

**Florida Section
American Society of
Agricultural and Biological Engineers
2019 Annual Conference
and Trade Show**



***June 26-29, 2019
Delray Beach Marriott ♦ Delray Beach, Florida***

**Contact Derek Hendrie, FASABE Vendor Coordinator for
Sponsorship and Vendor Opportunities
Derek.Hendrie@lykes.com or Cell: (863) 214-1536**

**The Preliminary Agenda for the FASABE Continuing
Education Course and Conference is attached.**

Register Today! www.fl-asabe.org

Earlybird Registration Deadline: May 24, 2019

We look forward to seeing you in June!



FASABE Continuing Education Program

Wednesday Afternoon June 26, 2019

1:00 – 5:00 PM

Coral Reef Ballroom

Storm Water Management Model (SWMM)

Overview, Applications and a Case Study

4.0 Continuing Education Units (CEU) FBPE Provider #0003844

SWMM is a dynamic urban rainfall-runoff simulation model used to evaluate the performance of stormwater management systems. Participants will be given an overview of the model structure and its capabilities as well as applications to address a variety of water quantity and quality issues. Common SWMM applications will be discussed such as how and when the model may be applied to simulate complex routing (i.e. pipes, channels, storage/treatment devices, pumps, and control structures) and flow regimes (i.e. backwater, surcharging, reverse flow, and surface ponding). Participants will be guided through a case study to demonstrate the model development process including how to develop inputs and evaluate/interpret results.

Instructors

Mr. Wagner is a principal water resources engineer at CDM Smith and a professional engineer with 36 years of experience, specializing in watershed and water quality studies. He is a graduate of Marquette University (B.S. 1981) and University of Cincinnati (M.S. 1983). Wagner has contributed to the development of Total Maximum Daily Load (TMDL) studies, stormwater master plans, nonpoint pollution management studies, water supply studies, waste load allocation studies, stormwater Best Management Practice (BMP) manuals, and water quality data assessments. He has served as the technical expert for projects in Florida as well as across the U.S., and internationally. Mr. Wagner is a registered professional engineer in Florida and Virginia, and a Diplomat of Water Resources Engineering

SWMM was developed to simulate complex urban stormwater systems, enabling local, state, and national officials to manage runoff through infiltration and retention as well as reduce discharges that cause impairment to waterbodies. The model is widely used by stormwater managers and has been applied globally. Wagner's proficiency with SWMM will provide attendees with an overview, review applications, and cover a case study.

Workshop Objectives

- To introduce SWMM and its capabilities
- To present examples of various stormwater quantity and quality applications
- To demonstrate how to develop model inputs and interpret model results
- To guide participants through a case study of a SWMM application

Items to Be Provided to Participants

- Case study SWMM model including all files needed to run the model, description of inputs, and interpretation of results
- Presentation slides with guidance on developing and interpreting SWMM model





Florida Section ASABE 2019 Annual Conference

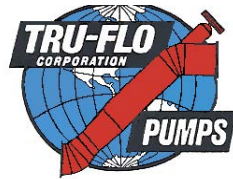
Thursday, June 27, 2019

Conference Registration Hours
Trade Show Hours

8:00 AM – 4:00 PM
8:00 AM – 4:00 PM

General Session: Modernizing Policy for a Resilient Future

Keynote Panel Address Sponsor:



Room: Coral Reef Ballroom

8:00 AM Trade Show Opens – Coffee Station –Salon ABCD

Sponsored by: SPONSORSHIP AVAILABLE

9:00 AM Welcome, Taylor Kroll, FASABE Chair

9:10 AM Introduction of Keynote Panel, Rajendra Sishodia, FASABE Program Vice-Chair

Opening Remarks by Panelists on Modernizing Policy for a Resilient Future

9:20 AM Brian Armstrong, Executive Director, SWFWMD

9:45 AM Tom Frick, Division Director, FDEP

10:10 AM Terri Lowery, Sr Vice President, Jones Edmunds & Associates

10:35 AM Sanjay Shukla, Professor, UF

11:00 AM *Networking Break, Visit Trade Show in Exhibit Hall –Salon ABCD*

Sponsored by: SPONSORSHIP AVAILABLE

11:20 AM Panel Discussion / Question and Answer Session

12:00 PM Lunch on Your Own



Florida Section ASABE 2019 Annual Conference

Thursday Afternoon, June 27, 2019

*Afternoon Technical Session A
(Graduate Student Presentation Competition)
Room: Coral Reef Salon 1*

TECHNICAL SESSION SPONSORSHIP AVAILABLE

Moderator: Nicole Pennington

- 1:30 PM A comparison between Cellular, LoRaWAN, and 2.4GHz Mesh wireless technologies for data collection in agriculture. Thiago Borba Onfore. University of Florida
- 1:55 PM Evaluation of the Hargreaves method for estimating reference evapotranspiration with ground and gridded weather data sources in the USA. Rogério de Souza Nóia Júnior. University of Florida
- 2:20 PM An analysis on the Best Management Practices to Reduce Hypoxia in the Gulf of Mexico. Anjali Sharma. Florida A&M University.
- 2:45 PM *Refreshment Break located in Trade Show Exhibit Hall –Salon ABCD*

BREAK SPONSORSHIP AVAILABLE

- 3:15 PM Improved climate-based tools for soybean production risk assessment. Daniel Perondi. University of Florida
- 3:40 PM Climate change in the Great Plains Aquifer simulated by CMIP5 Coupled Climate Models. Deepa Raveendranpillai. Florida A&M University
- 4:05 PM Evaluation of Mobile Heat Treatment System for Treating In-field HLB-affected Trees by Analyzing Biosensor Survival Rate. Shirin Ghaterhsamani. University of Florida
- 4:30 PM Extensions of the Technology Acceptance Model in SmartAg: An approach for New Product Development and Management Intervention. Raminder Kaur. University of Florida
- 4:55 PM Adjourn Session



Florida Section ASABE 2019 Annual Conference

Thursday Afternoon, June 27, 2019

Afternoon Technical Session B
Room: Coral Reef Salon 2

TECHNICAL SESSION SPONSORSHIP TBD

Moderator: TBD

- 1:30 PM Design of hydraulic channels using novel 3D printing technology for student engagement and recruitment. Aavudai Anandhi, PhD. Florida A&M University.
- 1:55 PM Latest Updates to the My Florida Farm Weather and Mobile Irrigation Lab Statewide Programs. Camilo Gaitan, PE, Florida Department of Agriculture and Consumer Services.
- 2:20 PM The Process of Decision-making in Small and Medium Scale Farmers Regarding to Diversification: The Roles of Opportunity Alertness, Risk-taking Proclivity, and Leadership Skills. Marcello Calle. University of Florida.
- 2:45 PM *Refreshment Break located in Trade Show Exhibit Hall - Salon ABCD*
- BREAK SPONSORSHIP AVAILABLE***
- 3:15 PM Facilitating Agricultural Resource Management Systems (FARMS) - Cost Share Opportunities. Gene Altman. SWFWMD.
- 3:40 PM Increasing Water Farming Efficiency with Nanobubbles. Sandra M. Guzman. University of Florida.
- 4:05 PM Development of a Fuzzy Logic Indicator Based Modeling Approach (FLIMA) for Forest Biomass Harvesting. Satyanarayan Dev. Florida A&M University.
- 4:30 PM **Adjourn Session**



**Florida Section ASABE
Awards Presentation
and Reception Buffet
Thursday Evening – June 27th
6 PM – 8:30 PM
*Ocean Terrace***

Cash bar opens at 6:00 PM; Buffet Dinner will open at 6:30 PM

*All Registrants are invited to this casual time of networking, good food and recognition.
Registration includes one tickets and student registration includes one ticket.
Additional tickets are available for purchase.*

Reception Sponsor:



Asmussen Engineering LLC.

Engineering & Environmental Services

P.O. Box 1998, Okeechobee, FL. 34973-1998 Office: (863) 763-8546 Fax: (863) 467-8560

Support the Florida Section Scholarship Programs at the Silent Auction!



Bid high and Bid often! Check out this year's silent auction items on display in the Trade Show Hall. Proceeds will benefit the three Florida Section ASABE scholarship funds: UF ABE, UF AOM, and FAMU BSE and other student award categories. The highest bidder on each item will be able to designate which fund his/her donation will go towards. The auction will end at the Awards Reception on Thursday evening. Silent Auction donations are needed – contact us at flasabeadmin@asabe.org or simply bring it to the conference.



Florida Section ASABE 2019 Annual Conference

Friday Morning, June 28, 2019

8:30 AM – 10:30 AM

Conference Registration

8:30 AM – 12:00 PM

Trade Show Hours

Morning Session A
Room: Coral Reef Salon 1

Session Sponsored by:
SPONSORSHIP AVAILABLE

Moderator: TBD

8:30 AM **Trade Show Opens – Coffee Station in the Salon ABCD**
Sponsored by:

SPONSORSHIP AVAILABLE

9:00 AM **Automated System for monitoring Asian Citrus Psyllid in Orchards. Yiannis Ampatzidis. University of Florida.**

9:25 AM **An Overview of Progression of Strawberry Harvesting Robot Development. Xue Zhou. University of Florida.**

9:50 AM **Low cost cow feeding behavior monitoring system using recurrent neural networks. Yiannis Ampatzidis. University of Florida**

10:15AM **Refreshment Break - *Salon ABCD***

BREAK SPONSORSHIP AVAILABLE

10:45 AM **UF/IFAS ABE Department Public Relations Opportunities. Kati Migliaccio. University of Florida**

11:10 AM **Modernization of Hydrologic Data Management at the Southwest Florida Water Management District. Asmita Shukla. SFWMD.**

11:35 AM **TBD**

12:00 PM **Adjourn**

An optional Technical Tour is being planned for Friday afternoon.



Florida Section ASABE 2019 Annual Conference

Friday Morning, June 28, 2019

**8:30 AM - 10:30 AM
8:30 AM – 12:00 PM**

**Conference Registration
Trade Show Hours**

**Morning Session B
Room: Coral Reef Salon 2**

TECHNICAL SESSION SPONSORSHIP AVAILABLE

Moderator: TBD

**8:30 AM Trade Show Opens – Coffee Station in the Suncrest Ballroom (Salon ABCD)
*Sponsored by:***

SPONSORSHIP AVAILABLE

- 9:00 AM Water and Nitrogen Budget Dynamics from a Corn-Fallow-Peanut Rotation. Maria I. Zamora Re. University of Florida**
- 9:25 AM What’s up with WOTUS? A Legal Update on Federal Wetlands Jurisdiction. Debbie Madden. Gunster Law Firm.**
- 9:50 AM Improvements in water usage and nitrogen leaching in corn using soil moisture sensor controlled irrigation. Jason Merrick. University of Florida.**
- 10:15 AM Refreshment Break – *Salon ABCD***
- BREAK SPONSORSHIP AVAILABLE***
- 10:45 AM A Resilient Future using vulnerability assessment in food-water nexus using systems thinking approaches. Aavudai Anandhi. Florida A&M University.**
- 11:10 AM Hydrologic and water quality benefits of compact bed geometry for vegetable production. Rajendra Sishodia. University of Florida**
- 11:35 AM June Mirecki, US Army Corp of Engineers.**
- 12:00 PM Adjourn**

An optional Technical Tour is being planned for Friday afternoon.



Florida Section ASABE 2019 Annual Conference Poster Session

*Posters will be on display in the Vendor Hall - Salon ABCD
Authors will be available during the Thursday afternoon break - 2:45 PM*

- 1) Use of Multispectral UAS imagery to evaluate plant nutrient status, Shubham Shirbhante. University of Florida.
- 2) Integrated monitoring platform of plant growth based on IoT edge computing in greenhouse. Chung-Liang Chang, National Pingtung University of Science and Technology, Taiwan.
- 3) Performance of ET-Based Irrigation Controller in reducing outdoor water use, Bayabil Haimanote, University of Florida.
- 4) Autonomous Field Plant Detection using Grid-Based Algorithms, Chandrasekaran Balasubramaniyan, University of Florida.
- 5) Intelligent Gardens for Food Production, Percy Grant, Florida Polytechnic University.

FASABE Annual Business Meeting Saturday Morning, June 29, 2018

SPONSORSHIP AVAILABLE

- 8:00 AM** Florida Section ASABE Executive Committee Breakfast (Includes incoming and outgoing officers) *Ocean Breeze*
- 9:00 AM** Florida Section ASABE Business Meeting – *Coral Reef Salon 1*
Agenda
2018-2019 Officer Reports
Introduction 2019-2020 Officers
UF Agricultural and Biological Engineering Department Update
FAMU Biological Systems Engineering Update
Florida Section Business
- 11:00 AM** Conference Adjourns

Enjoy your Conference stay at the Delray Beach Marriott!

Take advantage of our premier oceanfront setting on the popular Atlantic Avenue at Delray Beach Marriott. Step right out of our hotel entrance to enjoy family-friendly beachfront activities, or wander down

Atlantic Avenue for upscale boutiques, galleries, local restaurants and exciting nightlife.

Our luxury, resort-styled hotel also offers a tranquil, newly renovated on-site spa, several outdoor pools, a fully-equipped fitness center and restaurants with delicious cuisine and hand-crafted cocktails. At nighttime, unwind in the comfort of well-designed guest rooms and

suites with plush bedding, spacious bathrooms, Wi-Fi access and ergonomic workstations. Or, relax in our contemporary, condo-styled accommodations at Villas by the Sea with full kitchens and separate living spaces. If visiting Florida for a business event or a social gathering, you are certain to enjoy our large-scale, modern venues with high-tech amenities. We want to make your vacation to Florida a memorable experience at Delray Beach Marriott).



Make your reservation today!

Hotel reservations can be made online at the group rate through the FASABE website: <http://www.fl-asabe.org/> or by calling 1-877-433-5729 and asking for the 2019 FL-ASABE Annual Conference Group rate. The FASABE group rate is \$164.00 plus tax (single/double occupancy). The resort fee has been waived and self-parking is discounted to \$12.00 per day. Complimentary wifi. Cancellation policies apply.



Florida Section ASABE Annual Conference Registration Form Early bird Deadline May 24, 2019

Online registration available at www.fl-asabe.org! Credit card payment can be used for online registration only. See www.fl-ASABE.org for more details. Registration form and fees can also be mailed to: Lisa M. Collins, PE, Administrative Consultant, Florida Section ASABE, 412 Newman Road, Sebring, FL 33876, Phone: (863) 414-0710, Email: flASABEadmin@asabe.org. Make checks payable to *Florida Section ASABE*.

Name _____
 Spouse Name _____
 Company or Agency _____
 Address _____
 City _____ State _____ Zip _____
 E-mail _____

ASABE member? Yes: No:
 Current Student Member? Yes: No:
 Check One if Applicable: Speaker: Trade Show Vendor:

“Early Bird” Postmarked by May 24, 2019	“On-Site” Postmarked after May 24, 2019	TOTAL \$
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Continuing Education Program: SWMM: Overview, Applications, and a Case Study - 4 CEU (June 26, 2019)
 Continuing Education Registration fee: \$75.00 \$100.00 _____

Full Meeting Registration (June 27-29, 2019) - Check one:

The Full Meeting Registration fee includes the 2019 Annual Conference, Thursday Evening Awards Reception Buffet and networking breaks.*

<input type="checkbox"/> ASABE member/speaker (*one buffet ticket incl.)	\$300.00	\$350.00	_____
<input type="checkbox"/> Non-ASABE member (*one buffet ticket incl.)	\$400.00	\$450.00	_____
<input type="checkbox"/> ASABE Student member (*one buffet ticket incl.)	\$ 75.00	\$100.00	_____

Additional Awards Reception Buffet Tickets (June 27th, evening):

of Adult Tickets at \$25.00 each: _____ Total: _____
 # of Child Tickets (under 10) at \$15.00 each: _____ Total: _____

- Check here if you would like to pay your 2019 Florida Section dues now: \$25.00
Please Note: You may have already paid your 2019 Florida Section dues with your ASABE national membership dues. If you need to check to see if you owe the Section Dues, please contact Lisa Collins at 863-414-0710 or flASABEadmin@ASABE.org.

- If you would like to join the American Society of Agricultural Engineers, please complete the application form at www.asabe.org. Remit the form and dues to ASABE as shown on form.
 Check here if you have joined ASABE today:

Subtotal this page: _____

Annual Conference Registration Form – continued

The following events are optional.

Help Sponsor a Student at the Conference

\$100.00 x _____ = _____

Donation to Florida Section ASABE Student Support:

\$ _____

Donations of funds may include scholarships given via the various FL agricultural and biological engineering programs (such as ABE, AOM, FAMU-BSE, indicate below) or if no specific scholarship is designated the funds may be used for student support activities such as the state science fair awards or the graduate student paper competition.

Check your choice to specifically designate your donation to a student scholarship program or student support activities. Multiple checked choices will result in donations split evenly across those choices:

UF/IFAS SHARE Endowment

Agricultural & Biological Engineering Account

Agricultural Operations Management Account

FAMU BSE Scholarship Account:

Student Support Activities:

Subtotal this page \$ _____

+ Subtotal front page \$ _____

Grand Total \$ _____

Mail registration form & Fees to: Lisa M. Collins, PE, Administrative Consultant, Florida Section ASABE, 412 Newman Road, Sebring, FL 33876, If you have any questions, please contact Lisa Collins at (863) 414-0710 or. *Make checks payable to Florida Section ASABE. Credit cards are now accepted online only. See www.fl-ASABE.org for details.*

- **Trade Show Vendors:** If you have registered on the Trade Show form, you do not need to register for the meeting on this form. You may, however, use this form to register for the optional events listed. Simply check the trade show vendor box on the front of this form.
- Take advantage of ASABE member rates. See the ASABE Membership application at www.asabe.org. If you are already an ASABE member, please pass on the web location to a potential member.
- Hotel reservations should be made directly with the *Delray Beach Marriott* to guarantee the ASABE Group rates. See the hotel reservation information at www.fl-asabe.org
- **No refunds will be made after May 31, 2019. No exceptions!**