

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 Corkscew 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.