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MEETING SUMMARY

Agricultural and Green Industry Joint Advisory Committee

Southwest Florida Water Management District
September 6, 2018

The Agricultural (AAC) and Green Industry (GIAC) Joint Advisory Committee of the Southwest Florida Water Management District convened for a meeting at 9:00 a.m., September 6, 2018, at the Tampa Service Office, 7601 US Highway 301 North, Tampa, Florida.

AAC Committee Members Present
Chair Mac Carraway, FL Turfgrass Assoc.
Curt Williams, FL Farm Bureau Federation
Dale Lewis, FL Nursery, Growers & Landscape Assoc.
Jeff Krieger, FL Citrus Production Managers Assoc.
Kenneth Parker, FL Strawberry Growers Assoc.

GIAC Committee Members Present
Chair Travis Council, Turfgrass Producers of FL
Vice-Chair George Cook, FL Golf Course Superintendent's Assoc.
Jennifer Bryan, FL Golf Course Superintendent's Assoc.
BJ Jarvis, UF/IFAS
Phil Christman, City of Largo Parks Superintendent
John Miragliotta, FL Irrigation Society

Governing Board Members Present
Mark Taylor
Bryan K. Beswick

Staff Members Present
Caroline McKnight, Facilitator
Michael Molligan
Thomas Kiger
Chris Zajac
Granville Kinsman
Lois Sorensen

Recording Secretary
Kelly Page

Others Present
Dr. Michael Dukes, Florida-Friendly Landscaping
Dr. Tom Yaeger, UF/IFAS

Approved summaries from previous meetings can be found on the District's website *WaterMatters.org*.

The numbers preceding the items below correspond to the order of presentations.

1. **Call to Order and Introductions**
   Mr. Travis Council, Green Industry Committee Chair, called the meeting to order. He welcomed Governing Board members Mr. Mark Taylor and Mr. Bryan Beswick.

2. **Additions and Deletions to the Agenda**
   Ms. Caroline McKnight, Board and Executive Services Manager, stated there was an addition to the agenda – Advisory Committee Policy Updates.

3. **Approval of the June 7, 2018 Committee Meeting Minutes**
   Following consideration, the committee approved the June 7, 2018 meeting minutes.

4. **Public Comments**
   None

5. **Advisory Committee Policy Updates**
   Mr. Michael Molligan, Employee and External Relations Director, presented proposed changes to the District's advisory committee policies. These suggested changes are the result of feedback

collected from the advisory committees and will be presented to the Governing Board for approval. Updates include the elimination of:

- The attendance policy that restricts members from missing three consecutive meetings
- The requirement of a quorum to vote
- The limit of terms a chair can hold (terms remain at two years)

Members asked how membership changes would occur and Mr. Molligan responded the policy language changes would not result in any changes to membership on the committees.

Chair Travis Council applauded these changes and there were no concerns raised by committee members regarding the proposals.

6. Draft RWSP 2020 Agricultural Water Demands

Mr. Thomas Kiger, Water Supply Engineer, presented the 2020 Regional Water Supply (RWSP) plan as well as the proposed agricultural water use projections. The RWSP plan is a 20-year plan that projects water use demand projections through 2040, with updated data every five years. The projections are used to assess water availability, determine whether water supply will meet our current and future needs, and is used to establish minimum flows and levels status updates as well as recovery strategies.

Mr. Kiger explained the method that Florida Department of Agriculture and Consumer Services (FDACS) uses in creating agricultural water use projections. FDACS uses metered water use data and acreage mapping to create an econometric model to predict total water demand. Their most recent product, FSAID5, predicts water use into 2040 by predicting future acreage projections for each county based on historical trends in irrigated acreage and applying the econometric model to predict overall water use for those acreages.

Mr. Kiger explained the District addressed feedback on FSAID projection method from the Agricultural and Green Industry Joint Advisory Committee in June 2018 and compared the FSAID product to available metered water use data. District staff found significant differences in historic water demand estimates provided by FDACS and historic metered water use data in some counties. The District also found that there were significant differences in the FSAID estimated water demands and average water use for many individual permits.

Based on this investigation, the District proposed a new agricultural water use projection method for our region, using the acreages from the FSAID5 report combined with local grower-provided metered water use data. Mr. Kiger proposed the District use the updated agricultural water use projections based on local metered data to better capture local behavior of growers at the permit level. This method will provide more accurate water data for regional groundwater modeling and MFL evaluations.

Mr. Kiger showed slides that represented projected irrigated acreage changes in the District from 2016 to 2040, as published by FDACS. Chair Council felt the data on sod production is inaccurate because it suggests production will decrease over the years, but there are real life patterns of tremendous growth. Mr. Kiger noted this observation.

Members asked if meteorological data is taken into consideration and Mr. Kiger explained that rainfall conditions from 2014 to 2016 have been included in these calculations.

Members asked when the changes are captured, and Mr. Kiger explained changes are captured in the five-year update. Members questioned whether data should be collected fewer than five years, and Mr. Kiger explained that the five-year timeframe for the Regional Water Supply plan is

established by statute, and the District tries to incorporate the most up to date data feasible in each plan.

Members asked to review information with their boards before consenting to move forward with the combined dataset. Mr. Kiger will send a summary of the proposal to members and a public meeting will be set in October to follow up on this request.

7. Florida-Friendly Landscaping (FFL) Update

Dr. Michael D. Dukes, University of Florida Agricultural and Biological Engineering Department Director, explained that Florida is the fourth fastest growing state, and water use is a concern. He shared a study conducted on the water use of an FFL home versus a non-FFL user. This study suggests there is a larger cost upfront for FFL than for conventional landscape/irrigation, but it significantly reduces water use.

Studies began in 2010 to estimate irrigated water use, which was calculated by subtracting the indoor water use from total water use of each home. Researchers monitored homeowner's irrigation behavior, which reflected the non-FFL users often result in insufficient irrigation during high demand months, such as April and May, and excessive irrigation during the winter months.

To determine savings in maintaining a Florida-friendly landscape, Dr. Dukes evaluated irrigated costs of five to ten FFL homes within a given neighborhood. If all homes throughout Florida followed FFL guidelines, there would be a savings of nine billion gallons of water per year, with a monthly savings in water use of up to 61 percent.

Members asked if there are foreseen policies for FFL in the future and Dr. Dukes replied in the negative, but mentioned incentives that will become available, such as rebates.

8. New Practical Method for Managing Irrigation in Container Nurseries

Dr. Thomas Yeager, University of Florida Environmental Horticulture Department Professor and IFAS Extension Specialist, introduced his study that helps nurseries apply the correct volume of water without over-watering plants. This is done by use of a weather station, which determines how much rainfall the plant has received, and the CIRRIG program, which calculates irrigated water needed and communicates it to the sprinklers.

Dr. Yeager explained the several variables to consider when conducting this type of study in container plants, such as size, species, spacing, weather, etc. His team measured the leaching fraction, or excess water from each plant following irrigation, to determine the amount of water each plant consumed.

Members asked how much a weather station costs, and Mr. Yeager explained that most nurseries only need one weather station, which costs $1,200.

Members suggested more research should be done on varied crop types.

9. Letter Response

Mr. Chris Zajac, FARMS Program Manager, discussed the Governing Board's response to the committee's letter supporting the FARMS program. The letter was received with appreciation and no action was taken to change the FARMS' cost-share program.

Chair Council expressed the committee's gratitude for the Board's support in the FARMS program.

10. Vertical Datum (NAVD88) Completion

Mr. Granville Kinsman, Hydrologic Data manager, spoke to the committee about the new data collection system used as a reference in determining elevation. Mr. Kinsman's team completed a lengthy project (started in 2001) to replace the NGVD29, which is no longer supported by the federal government, with NAVD88.

The transition began in 2001, where team members individually surveyed, set benchmarks and migrated the data. This process required the District work with other entities, such as the other water management districts, and readings are much more accurate than they were in the past. This information is documented in the Water Management Information System. All surveys are published and available to the public.

11. Hydrologic Conditions Update

Ms. Lois Sorensen, Demand Management Program Manager, updated the committee on the District's current hydrologic conditions. She explained the hydrologic conditions are expected to remain above normal through May, which means El Niño is likely to develop this fall and last through the winter months.

The three-month climate forecast suggests there is equal chance for above and below normal temperatures and the rain forecast is above normal. Groundwater levels remain above normal. Surface water in the northern counties average in the 86th percentile; Central countries are averaging in the 82nd percentile; and Southern counties average at the 82nd percentile.

12. Development of agenda topics for the next Agricultural and Green Industry Advisory Committee meeting at 9:00 a.m. on December 6, 2018 in the District's Tampa Office.

Members suggest: Projections on recreation turf and water demands; Having a workshop or meeting to discuss Agmod in regard to nursery crops and developing a fair threshold; Set up October meeting to discuss water projections for RWSP 2020 agricultural water demands.

Mr. Ken Parker mentioned Florida Department of Environmental Protection's (FDEP) comment based on paleo studies that the Hillsborough River basin has been impaired for over 200 years and would like to know the District's role in addressing Basin Management Action Plans (BMAP). Mr. Molligan explained FDEP establishes the BMAPs and suggested the District could schedule this topic for a future meeting.

13. Announcements and Other Business

None

14. Adjournment

Meeting adjourned at 12:00 p.m.