinions, so that the group can work together to identify points what can be agreed with a strong voice.

The audience member asked if Nick Penniman will continue as the Growth Management Oversight Committee (GMOC) chairman? Mr. Van Lengen said that he is not sure at this time. The Oversight Committee looks at all four Restudies to verify the Restudies are coordinated and that there is sufficient public outreach.

An audience member asked if the white paper will go to the CCPC? Mr. Van Lengen said it does not. The public hearing process for GMP Amendments includes the CCPC sitting as the CCPC and EAC, then to the Board, and then it goes around again.

Ms. Olson said a concrete recommendation is that she wants the 2002 underlying data on which the program is based.

Dr. Evans said the more precise the recommendations, the better. She said while some topics can become polarized, there have been many conversations throughout the year of workshops where many people were on the same page. Trust has been an underlying issue. The next two meetings are important for tightening up thoughts and recommendations and consensus building. The many pages of data collected from all the workshops will be organized to pull out specific recommendations.

An audience member asked if additions can be made to the feedback tracking? Dr. Evans said any changes can be brought forward by email or contacting the County staff, but feedback will not be redacted. She said when consensus is not reached, it will be identified and the barriers to reaching consensus are important because they could represent a whole policy issue.

An audience member said several attendees were in attendance, and they would like to endorse the paper from the Conservancy. Dr. Evans said that is fine.

An audience member said the issue of the data could be clarified if the original data was available and compared with how the data is now classified. It would help clarify the changes as someone tries to assess how the system is working. The original data and the new data would be helpful for understanding what has happened at the site. Dr. Evans said this is a helpful recommendation to assess the efficacy of the program. Dr. Evans said we are all living on land that was developed poorly, and it's important to resolve the best way to continue how development occurs.

An audience member said that Rural Lands West can be reviewed as a good study of the original data and updated data for comparison.

Mr. Van Lengen said the next meeting is February 28th and closed the meeting at 8:05 p.m.



Meeting Summary

RLSA Restudy Public Meeting Consensus Workshop

*February 28, 2019, North Collier Regional Park, Exhibit Hall
15000 Livingston Rd., Naples, 34109*

I Opening Remarks

Speaker: Kris Van Lengen, Collier County

Mr. Van Lengen, Collier County Community Planning Manager, opened the meeting at approximately 6:10 p.m. and gave appreciation to the audience for attending, noting especially those who attended and provided comments during the yearlong workshop series.

He explained the meeting will be a consensus building exercise led by Dr. Amanda Evans.

From a timing standpoint, Mr. Van Lengen explained that the County staff's white paper will be drafted and in May it will be distributed to the workshop participant email list for public review before moving on to the public hearing phase. The public hearing phase will likely begin in September.

II Affinity Mapping

Speaker: Dr. Amanda Evans, Facilitator, Florida Gulf Coast University

Dr. Evans explained that the RLSA Restudy Workshops have been held monthly since January 2018. The Restudy process has involved the collection of data and comments. She said all the comments collected from the public is considered qualitative data. These qualitative data, or perceptions, have been organized and tracked. This includes all emails, comments from roundtables, and written comments.

Dr. Evans said the exercise of affinity mapping helps identify ideas that are agreed upon, and those ideas that aren't. All comments collected during the workshops and the public's correspondence to date have been gathered and collapsed onto sticky notes for use during the affinity mapping exercise. The exercise allows audience members to expand or comment on what ideas have been gathered.

Dr. Evans said the affinity mapping exercise may require a second meeting to finish, and the results will be the affinity diagram, which will be the basis for the public opinion portion of the County staff's white paper. The ideas that the audience agrees are important will get conveyed in the white paper.

Items that are not agreed upon will be identified as potentially needing additional research or feedback.

Audience members were instructed to place each sticky note containing a comment on the appropriate board arranged in the front of the room with the headings: Water, Agriculture, Taxpayer Impact, Towns & Villages, Credits & Scoring, Environmental Protection, Land Management, and Other. Dr. Evans affirmed that new categories and comments are allowed to be added during the exercise.

The meeting proceeded in an interactive fashion with audience members participating in the affixing of sticky notes on the topic boards. Then Dr. Evans led discussion on each of the comments associated with the topics of Water, Agriculture, Taxpayer Impact, and some of the comments associated with Towns & Villages. Dr. Evans identified by polling the audience whether a comment was supported by all audience members; if so, it was considered a consensus item and would be identified in staff's white paper as such. If a comment could not be supported or agreed to by all audience members, the comment was considered to be a non consensus item, which meant the comment would be identified in staff's white paper as a public comment needing further study or discussion or deliberation.

At the close of the meeting around 8:10 p.m., Mr. Van Lengen said the next meeting will be at the same time and place on March 28th.

[Photos were taken at the close of the meeting of the comments adhered to the boards.]



Meeting Summary

RLSA Restudy Public Meeting Consensus Workshop

*March 28, 2019, North Collier Regional Park, Exhibit Hall
15000 Livingston Rd., Naples, 34109*

I Opening Remarks

Speaker: Kris Van Lengen, Collier County

Mr. Van Lengen, Collier County Community Planning Manager, opened the meeting at approximately 6:05 p.m. He stated that the agenda begins with a presentation from the Eastern Collier Property Owners group (ECPO), who represent the majority of landowners in the eastern Rural Lands Stewardship Area (RLSA). He explained that Mitch Hutchcraft will present for ECPO and there will be time for a few questions, followed by Dr. Evans continued affinity diagramming. For any item where consensus cannot be reached, the item is still important. Such items constitute areas that need to be explored because of difference of opinion.

Mr. Van Lengen explained that after the public engagement workshops, staff will generate an analysis based on public comments, owner comments, and professional input which is planned to be ready for consideration by the Board of County Commissioners in June.

Mr. Van Lengen noted that 170 people are on the email distribution list, and fifteen emails did not transmit. Mr. Van Lengen asked the audience to please provide email addresses on the sign in sheets if they did not receive an email on Monday.

Mr. Van Lengen gave an update that Collier County staff is getting the data that underlies the Natural Resource Index (NRI) scores. Staff has the composite scores. Stantec has worked to provide the data, and the legal staff is working on how to provide the information publicly.

An audience member asked about the data for stewardship credits generally, and the data for restoration credits. Mr. Van Lengen said the NRI value score includes restoration potential. The stewardship credits and restoration credit information is resolved later in the process and is not part of this data set.

II Eastern Collier Land Owners Perspective

Speaker: Mitch Hutchcraft, President, King Ranch

Mr. Hutchcraft said it seemed some people haven't had the benefit of working on this project from the very beginning, and that he wants to give an overview of the regulatory framework that makes

the RLSA program what it is. He suggested that all interested parties should have the same context for conversations moving forward.

Mr. Hutchcraft asserted that the RLSA program is a big picture tool that is innovative and incentive-based. It is a planning program to protect habitat, protect land for agriculture, and promote sustainable growth and economic diversification in the rural areas. A statutory legislative framework establishes these parameters.

Mr. Hutchcraft described that the effort started in 1999. After discussions with the County, State, Governor and Cabinet, the RLSA program was adopted in 2002. He said that the County's original approach was to take away property rights, and the landowners opposed that. The Governor and Cabinet said to come up with a better approach, and the program implemented in 2002 received broad support including non-governmental organizations such as the Florida Wildlife Federation, Collier Audubon, and The Conservancy. It is based on data and analysis including land use, wildlife, wetlands, which drives how the program gets implemented. He said it is incentive based and market oriented to protect owner interests and public interests through stewardship. The program has unique Comprehensive Plan and Land Development Code (LDC) requirements.

Mr. Hutchcraft described that the RLSA program is voluntary, and the landowners can participate or not participate. If not participating, the base property rights are vested with landowners. Through the RLSA program incentives encourage clustering development into a smaller footprint with greater densities and intensities. The benefit to the public is larger preserves, concentration of open space and habitat connectivity. In order to get participation in the program early, early entry bonuses and private restoration credits were made available. It's now an award-winning program.

Mr. Hutchcraft referred to Florida Statutes indicating that the RLSA program is a tool that furthers broad principles of rural sustainability, including restoration and maintenance of agriculture, identification and protection of ecosystems and habitats, and diversification of the economy through expansion and new employment opportunities. He said that the intent is not just for setting aside the rural lands forever, but rather for maintaining the viability of agriculture in the economy. He summarized that Florida Statutes recognize protection of private property rights in rural areas, and the statutes were modified to reference Collier County's RLSA program and to recognize the program as compliant.

Mr. Hutchcraft displayed a map of the RLSA showing several property owners, all having different interests and having the choice to opt in or out of the program. The program was designed to create credits, allowing two landowners to work together to achieve a better big picture outcome. He said that if all owners don't participate, then the outcome is diminished. If all landowners participate, the result is maximum preservation and protection of agriculture going forward.

Mr. Hutchcraft posed the question, why was the program set up the way that it is? Before the RLSA program, if a property owner had wetlands or habitat, this was a devaluing effect. The public desired preservation and protection of water resources and habitat, while the landowners want to protect property rights and values. Mr. Hutchcraft argued that the program aligns the interests of the public

and the landowner. If the public wants more wetlands or wildlife conservation, the owner is credited for that either through value of the land or through a different currency such as density offered in the RLSA program. The incentives are structured to align private property rights and property values with the interests of the public. Mr. Hutchcraft explained that another option is public acquisition. The County, State or Water Management District could provide money for public land acquisition, however money and resources to acquire land for public acquisition is diminishing. The protection of land without a cost to taxpayers is achieved through the use of development rights as currency for landowners to preserve habitat or cluster density.

Mr. Hutchcraft said the regulatory framework involves how the credits are calculated. The most environmentally sensitive areas with wetlands or wildlife habitat generate the highest scores and value, and those credits can be used to develop on lower value lands. Mr. Hutchcraft displayed a sample calculation indicating how different levels of property rights can be removed to gain credits.

Mr. Hutchcraft displayed a map to show the effect of land use regulations before the RLSA program to portray how base rights could allow development to occur on what is currently open space, tomato fields, pasture, wetlands, etc. By implementing the RLSA program, including the 5-year review recommendations, the likely outcome was displayed on a map showing that more land gets preserved or maintained for agriculture. He highlighted that the financial ramifications include no costs to the public for land acquisition or maintenance.

Mr. Hutchcraft said since 2002, 180,000 acres of private land has been rezoned to limit the land's development potential to a clustered pattern. He noted that most landowners in the RLSA are large landowners, and since 2002, no land has been subdivided into five-acre lots. He said the benefit of the program is less rural sprawl, noting that total conservation land has grown to 50,000 acres which will be perpetually preserved and maintained at no cost to the public.

Mr. Hutchcraft added that some well-planned development has occurred. He said for every one acre developed, six to eight acres get set aside for preservation. He stressed that landowners are making long-term decisions in reliance on the program, and when the 5-year review was performed and recommendations were proposed, those recommendations were supported at the time.

In reference to the 50,000 areas preserved through the RLSA program, Mr. Hutchcraft said it is anticipated that 134,000 acres will be ultimately preserved at no cost to the public. He described that the Ave Maria development of about 5,000 acres, with additional proposed development totaling 7,300 acres, has resulted in 50,000 acres of preserved lands, noting that these preserves provide for flowways, wildlife and habitat.

Mr. Hutchcraft displayed calculations of the costs associated with preserved lands. He said that the Conservation Collier program has preserved 4,000 acres with an average cost of over \$25,000 per acre, and that Jim Beever of the Regional Planning Council identifies economic value to the public as \$144 million annually. He said the Lee County 2020 program saved 30,000 acres with an average cost of \$12,000 per acre. The RLSA program has already preserved almost 51,000 acres at zero acquisition costs. With zero acquisition cost and zero maintenance cost, he said the value to the

public of preserved RLSA lands is about \$1 billion annually. Considering the potential of 130,000 acres of preserve, the numbers become staggering. He added that all the preserved land stays on the tax rolls, albeit that the values do go down.

Mr. Hutchcraft said the 5-year review effort was a result of original Comprehensive Plan policy to review the program and determine if it could work better. It was a robust process involving a committee appointed by the Board of County Commissioners. Significant consensus was reached on a few key components. The County Commissioners ultimately accepted the Committee's report but did not adopt it.

Mr. Hutchcraft summarized key recommendations from the 5-year review, including:

1. Better incentives for protection of agricultural land.
2. Better focus on land preservation for panther corridors that are more functional with incentivization.
3. Cap on the number of credits and number of receiving acres. Create a maximum development footprint of 45,000 acres.
4. Add credits for panther corridors and agriculture.
5. Restoration credits should be capped.

Mr. Hutchcraft reported that the projections for the program today are: 92,000 acres of Stewardship Sending Area (SSA), 43,000 acres of Stewardship Receiving Area (SRA), and 43,800 acres not participating and still developing at the base density. By adopting the 5-year review recommendations, he said that credits are recalibrated to account for agriculture credits, and there would be more agricultural use of the 43,800 acres that would not have participated previously.

Mr. Hutchcraft described that questions have been raised about economic impact assessments. He said the Collier County LDC requires a review of economic impact of Stewardship Receiving Areas (SRAs) each time an application is submitted. Rules are established for the evaluation. He said that the Smart Growth America study does not follow the rules established by Collier County, and said if the study cannot be validated, it cannot be considered a valid study. He argued that credit should be given to the landowners' studies that comply with the rules.

He concluded by noting that the landowners wanted to reach out and provide perspective, and that ECPO supports the adopted plan and supports the 5-year review recommendations. He offered that the program aligns private and public interests, provides positive outcomes, maintains agriculture, and provides diversity in the economy. He reiterated that for nearly two decades, landowners have acted on reliance on the program, stating that the program is law and landowners feel strongly about maintaining the program, and they continue making decisions in reliance on the program.

Mr. Hutchcraft said that ECPO does not find it appropriate to consider additional changes until the 5-year review recommendations are done, and that now is time to move forward with the

recommendations. Afterwards, he said landowners will continue to work with the community to move forward.

An audience member asked why the BOCC did not adopt the 5-year recommendations. Mike Bosi, Collier County Planning and Zoning Director, said the cost to do the 5-year review recommendations could not be funded by the BOCC due to the recession.

April Olson of The Conservancy said she has been involved in the RLSA program for twenty years, and she wants to set the record straight. She said The Conservancy was in support of the RLSA program in 2002, but there was an understanding that it yielded 16,800 acres of development and an estimated build-out population of 87,000 people. She said that tens of thousands of credits were put into the program just days before the program was adopted, and it was never disclosed to the public. Instead of 16,000 acres, she said 45,000 acres, or 250% more development, is proposed. She said this was not revealed until the 5-year review in 2008. She said that the program as understood by The Conservancy in 2002 is not the program we have today. She appealed for comments identifying flaws or inconsistencies found in the Smart Growth America report. She stated that The Conservancy opposes the 5-year review, noting it was conducted ten years ago and is outdated. She said the 2008 Wilson Miller calculations of the credits are still wrong, and now more lands are eligible for restoration.

Dr. Evans offered that there is disagreement on this issue, and it is a fact that some topics will not achieve consensus. She acknowledged that property owners and The Conservancy have different perspectives, which can be explored further. Any issue identified as a non-consensus item can be captured as such and will not go away.

Another audience member expressed confusion from the presentation. She said the presentation should have been at the beginning of the workshop series and not at the last meeting. She summarized that she heard the landowners don't want any changes and don't plan to adhere to any changes. She noted her impression that nothing was in place until the Commissioners adopt the plan. She questioned what the point is of a 5-year review if nothing happens.

Dr. Evans said the effort underway is a restudy; it is another effort to refine the program. The audience member asked what the point is if there is not consensus? Dr. Evans said the last 14 months have provided clarification of the policies. Areas of consensus are visible and non-consensus areas are visible. This process makes it clear where everyone is on the same page. Where they are not in agreement, those issues can be identified and presented to the BOCC as topics needing further discussion or exploration.

An audience member asked if development rights are currently four units per acre, noting that other cities do not allow development in wetlands. He added that he is concerned that no land is set aside for surface water. Dr. Evans said he can offer a recommendation based on this concern, and it can be determined if consensus is reached for the recommendation during the affinity mapping exercise.

An audience member asked if wetlands are developable lands. Mr. Van Legnen said wetlands are very expensive and not easy to develop, noting it is not impossible to develop wetlands. He advised that permits are needed, and there is a mitigation cost. The designated Stewardship Sensitive Areas help toward preservation of wetlands and habitat.

An audience member said there is no resolution on the number of credits, noting there are about 240,000 credits and about 58,000 credits are for restoration. The definition for restoration is not well defined in the LDC.

An audience member said that the statement presented declaring the acres set aside in the RLSA program cost the public nothing is not true. The cost of infrastructure is roughly in the \$90 million range for the road network, and there is additional cost for schools, fire stations, etc. She stressed that there is a big cost to the public.

III Affinity Mapping, continued from February 28, 2019

Dr. Amanda Evans, Facilitator, Florida Gulf Coast University

Dr. Evans initiated the affinity mapping exercise for the topics of Towns & Villages, Land Management, Credits & Scoring, Environmental Protection, State Requirements and Other recommendations that did not align with the grouped topics. (Topics mapped at the February 28th Workshop included Water, Agriculture, Taxpayer Impact, and some comments associated with Towns & Villages). Dr. Evans identified by polling the audience whether a comment was supported by all audience members; if so, it was considered a consensus item and would be identified in staff's white paper as such. If a comment could not be supported or agreed to by all audience members, the comment was considered to be a non-consensus item, which meant the comment would be identified in staff's white paper as a public comment needing further study, discussion or deliberation.

At the close of the meeting around 8:10 p.m., Mr. Van Lengen asked for attendees to include their email addresses on sign in sheets so they will receive correspondence sent to the distribution email list group.

[Photos were taken at the close of the meeting of the comments adhered to the boards.]