Message from the Steering Committee

by Manasota Chapter Secretary
Linda Maudlin, Greeley & Hansen

The Manasota Chapter kicked off fall by collaborating with Florida Section American Water Works Association (FSAWWA) Region X to plan the second luncheon of the fiscal year. Hurricane Hermine intervened and caused the cancellation of the luncheon, but the chapter rallied to reschedule the event. On September 30, over forty people were enlightened with a presentation entitled, “The Town of Longboat Key Force Main Assessment.” This project included the use of the PURE Technologies SmartBall®, among other technologies. This assessment was recently completed by the town and is the fifth assessment or inspection it has pro-actively performed on the 20-inch-diameter force main that carries all of the town’s wastewater off of the Key to Manatee County for treatment.

Thank you to the speakers: Will Craven of PURE Technologies, Mark Kincaid of Coastal Engineering Inc., Tom Wilson and Mike Knowles of Greeley and Hansen, and David Greene of the Town of Longboat Key.

The next chapter luncheon is scheduled for January 20, 2017. For more information and to register: http://mms.fwea.org/Calendar/moreinfo.php?eventid=41733

Congratulations to Kristiana Dragash! The chapter honored Kristiana with a Founders Award in grateful recognition for her outstanding leadership and guidance since 2010. Thank you for your continued support.

October ended with a bang for the chapter. The second annual Manasota Chapter Sporting Clay event was held on October 28 at the Sarasota Skeet and Gun Club. The planning committee could not have asked for a more beautiful day—sunshine, blue skies, low humidity and a welcomed breeze. Over fifty attendees representing consultants, contractors, and municipalities took part in the event. Participants enjoyed a barbeque lunch, followed by a Sanders Co. mini-presentation on wastewater pump systems, avoidance of common causes for failure, and selection of the right pump.

A shotgun start immediately followed the presentation. The thirteen teams accepted the challenge of who would take home the coveted titles and trophies for the top three shooting teams and top individual shooters. The results were:

- Top Individual Shooters: Mike Chell, Mike Dickey, Rob Humpel, James Loften and Lane Longley.
- Top Teams: Banks Engineering, TSC Jacobs, and Johnson Engineering.

Congratulations to all of the winners!

Thank you to the Sporting Clay event sponsors: Arcadis, Greeley and Hansen, Johnson Engineering, McKim & Creed, PSC Cardinal Contractors, Sanders Company, Sharek Solutions, and TSC Jacobs.

Mark your calendars now and save the date for the third annual Sporting Clay Event, which will be held on November 17, 2017.
The Annual Winter Social was held Thursday, December 15th. This fun-filled event was an opportunity for local members of FWEA, AWWA, American Society of Civil Engineers (ASCE), American Public Works Association (APWA), and Florida Engineering Society (FES) to join together for an enjoyable, relaxing evening. There was also a successful toy collection for our local Toys for Tots program.

As always, we are so thankful for our members and sponsors and are looking forward to an exciting 2017!
# Calendar of Upcoming Events

## JANUARY

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<td>AWWA Region X Model Water Tower Competition, Sarasota</td>
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<td>FES Myakka Chapter Luncheon, Sarasota</td>
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<td>20</td>
<td>FWEA/AWWA Manasota Chapter Joint Luncheon, Sarasota</td>
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<td>25</td>
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## FEBRUARY

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<td>FWEA Air Quality Seminar, Fort Myers</td>
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<td>FWEA Wastewater Process Seminar, Miami</td>
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<td>FWEA West Coast Chapter 2nd Annual Sporting Clays Tournament, Lithia</td>
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<td>ASCE Toothpick Bridge Building Contest, Sarasota</td>
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## MARCH

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<td>FWEA Manasota Chapter Luncheon, Sarasota</td>
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<td>FES Myakka Chapter Luncheon, Sarasota</td>
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<td>ASCE Suncoast Chapter Luncheon, Sarasota</td>
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<td>22</td>
<td>APWA Suncoast Branch Monthly Breakfast, Sarasota</td>
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<tr>
<td>23</td>
<td>FWEA West Coast Chapter Annual Roundtable Luncheon, Tampa</td>
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Most of today’s water and wastewater utilities utilize a mixture of low voltage (below 600V) and medium voltage (600V – 69kV) equipment operating in their systems. While most people understand that there is an inherent risk in working with live electrical equipment, defining that risk and providing adequate protection has become more prevalent within the industry. Electrically, this has taken the form of Arc Flash Studies and Arc Flash Hazard labeling. The Occupational Safety and Health Administration (OSHA) states that: “Arc flash, simply put, is a phenomenon where a flashover of electric current leaves its intended path and travels through the air from one conductor to another, or to ground. The results are often violent and when a human is in close proximity to the arc flash, serious injury and even death can occur.” Over the last few years OSHA and the National Fire Protection Agency (NFPA) regulations have moved from recommending arc flash studies to requiring them. Utility owners and operators are accessing consulting engineers to perform studies at their facilities to meet or exceed the current safety requirements. Operators and maintenance staff are training to become educated as to the significance of arc flash warning labels and proper procedures for working around this equipment.

One of the main challenges confronting most utility owners is understanding what is involved in performing an arc flash study. There can be confusion over why one facility requires more extensive effort to perform a study than another. The warnings, Personal Protection Equipment requirements and arc flash hazard labels on electrical equipment are becoming more common place, but what goes into the determination of the proper protection level and what information is needed to be compliant with current regulations?

A key component for any arc flash study is proper data collection. This portion of the process is often overlooked in terms of how much work is actually involved and the effort required to compile all the necessary data to input into the software model.
This is especially true of older facilities that have had multiple additions, changes to equipment and renovations to their systems over the years. Having accurate as-built documentation of the facility as well as established operating modes will also have an impact on the study. It's important to have this information organized prior to the start of an arc flash study.

The arc flash hazard levels found initially are not always what gets put on the equipment labels. There are some issues that are relatively easy to mitigate, while others require actual changes to the design of the electrical distribution system. A general overview of protective devices (fuses, breakers, relays) and how they affect the results of an arc flash study will give the owner a better grasp of the issues involved with mitigation.

When embarking on an arc flash study it is always best to have an industry professional on your side to guide you through the process to avoid potential issues. These include pitfalls of the data collection process, a basic introduction to overcurrent protective devices and the most common ways to mitigate arc flash hazard levels.
What Should You Know About An Arch Flash Study

Keff Kurella, PE., Principal Electrical Engineer, Arcadis

In the end, it is still up to the owner to determine how to provide a safe environment for their workers. By becoming more intimate with the study process, an owner can have more input with respect to mitigation, operation and better record keeping at their facility.
FWEA Manasota Chapter Steering Committee Officers

Chair
Mike Knowles: 941.378.3579

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Laura Baumberger: 941.371.9832
Ashley Miele: 941.379.7616

Utility Liaisons
Jeff Goodwin (Manatee County)
Peter Bonk (Sarasota County)
Mike Mylett (Sarasota County)

Founding Chair
Kristiana Dragash: 941.371.9832
Lindsay Marten (Past Chair)

If you are interested in joining the Steering Committee, please contact us.

We are currently seeking Utility Liaisons and additional At-Large Members.
Kevin Morris, P.E. from the Peace River Manasota Regional Water Supply Authority will be presenting on the potential effects of sea level rise and climate variability on hydrology and water quality for the Peace River and Peace River Drainage Basin.

**Kevin Morris, P.E., BCEE, CPPO, CSEP. Env SP, Peace River Manasota Regional Water Supply Authority, Science and Technology Officer**

Kevin Morris has been with the Authority since 1999 and is currently the Science and Technology Officer. Prior to joining the Authority, Mr. Morris worked for 10 years with a global engineering services firm and worked on municipal, federal and private client projects located in Florida, Georgia, South Carolina, California, and Puerto Rico.

Mr. Morris has Bachelors and Masters degrees in Engineering from the University of Central Florida and an MBA from Florida State University. Mr. Morris is a registered Professional Engineer in the state of Florida and is Board Certified as an Environmental Engineer. He also has certifications as a Public Purchasing Officer, Systems Engineering Professional, Envision Sustainability Professional, and has earned the LEED Green Associate and Six Sigma Green Belt credentials. Collectively, Mr. Morris has managed the implementation of over $250 million in CIP projects for the Authority including multiple surface water treatment capacity expansions, an ASR wellfield expansion, 33 miles of finished water transmission mains and an offline raw water storage reservoir.

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**Climate Change and the Peace River**

Kevin Morris, P.E., Peace River Manasota Regional Water Supply Authority

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**JOINT FWEA MANASOTA & AWWA REGION X CHAPTER LUNCHEON MEETING**

**Sarasota County Operations Center (BOB Building)**

**Conference Room 1**

1001 Sarasota Center Blvd., Sarasota, FL 34240

Registration - 11:30 • Lunch and Program - 12:15

**Menu:**

1) Broasted Chicken, 2) Real Mashed Potatoes, 3) Chicken Gravy, 4) Green Beans, 5) Tossed Salad, 6) Dinner Rolls, 7) Baked Pie and Cream Pie, 8) Sweet Iced Tea and Lemonade

Please register by Friday, January 13th

Pre-registered Members: $15 • Pre-registered Non-members: $20 • Walk-in: $25

You can register online at [www.fwea.org](http://www.fwea.org) or register by phone, fax, or e-mail to Linda Maudlin

2601 Cattlemen Road, Suite 100, Sarasota, FL 34232

Ph: 941-378-3579 • Fax: 941-378-9489 • E-mail: lmaudlin@greeley-hansen.com

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The Manasota Chapter is in search of Project Spotlight articles for future newsletter editions. Chapter sponsors are encouraged to submit an article highlighting a local project. Please contact Samantha Nehme at samantha.nehme@stantec.com or 941-921-4183 for more information.