

# RIVER RAMBLINGS



The newsletter of the  
**Indian River Citrus League**  
MARCH 2017

## Using Public-Private Partnerships with Citrus Growers to Protect the Indian River Lagoon

*By Sherry Brandt-Williams  
Chief, Bureau of Water Shed Management & Modeling  
St. Johns River Water Management District*

Using reservoirs to store non-point source runoff on the landscape is an integral part of the Upper St. Johns River Basin approach to protecting the Indian River Lagoon estuaries from impacts due to changing salinity and increased nutrients and sediments. Numerous water management areas have been built with partnerships between the U.S. Army Corps of Engineers and the St. Johns River Water Management District, and the District has moved forward on several additional reservoirs on their own property. Other storage alternatives are under consideration to help offset potential impacts from future growth and increased consumptive use and stormwater runoff.

The concept of dispersed water storage on private property has evolved as an innovative approach to assist in achieving water supply and quality goals. The Florida Legislature encourages public-private partnerships to accomplish water storage and water quality improvements on private agricultural lands, Section 373.4591, Florida Statutes.

Dispersed water storage programs investigating the use of private land aim for retention of runoff, to provide storage for flood control, as alternative sources of irrigation and to reduce nutrient loads to important waterbodies. Dispersed water management incentivizes private property owners to retain water on their land rather than drain it, receive and detain regional runoff for storage supply, or do both.

### **St. Johns River Water Management District Projects Under Development on Private Property**

The St. Johns River Water Management District advertised for proposals from agricultural property owners and selected two pilot projects. Criteria for selection included sufficient acreage to remove at least 1/2 metric ton of total phosphorus annually within the Indian River Lagoon Basin Management Action Plan area and close access to a canal or stream draining to tide. Property owners also needed to agree to a 10-year operation schedule. A key component of the District's proposed plan is the

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# Protection against Phytophthora

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Unique protection – Inhibits spore production, thereby preventing transmission of disease to neighboring plants.

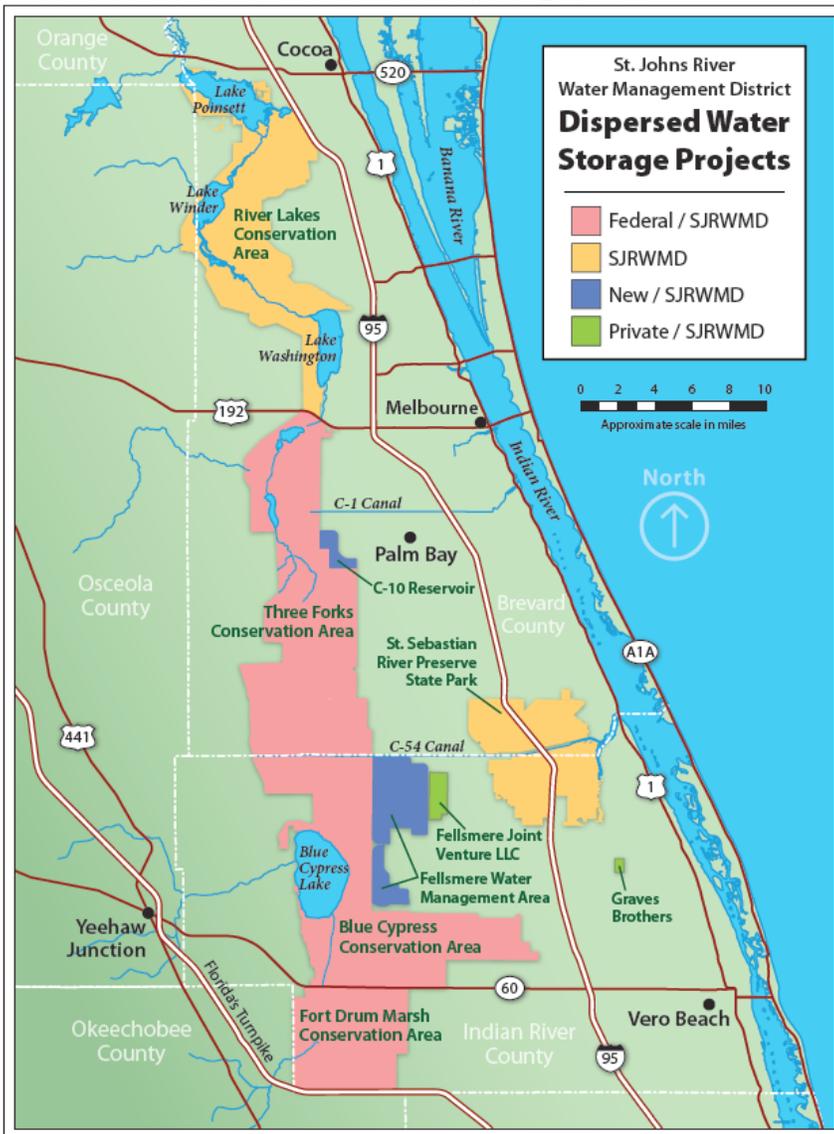


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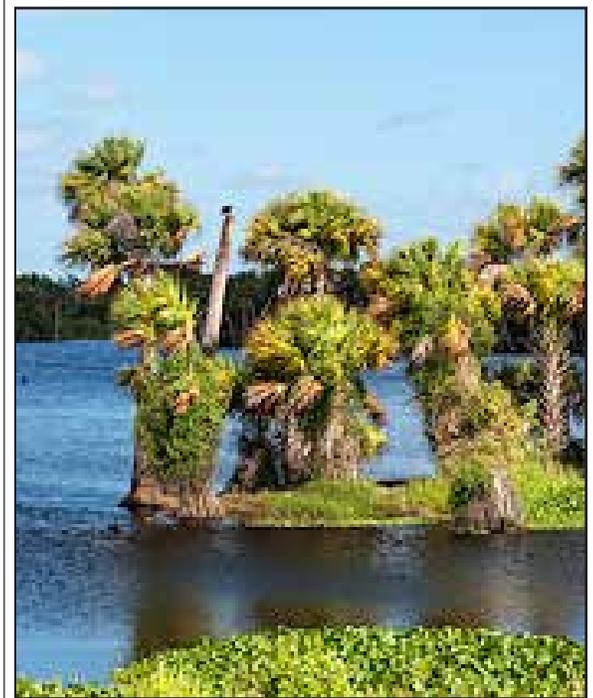
pay-for-performance model. The District will assist property owners with design and construction of the facility and once in operation owners will be paid for nutrients reduced each month, but not a set annual fee independent of actual project performance.

The District's Governing Board approved contract negotiations with the top two projects in January 2016 with a cap of \$22.5M over 13 years. The two highest ranked projects were selected for contract negotiation: Fellsmere Joint Venture LLC, at about 2000 acres, and Graves Brothers at about 200 acres. Contracts were finalized in September 2016. Both projects are in the Design and Engineering phase with construction expected to begin Fall 2017. Both landowners are fully responsible for their own permitting and the primary permitting agency is the Florida Department of Environmental Protection. Operation is currently targeted to begin Fall 2018.

Collectively, the projects are estimated to eventually capture almost 9,000 pounds of phosphorus annually and almost 60,000 pounds of nitrogen and treat an annual average of 23 million gallons of water daily. District staff expect the nutrient treatment to be cost effective. While most nutrient removal projects range from \$500 to \$3,000 per pound phosphorus, Fellsmere and Graves Brothers are estimated to cost between \$250 and \$500 per pound. The reductions from both projects are expected to provide about 18% of the total phosphorus and 21% of the nitrogen BMAP required reductions in the Central Indian River Lagoon.



*Location of both pilot projects – FJV and Graves.*



*Map of existing and proposed water storage and treatment projects within the Upper Basin of the St. Johns River Water Management District.*

# Industry Urges Focus on Fresh Fruit

By Pete Spyke, Apapaho Citrus Mgmt., Inc.

On February 22, representatives of the Indian River Citrus League and the Treasure Coast Agricultural Research Foundation met with Dr. Jackie Burns, IFAS Vice President of Agricultural Research, and Dr. Ron Cave, Center Director of the Indian River Research and Education Center (IRREC), to explore the possibility of sharpening the focus of IRREC's Fresh Fruit programs. A number of new, energetic young faculty have been hired, with one more to go, and the goal is to get them up to full speed as quickly as possible. The River is fighting a battle with HLB, particularly with grapefruit, and we need as much support as possible in finding answers that will allow growers to find sustainable answers to this challenge, as well as the others we have to deal with every day.

The idea is to declare IRREC's primary core mission to be development and support of the Fresh Citrus Fruit industry. Different approaches were discussed, including establishing a Center of Excellence, which would require approval by the Board of Regents, to simply updating the IRREC Mission Statement to reflect a more concentrated focus on Fresh Fruit. One outcome could be recognition by funding agencies that the projects our researchers propose fit within the context of the broader fresh fruit goals, and evaluate them on that basis. The group is planning on meeting again with the IRREC leadership and faculty to pursue this idea, and hopefully make a decision on the best approach, in mid-March. We very much appreciate the unhesitating support from Drs. Burns and Cave, and the rest of the IRREC faculty, in this effort.



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## 2017 River Fun Shoot

Registration is underway for the 2017 River Fun Shoot, which will take place on Friday, March 31 at Florida's premier sporting clays and outdoor recreation venue, Quail Creek Plantation. Quail Creek is located north of Okeechobee and west on Ft. Pierce on SR 68 – just less than 45 minutes' drive from most parts of Indian River and St. Lucie Counties.

If you are interested in participating in this great event, or perhaps investing in some promotional sponsorships, see the event flyer on page 4 or contact the League's office at 772/595-5026 or [info@ircitrusleague.org](mailto:info@ircitrusleague.org)

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# 2017 River Fun Shoot

100-Target Fun Shoot on March 31, 2017 at Quail Creek Plantation

8:30 a.m. Registration — 9:30 a.m. Shot Gun Start

RAFFLE DRAWING

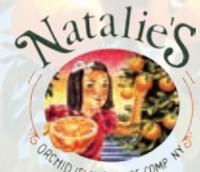
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## PARTICIPATION LEVELS

All levels include one raffle ticket per shooter registered

### Gold Sponsorship \$700

Includes 4 shooters, lunch, use of one four-seat cart, one station sign and recognition during awards ceremony

### Team Sponsorship \$450

Includes 4 shooters, lunch and station sign

### Individual Shooter \$125

Includes 100-target shooting round and lunch

### Station Sponsorship \$125

Includes lunch for two and a station sign

Golf cart rental \$50 (limited # of carts) | Lunch only \$30

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Please sign me up for:  Gold  Team  Station  Individual  Lunch  Cart

Contact Name: \_\_\_\_\_

Company (for signage and publication use): \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

### Team Entry

Shooter #1 \_\_\_\_\_

male  female  under 16

Shooter #2 \_\_\_\_\_

male  female  under 16

Shooter #3 \_\_\_\_\_

male  female  under 16

Shooter #4 \_\_\_\_\_

male  female  under 16

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Enclosed is my check for \$ \_\_\_\_\_ or  Send Invoice for \$ \_\_\_\_\_

Questions: Please contact Karen Smith at 772/595-5026 or [info@ircitrusleague.org](mailto:info@ircitrusleague.org)



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# League's February Board Meeting



**Citrus Administrative Committee begins internal administrative upgrades.** Users will see a quicker turn around on certified shipment data as well as improvements to the website. By 2018, administrative duties will be automated creating more cost efficiency and timeliness on data availability.

**New Variety Development Management Corp** provided an update on specialty data that showed heavy movement to specialties. USDA/ARS breeding program identified selections for potential with Jackson grapefruit trees. As far as canker/HLB resistance, the Summer Gold grapefruit is a success and the sugar bell is receiving a lot of attention.

**A joint letter to Commissioner Adam Putnam** from the Indian River Citrus League and the Florida Citrus Packers was approved to be sent that is requesting a blanket exemption for fresh citrus from Food Safety Modernization Act (FSMA) water requirements testing regimens, since shipping fresh Florida citrus to more than 20 countries for more than 40 years with no documented incidence of food borne illness resulting from consumption of fresh Florida citrus.

**ARS provided an update on grapefruit HLB resistant trees that are showing promise.** USDA is working with a local grower on "escape" trees. Experiments continue to show lower HLB symptoms within the greenhouse. The legality of this has been worked out and the end result will create a template with other growers and organizations.

**Division of Plant Industries is creating an acceleration of clean up on budwood** material and a new permitting program in light of the discovery of "escape" trees here on the River. This new process requested by the League will reduce the wait time from three years to nine months. The permit is to allow the planting of escape trees on up to 10 acres per variety starting with grapefruit for commercial use only and treated as a research block.

**Florida Citrus Mutual provided an in-depth update on the budgets** for the 2017-18 state and federal appropriations. The breakdown for the state is \$28.2 million and federal is \$165.5 million.



## Indian River Citrus League

## 2017

## Board of Directors

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Hale Groves

**Cody Estes**

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Evans Properties, Inc.

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The Packers of Indian River

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# Citrus Grove Project .....

## at Heathcote Botanical Gardens .....

By Diane Kimes, Executive Director  
Heathcote Botanical Gardens

Nestled on Savannah Road, in Fort Pierce, is a little oasis - Heathcote Botanical Gardens (HBG). In a former life, it was a commercial nursery; today, it celebrates 30 years as a community public garden. The five-acre garden is home to a collection of outdoor galleries for children and families to escape their wired world.

Among its assemblage is the "**Citrus Grove**" established in 2012 through a partnership with the U.S. Department of Agriculture. Fifteen species of citrus were initially planted, with back-up trees at the USDA greenhouse. Tim Gottwald, PhD. (USDA/ARS) recently swapped out many of the diseased trees. Doug Bournique and Karen Smith, both of the Indian River Citrus League, along with Kate Rotindo, Extension Agent, Urban Horticulture of UF/IFAS were on hand to see the new plantings and learn about the interpretive displays being planned. The goal is to provide a visual example of Florida's imperiled citrus tree industry to audiences visiting Heathcote. "It is important to share our history in the context of what Florida farmers are facing with HLB and psyllid and to inspire confidence that it remains a vital part of our future," shared Doug Bournique.



Left to Right: Diane Kimes, Kate Rotindo and Karen Smith

HBG will also be a site for research conducted by Joseph Patt, Ph.D, Research Entomologist of the USDA, focused on biological control agents that prey upon the psyllid and other plant pests. The demonstration project may begin as early as April 2017 and have a public education component to engage residents, students, and citizen scientists.

For more information about Heathcote Botanical Gardens and the **Citrus Grove Project** at Heathcote Botanical Gardens, please contact Diane Kimes at 772.464.4672.



## Upcoming Events .....

**March 31, 2017** – IRCL River Fun Shoot – Quail Creek Plantation - Okeechobee



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## Getting Involved.

### membership opportunities

Our Associate Membership provides opportunities to network with existing customers and potential customers by providing opportunities to sponsor events scheduled throughout the year. Their partnership with our organization is important to us. If interested in joining our organization, please contact the League office for further details.



# Grower vs. Researcher Production Funding Priorities



Mark A. Ritenour<sup>1</sup>, Garima Kakkar<sup>2</sup>, and Laurie Hurner<sup>3</sup>, University of Florida

<sup>1</sup> Indian River Research and Education Center, Ft. Pierce, FL.

<sup>2</sup> St. Lucie County Extension, Ft. Pierce

<sup>3</sup> Highlands County Extension, Sebring

On the final educational session of the Florida Citrus show (25-26 January, 2017) in Fort Pierce, FL, the audience was separated into industry and research/extension representatives and surveyed to learn what each group believed were the most important funding priorities related to citrus production given limited financial resources and the ever pressing need to mitigate negative effects of HLB. For each production category, the audience was instructed to assume a maximum citrus production budget of \$1,600 per acre for fruit destined to the fresh market, and \$1,200 per acre for fruit destined to processing. These amounts did NOT include maintenance expenses for roads, canals, irrigation systems, hedging/topping, taxes, and financing. Questions were repeated four times to cover non-bearing, bearing, fresh, and processed fruit. Participants were each given a Turning Technologies ResponseCard to record their anonymous responses. One laptop was set up for industry participants, and one for research/extension participants to pose questions and receive responses. Results from the polling was viewed by the audience immediately after polling was closed for each question.

The overarching question was, "Approximately what percentage of available funds do you plan/recommend spending on ..." and then each question addressed different aspects including fertilizers, insecticides, thermal therapy, bactericides, fungicides, herbicides, disease inspection & rouging, and tree replanting. An average of about 10 industry and 21 research/extension participants responded to each question. Because of the way responses had to be collected, participants could only respond within a range (0 to 10%, 11 to 20%, 21 to 30%, etc.) so responses were relatively broad. Presented here is a brief summary of the responses for FRESH fruit (Table 1).

While using averages does not illustrate the spread or other nuances of the responses, it does point out some different perceptions between the two groups and between bearing and non-bearing trees. For example, researchers/extension participants put a slightly higher priority on the use of bactericides than commercial growers. Both groups placed high importance on the use of fertilizers and low priority on the use of thermal therapy. Apparent low responses for the use of herbicides and tree replanting could benefit from a survey with greater resolution between responses. Surveying a broader, state-wide cross section of citrus producers and researchers using a refined and more detailed survey would offer better insights that would benefit both industry and research/extension personnel to better understand what each group views as priorities.

Table 1. Average audience response for different aspects of FRESH citrus production related to the question, "Approximately what percentage of available funds do you plan/recommend spending on ..."

Production Category	Industry		Researcher/Extension	
	Bearing	Non-bearing	Bearing	Non-bearing
Fertilizers	21 to 30%	21 to 30%	21 to 30%	21 to 30%
Insecticides	21 to 30%	21 to 30%	21 to 30%	11 to 20%
Thermal Therapy	0 to 10%	0 to 10%	0 to 10%	0 to 10%
Bactericides	0 to 10%	0 to 10%	11 to 20%	11 to 20%
Fungicides	11 to 20%	11 to 20%	11 to 20%	0 to 10%
Herbicides	0 to 10%	11 to 20%	0 to 10%	0 to 10%
Disease Inspection & Rouging	0 to 10%	0 to 10%	0 to 10%	0 to 10%
Tree Replanting	0 to 10%	0 to 10%	0 to 10%	0 to 10%

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- When submitting logos, convert all fonts to outlines.
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- We print in 4-color CMYK process.
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- Resolution should be a minimum of 300 dpi at actual size.
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