



## The Outlook for the 2017 Legislative Session

Debbie Flack, President (12/30/16)

At the conclusion of September's annual conference, FSBPA's governmental agenda for 2017 was daunting but clearly identified. Senator Jack Latvala, Chair of the Appropriations Committee for 2017-2018, in his keynote made it quite certain that Florida's beaches were one of his top priorities for the upcoming session with a laser focus on reestablishing a predictable source and minimum amount of funding for statewide projects. That starting number seems to be the easily-defensible \$50 million a year. The Senator also expressed his opinion that with increased funding comes the responsibility to revisit the annual project selection process, revise ranking criteria, provide increased emphasis on inlet management projects, and improve transparency, funding accountability, and long-term planning for beach and inlet management projects.



In the few weeks following the September conference and prior to Hurricane Matthew's impact to Florida's East Coast beaches, FSBPA emphasized in detailed publications and meetings the concerns, needs, and future advocacy strategies for the benefit of Florida's critically-eroded beaches. We all had to be encouraged with the Senator's hands-on interest in legislation and his early filing of a draft bill.

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Unfortunately on many fronts, but especially for those impacted, Matthew's and to a far lesser extent Hermine's damages to so many miles of shoreline (up to 500 miles of Florida's 825 miles of beaches) have since taken over the conversation. The concern has obviously focused on the significant beach recovery costs, but intertwined is the need to address a number of shortcomings in the existing statewide beach management program. It shouldn't be lost in the conversation that in this same brief period of time the Office of Economic & Demographic Research Long-Range (3 year) Fiscal Outlook was presented. The bottom-line is there will be no budget surplus going into the upcoming appropriations process. This complicates and severely limits what is now obviously our mutual two-track initiative on behalf of Florida's beaches for 2017 and beyond.

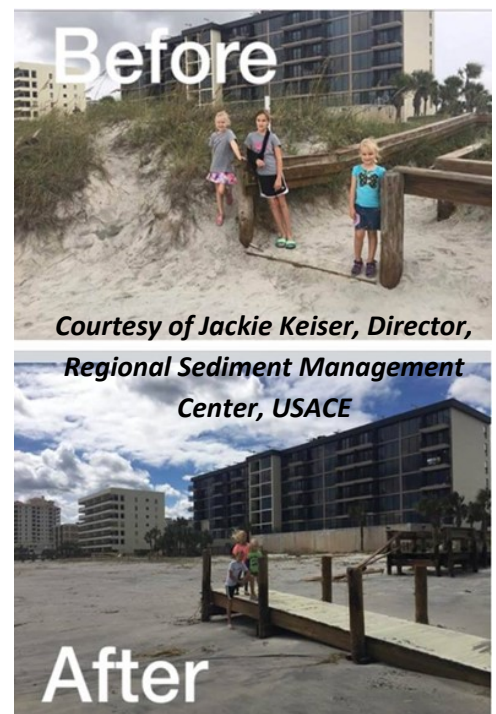
While hard to appreciate currently, all the news surrounding Hurricane Matthew isn't negative. In fact, there are two important observations or "lessons" to come away with. Lesson 1 is to fully recognize and appreciate just how well all beach nourishment (managed, engineered) projects performed, even those awaiting periodic maintenance. It was simply outstanding! All federally-authorized projects impacted by Matthew as well as a dozen or so State/Local (non-federal) nourishment projects from Nassau through Palm Beach counties did their job — there was no major damage to upland structures caused by erosion. Beach nourishment projects again proved to be the best form of coastal infrastructure, sacrificing sand while protecting roads and major upland structures.

*"Florida's economy relies heavily on its beaches, the state's invisible coastal infrastructure that protects Florida's communities." "The State and the U.S. Army Corps of Engineers experience shows the most cost-effective, socially and environmentally suitable way to reduce storm damages and coastal flooding on most open coast sites occurs through beach nourishment."*

**(American Society of Civil Engineers, 2016 Report Card for Florida's Infrastructure)**

Lesson Number 2, lest we forget, dunes add more coastal protection and reduce coastal flooding. Whether as part of beach nourishment projects or standing alone, we must refocus program efforts on restoration, enhancement and routine maintenance of dunes and vegetation. Where well-developed and maintained, dunes served as strong reinforcement upland of nourishment projects or in many cases the only source of storm protection, reducing coastal flooding, and are inarguably far less expensive to replace than the alternative.

All impacted "managed" beaches (nourished, engineered), if post-storm assessments indicate they sustained measurable sand losses, have at least the opportunity for U.S. Army Corps of Engineers shore protection funding or FEMA Category G funding for engineered projects not part of the federal program.



While the project performance of our existing nourishment projects is reason to celebrate, FSBPA must acknowledge that the future performance of existing nourished beaches will suffer considerably if we don't quickly and adequately address the growing backlog in state cost-sharing for scheduled maintenance of existing projects. If we fail to do so as part of this historical intergovernmental funding partnership, the more vulnerable restored beaches will be the target of the next major storm event. We cannot continue to fund just one-third, more or less, of the annual number of local government project requests for state cost-sharing. Further, we share the added responsibility to strategically bring a portion of the 184 miles (and growing) of DEP designated critically-eroded beaches without projects into the statewide program. Matthew, with pinpoint precision, made both of these issues worthy of serious and immediate consideration for Florida's future economic well-being and safety.

The Corps recovery process for federally-authorized projects which was announced to local government sponsors prior to Matthew's arrival is advancing as scheduled, especially since the December 9 Congressional passage of WRDA 2016 and the Continuing Resolution which included Hurricane Matthew Supplemental Funding for flood control and coastal emergencies. We can expect some further notice of projects receiving 100% federal FCCE dollars for sand losses as well as Supplemental CG (Construction General) funding. The Corps pre and post-storm LIDAR surveys have not only allowed their PIR process to be responsive but have proved perhaps even more valuable for areas, including entire counties, with no or limited involvement with beach management activities or the state's beach program to begin to assess actual sand losses and recovery needs.

For the dozen or so State/Local nourishment projects awaiting FEMA follow-up site visits from their coastal team with the hope of securing project worksheets for Category G Funding (75% FEMA, 12.5% state, 12.5% local) at least this final stage is expected to be underway with the New Year. This—repair and recovery of the beach nourishment projects impacted on

Florida's East Coast— is the easy part of the puzzle! And if relatively successful in securing federal dollars, requires a manageable state cost-share.

The most consequential problems and issues resulting from Matthew with precedent for the statewide beach management program will have to be expressly considered by the Legislature. How lawmakers respond to these issues, and to what extent they can also address the traditional FY2017/18 program will largely determine how Florida's beaches fare in the near future.



**Indian River County, Segment 3**



The impact of Matthew has made it the responsibility of decision-makers to focus on how best to grow the number of miles of managed beach to include in some responsible fashion the most vulnerable beaches without projects. Unfortunately, even that number has increased to include major segments of beaches that weren't even designated as critically-eroded prior to Matthew, and in turn not eligible for state funding. I haven't heard anyone suggest this outcome would be what we are witnessing as a result of the hurricane. Miles of unprotected beaches and upland development, no local beach program, no history or involvement in the statewide program, and no existing projects. This includes almost two entire counties – Flagler and Volusia (except Ponce Inlet IMP). While not certain of timing or impact, at least Flagler had the only federal shore protection project authorized in WRDA 2016. (It's just a 2.6 mile protective dune structure to protect what is now a failed segment of A1A.) The rest of the county (15 miles), a large portion of Volusia's 49-mile shoreline, and approximately 7 miles of St. Johns County's shoreline from South Ponte Vedra to Vilano Beach have been severely-impacted, with homes perched on sand cliffs, infrastructure damage, and significant upland flooding. No simple answers, very difficult deliberations, and a historically effective state program that does not readily accommodate them.



Flagler Beach post storm Matthew impacts.



SPV - Vilano Beach area post-storm, Hurricane Matthew

The Legislature must decide how best to address these major segments of shoreline that don't typically qualify for state funding or don't satisfy the access and parking requirements. No one at this point in time is suggesting major beach nourishment projects, just area-wide dune enhancement for these three major segments of shoreline. DEP anticipates these dune projects may be coupled with FEMA Cat B emergency berm ("speed bumps") funding. It bears repeating, the projects envisioned are not major restoration projects that most confuse for native beaches, but are at best storm protective berms with short beach extensions. They are very costly, high cy/ft. projects, because of the severe erosion and profile lowering, and may have to rely on truck hauls or distant

off-shore sand sources. The vulnerability of these areas is undeniable. If not subject to the provisions of Chapter 161, F.S., and consistent with the requirements of statewide program, hopefully the response will be narrowly framed as a one-time only storm damage recovery appropriation, with expressed encouragement for local government sponsors to take responsibility in pursuing effective strategies and policies to bring these critically-eroded miles of beach into the statewide program.

Preliminary funding estimates for hurricane recovery efforts from DEP and FSBPA members are very similar--\$77M and \$74M respectively in state appropriations. However, we get there using somewhat different paths. FSBPA didn't include Hermine but certainly supports the FEMA Cat G requests in Manatee and Sarasota counties, and knows the Corps has a favorable PIR for the Pinellas County-Sand Key Project. We also were more optimistic regarding Corps participation generally. We did not include funding for agency support activities. DEP has no back-up plan for State/Local projects seeking CAT G funding, while FSBPA's preliminary number makes the assumption that a handful of these projects may go forward without federal funding, to be cost-shared equally by the state and local sponsor. But all and all the numbers are close. It's far too early to give the magic number much validity, but almost eerily EDR's 2015 Evaluation of the State's Investment in Beaches estimates that a high-impact hurricane would require the state to appropriate \$79.9 million for beach restoration. Future *Shoreline's* will update hurricane recovery efforts, estimated costs and final legislative budget deliberations.

The detail of hurricane recovery efforts in this legislative outlook is a less than subtle sign of Matthew's impact on what was to be FSBPA's exclusive 60th Anniversary initiative "Beaches 2017 and Beyond" to ensure the statewide beach management program is on sound footing going forward. It might be easier to wait until next year to address but we can't. Fortunately, we have strong legislative leadership on our side. Hurricane Matthew should simply reinforce the importance of reestablishing a dedicated funding source and minimum amount of annual funding for Florida's beaches, and examining program objectives and procedures to ensure state funds are used most effectively. It was never going to be easy, but Matthew and recent state revenue projections only make it more challenging. There is a positive, beaches are on the radar screen, and we are even hearing more interest in inlet management projects. Hopefully, legislation will be forthcoming.

FSBPA's Board and staff will continue to move our mutual agenda here in Tallahassee forward, and we urge each of you to do the same, so that the message is repeated often and clearly. Contact Diana Ferguson (FSBPA Legislative Services, Rutledge-Ecenia) or me ([mail@fsbpa.com](mailto:mail@fsbpa.com)) if you need specific talking points or have questions. I am encouraged by our early efforts to put together a coalition of coastal interests which will have a shared message. Please discuss with your local elected officials, and by chance members of your legislative delegation. It's a good message, and a noble cause!

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## Op-Ed by Senator Jack Latvala Naples Daily News, 12/4/16

[Click here](#) to view pdf of the article

Naples Daily News - 12/04/2016

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# Legislature has duty to protect Florida beaches



**STATE SEN.  
JACK LATVALA**  
DISTRICT 16,  
CLEARWATER

The "Shrinking Shores" series in the Naples Daily News reminds us of our collective responsibility in protecting Florida's shoreline and demonstrates the role of healthy, maintained beaches for our safety and economic well-being.

It covered the gauntlet of important issues — dwindling sand resources, at-risk public infrastructure and development, limited state funding to repair eroded beaches and bypass sand trapped at our inlets, and questionable coastal development policies.

The series helps to lay the groundwork for me and my legislative colleagues to take a proactive stand for managing Florida's beaches heading into the 2017 session.

With a return on investment of over 5-to-1, the only way to lose is by not investing in the state's beach program.

The Naples Daily News did a good job pointing out program flaws; so much so I am not sure we come away fully appreciating the many benefits provided by

this intergovernmental partnership and statewide program. We have had the best beach management program in the country and Floridians should be proud of it.

I anticipate the governor and Legislature joining me in making improvements to this important program with the overriding priority being the commitment of the annual funding needed to keep sand on our beaches. If the funding is adequate and timely, a lot of the other issues raised by the series will either fall away or can be successfully addressed.

Representing Pinellas County over many years makes sustaining Florida's beaches terribly important to me. I am committed to making beaches a major economic and coastal resource initiative for the 2017 legislative session.

Florida's beaches define our state's unique brand and drive our tourism economy. Unfortunately, over half of Florida's sandy beaches are eroding, and only half of these miles of eroded beaches are part of a beach project. We can point fingers or offer excuses, but the simple answer is not enough funding.

The 1998 dedicated funding level of \$30 million annually for state cost sharing with the federal government and local government sponsors still seems to

be acceptable to many, despite simple inflation, the miles of eroded beach eligible for funding increasing by 30 percent, and the miles participating in the program having increased by 50 percent. Even more troubling, 45 percent of the miles of critically eroded beaches are still not part of any solution. Hurricane Matthew showed us where many of these unmanaged eroded beach segments are.

We must re-establish a predictable source and adequate minimum amount of annual funding as well as examine program objectives and procedures to ensure state dollars are used most effectively.

This year's appropriation for beaches funded only 35 percent of local government requests, and totaled just 33 percent of the dollars requested. The result is a growing project backlog, leaving far too many worthy projects unfunded, and too many miles of beach left to further erode along with their contributions to Florida's economy.

We need to revisit project selection by revising ranking criteria to ensure the most significant or needed beach and inlet projects rise to the top annually.

We have known for decades our inlets

are starving adjacent beaches. We need to try again — put inlet management on sustainable foundation and emphasize major initiatives. We also must encourage cost-effective regional sand management strategies.

I would like to turn our attention back to the state's 1986 comprehensive long-term beach management plan to re-emphasize its importance, and consider a multiyear work plan so local governments can count on their state partner.

Beaches are critical infrastructure for storm damage protection and need scheduled maintenance. Hurricane Matthew reinforced what many of us already appreciated — it is far less costly to replace sand losses after a major storm than public infrastructure and development. Existing beach nourishment projects from Miami-Dade to Nassau counties performed well, providing adequate upland protection and reduction of coastal flooding that more than justified the funding they have received historically.

Let's also not forget, Florida's 227 miles of restored beaches also provide habitat and public access, and contribute to our quality of life.

We can all be champions for the future of Florida's beaches.

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## Happy New Year - Meet our 2017 Chair



Happy New Year!

2017 is expected to be a tremendous year for FSBPA as we celebrate our 60th anniversary. With your commitment to beaches and support of the Association's goals we were able to achieve this major milestone. Although I have just finished my first year with FSBPA, my beach preservation days go back 17 years when Phil Flood first welcomed me into the state's beach management program. This is only a fraction of the time many of you have contributed to beach preservation, and I would like to invite you to share your favorite memories with our readers throughout the year. Maybe you would like to share with others your first job working on a restoration project, an encounter at an FSBPA conference, or meeting Debbie, Lisa or Teri for the first time. Recently, Lisa and I had a chuckle over the first time we met – location Martin County's Hutchinson Island project, circa 2000. She, Rajesh and I decided to walk the 4-mile length of the project before it was nourished to document the erosion. At the end of our walk, we drew straws (okay, not really, Lisa and I voted on Rajesh) to see who would walk back to get the car! Oh to be young again.

Please email me a story or experience anytime throughout the year, and we will share it with others. We all have a fun or interesting experience to share, so don't be shy!

I would like to turn your attention now to the 2017 Board of Directors. At our annual meeting in Naples, the Board of Directors recommended and our members voted on the Board of Directors and Officers.

### Officers for 2017

**Jim Trifilio** (Okaloosa County): **Chair**

**Don Donaldson** (Martin County): **Vice-Chair**

**Laird Wreford** (Sarasota County): **Secretary/Treasurer**

These officers and the past chair, Leanne Welch (City of Boca Raton), will serve as the Executive Committee for 2017. Leanne was an exceptional Chair, and we are grateful she is still a member of our Executive Committee!

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## Board of Directors

Virginia Barker, Brevard County  
Richard Bouchard, St. Lucie County  
Steve Boutelle, Lee County  
Don Donaldson, Martin County, Vice-Chair  
James Gray, Indian River County  
James Houston  
Gary McAlpin, Collier County  
Tamara Pigott, Lee County Visitors & Convention Bureau  
Andy Squires, Pinellas County  
Marty Smithson, Sebastian Inlet Tax District  
Jim Trifilio, Okaloosa County, Chair  
Leanne Welch, City of Boca Raton, Past-Chair  
Laird Wreford, Sarasota County, Secretary/Treasurer

## Ex-Officio Board Members

Ken Craig, Taylor Engineering, Inc.  
Dan Hussin, Manson Construction  
Erin Hodel, CSA Ocean Sciences Inc.  
Jackie Keiser and Jason Engle, USACE Jacksonville District  
Jenny Jacobsen, USACE Mobile District  
Trina Vielhaurer, FDEP

Our new Chair, Jim, recently visited with me and Debbie, and I had a chance to get to know him better. For those of you who haven't met Jim, he is intelligent, inquisitive, has an inviting personality and a contagious smile. He was born in New Jersey, but has lived in Florida over 25 years, and is currently the Coastal Management Coordinator for the Okaloosa County Tourist Development Council. In getting to know our new Chair, I asked him a few ice breaker questions to resolve my own curiosity, and he agreed to let me share our exchange with you. I hope you agree Jim will be an upstanding and outstanding leader and a great resource to the Board and to the FSBPA staff.



**Jim Trifilio, 2017 FSBPA Chair**

## Meet Jim Trifilio, 2017 FSBPA Chair

**Tell me about your job: in the course of a day, what type of decisions do you make and what type of problems you handle?**

*Working for a Tourist Development Council, and unlike most government agencies, we are blessed with having a healthy budget from year to year. My day to day decisions begin with a smart budget for each fiscal year. Although we do not collect taxes from our local citizens and are not required to provide any services that do not serve our visitors, we try to craft a budget with projects that benefit*



*not only our tourist population but also our residents. Hopefully, if we do a good job on the budget, our daily decisions are directed by that plan. A good example of just such a project concerns water quality. Each year, health departments across Florida must post health advisory signs at areas where our visitors and residents swim due to high levels of enterococcus bacteria. In our area, to date, that is as far as any investigation has gone. This year we will begin a program with the aim of identifying a source(s) and remedying the problem. Our area benefits by providing cleaner water for our visitors and our citizens alike.*

### **How did find your job with Okaloosa County?**

*In a way, I have Phil Flood, formerly with the FDEP Bureau of Beaches and Coastal Systems, to thank for my position. After the hurricanes of 2004/2005, Phil addressed our Tourist Development Council and urged them to create a position dedicated to all things coastal, with emphasis on beach restoration projects. He convinced them that the work associated with beach restoration was too important to be handled on an “as needed” basis. So, thanks Phil! (I think I still have your presentation!)*

### **What sort of changes are occurring in your field?**

*Well, I’m not entirely sure what my field is since my position with the Okaloosa County Tourist Development Council has morphed significantly since I started back in 2005. Originally I was tasked with getting funding, sand and permits for beach restoration. One of the initial steps was to secure funding. At the time, the TDC was collecting 4% from the Tourist Development Tax. Under State statute, Okaloosa County was allowed to collect a maximum of 5%. I suggested that adding an additional penny and dedicating that penny to beach restoration would be a relatively painless path to a stable funding source. The additional penny was approved by a super majority by the Okaloosa County Board of County Commissioners. However, over the years and changes to ordinance language, that penny is no longer dedicated to just beach restoration. Having said that, the TDC does have a beach restoration reserve fund dedicated to emergency beach restoration.*

*If I had to sum up what we do with that penny these days, I’d call it “product improvement.” The “product”, in this case, being those aspects of our area that tourist come to enjoy. Certainly the beach is the foundational reason most people come to our area but we’ve expended that into areas of ecotourism, park development, water quality improvement and habitat restoration among others.*

### **Which project accomplishments do you deem to be the most successful in your career?**

*I find the most satisfying, and hopefully successful, aspect of my job, to be the mentoring of staff. Projects come and go and they do have significant impacts on peoples’ lives, but helping those you work with and imparting whatever little knowledge I’ve gained over the years is more fulfilling than any project could ever be.*

*Having said that, one anecdotal story I like to tell does concern a beach restoration project. For a long time, portions of the beach in western Destin were mainly non-existent. There were beach front condominiums without a beach. Immediately after a successful restoration project I spoke with the property manager of one of these condos and he told me that he had been contacted by a dozen owners interested in selling their units. Previously, without a beach, it was impossible to*

*sell those properties. It brought home to me how beach projects can have immediate impacts on an individual's life.*

### **Why did you decide to join the FSBPA Board of Directors?**

*Working in the tourism industry, you quickly realize the importance of our beaches to the Florida economy. When people in our area question the need for beach restoration I ask them to imagine taking Destin and dropping it in the middle of Kansas (no offense Kansas) and asking themselves how big their tourism economy would be. Bottom line, no beach, no tourism. The FSBPA has shown a laser focus on the issue of beaches now for 60 years. This dedication in the time of shrinking budgets and other challenges represents a level of commitment not often seen. I'm proud to be a part of this organization. And who would pass up the chance to work with Debbie Flack? I'd be remiss if I didn't say something about Debbie. She has been the heart and soul of the FSBPA for so many years and it has been and will continue to be (don't leave yet Debbie! At least not while I'm Chair!) a true pleasure to work with someone with such talent, drive and overall "smarts".*

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## 2017 Tech Conference • February 8-10 • Hutchinson Island Marriott • Stuart, FL

Please join us for the 2017 National Conference on Beach Preservation Technology in Stuart! The Planning Committee evaluated numerous abstract submittals and produced another outstanding program with a wide range of presentations including:

- Hurricane Matthew – damages, assessments, responses, and the role of dunes
- Hurricane forecasting and coastal flooding considerations and challenges
- Survey and modeling innovations in coastal mapping and sand monitoring techniques
- Beach nourishment and Inlet sand bypassing project discussions and lessons learned
- Coastal restoration and regulation of seagrasses, hardbottom, and much more
- Habitat monitoring
- Miami Harbor Expansion Project – the long and the short of it



The program is available on the following pages or on our website [www.fsbpa.com/tech-conference.html](http://www.fsbpa.com/tech-conference.html) along with the most up-to-date list of sponsors and exhibitors. A few sponsorships and exhibit booths are still available. Please email ([mail@fsbpa.com](mailto:mail@fsbpa.com)) us for more information.

Please be sure to take a look at the program so that you can be thinking about which sessions you would like to attend on Thursday, with concurrent sessions running all day.

### **January 19—Last Day for Early Registration and Guaranteed Hotel Rates**

To register for the conference, visit the conference website and sign-up online.

Hotel reservations should be made directly with the conference hotel, the Hutchinson Island Marriott. [Click here to make your reservation online](#) or call (800) 775-5936. The group rate is \$159 for a single or double room, plus tax. **To ensure room availability, make your reservation early!** The hotel will honor the group rate as long as rooms remain in FSBPA's block or by **January 19, 2017**, whichever occurs first. We hope to see you in Stuart this February!

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## 30<sup>th</sup> Annual National Conference on Beach Preservation Technology Conference Program

February 8-10, 2017 ♦ Hutchinson Island Marriott ♦ Stuart, FL

### Wednesday, February 8, 2017

#### OPENING SESSION

1:00 p.m. to 8:00 p.m.

1:00 p.m.

Welcome – Martin County Commissioner Ed Ciampi (invited)

1:10 p.m.

Hurricane Forecasts and Impact Decision Support Information

Robert Molleda, National Oceanic and Atmospheric Administration, National Weather Service, Miami, FL

1:40 p.m.

FEMA Coastal Hazard Mapping and Beyond – What FEMA is Doing to Increase Flood Risk Communication

Michael DelCharco, P.E., Taylor Engineering, Inc., Jacksonville, FL and Christina Lindemer, Federal Emergency Management Agency, Region IV, Atlanta, GA

2:00 p.m.

The 2016 Hurricane Season in Historic Perspective: Matthew, Hermine and Storms from Years Gone By

Michael Jenkins, Ph.D., P.E., Applied Technology and Management, Inc., West Palm Beach, FL

2:20 p.m.

Reserved

2:40 p.m.

Professional Exchange Break

3:10 p.m.

The Impact of Hurricane Matthew on the Atlantic Coast of Florida

Ralph Clark, P.E., Jennifer Steele, Ph.D., P.G., William Weeks, and Michael Manausa, Division of Water Resource Management, Florida Department of Environmental Protection, Tallahassee, FL

3:35 p.m.

How the USACE's Overall Hurricane Response Efforts Have Evolved, and the Specific Response and Observations Following Hurricane Matthew

Jason Engle, P.E. and Kevin Hodgins, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL

4:00 p.m.

Hurricane Matthew Impacts to Jacksonville Beaches

Kevin Bodge, Ph.D., P.E. and Steve Howard, P.E., Olsen Associates, Inc., Jacksonville, FL

4:25 p.m.

Game of Inches: Nuisance Flooding and the King Tide Phenomenon

David Kriebel, Ph.D., P.E., Ocean Engineering Department, U.S. Naval Academy, Annapolis, MD

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**Wednesday, February 8, 2017**

**OPENING SESSION**

**1:00 p.m. to 8:00 p.m.**

**4:50 p.m.**

**Sea Level Rise Adaptation for a Portfolio of Assets**

**Angela Schedel, Ph.D., P.E., Commander, U.S. Navy, Ocean Engineering Department, U.S. Naval Academy, Annapolis, MD**

**5:15 p.m.**

**Return Period Economics: The Impact of Sea Level Rise**

**David Kriebel, Ph.D., P.E., Ocean Engineering Department and John Schedel, Ph.D., P.E., Commander, U.S. Navy, Mechanical Engineering Department, U.S. Naval Academy, Annapolis, MD**

**5:40 p.m.**

**Adjourn**

**6:00 p.m.**

**Welcome Reception**

**Location: Exhibit Hall (6:00 - 7:00 pm) and Poolside (7:00 - 8:00 pm)**

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**Thursday, February 9, 2017**

**CONCURRENT SESSIONS**

**8:00 a.m. to 10:05 a.m.**

**SESSION A**

**8:00 a.m.**

**Aerial Survey of Beachfront Damage Inflicted by Hurricane Matthew in Northeast Florida**

**William Dally, Ph.D., P.E., University of North Florida, Jacksonville, FL**

**8:25 a.m.**

**Hurricane Matthew Impacts and Response in Indian River County, FL**

**Will Reilly, P.E. and Michelle Pfeiffer, P.E., CB&I, Boca Raton, FL and James Gray, Jr., Public Works, Indian River County, FL**

**8:50 a.m.**

**Pre Post Storm Photographic Assessment of Hurricane Hermine**

**John Bishop, Ph.D. and Andrew Squires, Pinellas County Environmental Management Division, Clearwater, FL**

**9:15 a.m.**

**Honeymoon Island Erosion Control Project Performance during 2016 Tropical Season**

**Brett Moore, P.E., Humiston & Moore Engineers, Naples, FL**

**9:40 a.m.**

**The Tale of Two Storms and Two Islands: 2016 Storm Season Impacts and Response in Anna Maria Island and Lido Key, FL**

**Michelle Pfeiffer, P.E., Thomas Pierro, P.E., and Will Reilly, P.E., CB&I, Boca Raton, FL**

**10:05 a.m.**

**Professional Exchange Break**

**SESSION B**

**8:00 a.m.**

**Living Shorelines: Potential Alternatives for Shoreline Stabilization and Seagrass Permitting & Successful Mitigation Options**

**Dianne Rosensweig, M.P.H. and Thomas Ries, Scheda Ecological Associates, Inc., Sarasota and Tampa, FL**

**8:25 a.m.**

**The Evolution of Lake Worth Lagoon Restoration and Living Shorelines Projects**

**David Carson and Eric Anderson, Palm Beach County Department of Environmental Resources Management, West Palm Beach, FL**

**8:45 a.m.**

**Innovative Seagrass Habitat Creation Approach at the Rookery at Perico Preserve in Coastal Southwest Florida**

**Ryan Horstman, ICON Consultant Group, Tampa, FL and Damon Moore, Manatee County Parks and Natural Resources Department, Bradenton, FL**

**9:05 a.m.**

**Grassy Flats Restoration: Creatively Capping Muck to Restore Lake Worth Lagoon**

**Eric Anderson, Palm Beach County Department of Environmental Resources Management, West Palm Beach, FL**

**9:25 a.m.**

**Implementing Living Shorelines in Highly Urbanized Environments**

**Nicole Sharp, P.E., Greg Ward, and David Stout, Environmental Planning and Community Resilience Division, Broward County, FL**

**9:45 a.m.**

**Coastal Restoration with Breakwaters**

**Bruce Hasbrouck, Faller, Davis & Associates, Inc., Tampa, FL**

**10:05 a.m.**

**Professional Exchange Break**

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**Thursday, February 9, 2017**

**CONCURRENT SESSIONS**

**10:35 a.m. to 12:15 p.m.**

**SESSION C**

**10:35 a.m.**

**Collier County Beach Renourishment Projects: North County and South Marco Island Status of Construction**  
Gary McAlpin, P.E., Coastal Zone Management, Collier County, FL, and Tara Brenner, P.G., P.E. and Stephen Keehn, P.E., Coastal Planning & Engineering, Inc., Boca Raton, FL

**11:00 a.m.**

**Development and Construction of the Longboat Key, FL 2016 Multi-Phase Beach Nourishment Project**  
Albert Browder, Ph.D., P.E. and Juan Florensa, Town of Longboat Key, FL

**11:25 a.m.**

**Miami Beach Hotspot Project Summer 2016**  
Jamie Monty, Department of Regulatory and Economic Resources, Miami-Dade County, FL and Betsy Wheaton, Environment and Sustainability Department, City of Miami Beach, FL

**11:50 a.m.**

**Renourishment of Pensacola Beach, FL**  
Krista Egan and Albert Browder, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL

**12:15 p.m.**

**Luncheon**

**SESSION D**

**10:35 a.m.**

**A Regulatory Perspective on Seagrass Monitoring**  
Jennifer Peterson, Ph.D., Division of Water Resource Management, Florida Department of Environmental Protection, Tallahassee, FL

**11:00 a.m.**

**A Preliminary Review of Beach Profile and Nearshore Hardbottom Interactions**  
Douglas Mann, P.E., CB&I, Boca Raton, FL

**11:25 a.m.**

**Regulation and Evaluation of Hardbottom Monitoring**  
Lainie Edwards, Ph.D. and Brendan Biggs, Ph.D., Division of Water Resource Management, Florida Department of Environmental Protection, Tallahassee, FL

**11:50 a.m.**

**Sand Tracer Study in the Fort Pierce Inlet**  
Erin Hodel, CSA International, Inc., Stuart, FL, Jonathan Marsh, Ph.D., ETS Worldwide Ltd., Helensburgh, UK, Michael Trudnak, P.E., Taylor Engineering, Inc., Jacksonville, FL, and Richard Bouchard, P.E., St. Lucie County Erosion District, Ft. Pierce, FL

**12:15 p.m.**

**Luncheon**

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**Thursday, February 9, 2017**

**CONCURRENT SESSIONS**

**1:15 p.m. to 3:20 p.m.**

**SESSION E**

**1:15 p.m.**

**Improving Coastal Resilience through Dunes**

**Doris Otero, Michelle Pfeiffer, P.E., and Thomas Pierro, P.E.,  
CB&I, Boca Raton, FL**

**1:35 p.m.**

**Sediment Sorting During Coastal Restoration Projects:  
Implications for Resource Management, Environmental  
Impacts, and Multiple Use Conflicts**

**Katherine Brutsché, Ph.D., Coastal Hydraulics Laboratory, U.S.  
Army Engineer Research and Development Center, Vicksburg,  
MS and Douglas Piatkowski, Bureau of Ocean Energy  
Management, Headquarters, Department of the Interior,  
Sterling, VA**

**1:55 p.m.**

**Web Application for Siting Nearshore Placement Areas of  
Dredged Sediment**

**Katherine Brutsché, Ph.D. and Brian McFall, Ph.D., Coastal  
Hydraulics Laboratory, U.S. Army Engineer Research and  
Development Center, Vicksburg, MS**

**2:15 p.m.**

**Proof of Concept Tests UAS Feasibility for Coastal Surveys**

**Tim Cawood, PLS, McKim & Creed, Inc., Wilmington, NC**

**2:35 p.m.**

**Applications of Full Motion Video (FMV) Technology in  
Examining Coastal and Nearshore Issues**

**Jodi Harney, Ph.D. and Dustin Myers, CSA International, Inc.,  
Stuart, FL**

**2:55 p.m.**

**Passive and Active: Remote Survey Solutions for the Nearshore:  
An Integrated Approach**

**Don Ventura, Fugro Pelagos, Inc., Kiln, MS**

**3:15 p.m.**

**Professional Exchange Break**

**SESSION F**

**1:15 p.m.**

**Miami Deep Dredge, the Success Story**

**Bill Hanson, Great Lakes Dredge and Dock Co., Oak Brook, IL**

**1:25 p.m.**

**Seagrass Monitoring at Two Different Sites for the Miami  
Harbor Phase III Federal Channel Expansion Project**

**Martha Robbart, Alex Schroder, Christina Marmet, Ryan Fura,  
Kristian Rogers, and William Precht, Dial Cordy and  
Associates, Inc., Miami, FL**

**1:40 p.m.**

**Julia Tuttle Seagrass Mitigation Site – Restoration of a  
Historic Dredge Hole in Biscayne Bay, Florida**

**Michael Barnett, P.E., Tetra Tech, Inc., Mobile, AL and Terri  
Jordan-Sellers, U.S. Army Corps of Engineers, Jacksonville  
District, FL**

**1:55 p.m.**

**Miami Harbor Mitigative Artificial Reef**

**Jesse Davis, P.E., Tetra Tech, Inc., Boynton Beach, FL and  
Terri Jordan-Sellers, U.S. Army Corps of Engineers,  
Jacksonville District, FL**

**2:10 p.m.**

**We Built it. Did they come?**

**Terri Jordan-Sellers, U.S. Army Corps of Engineers,  
Jacksonville District, FL**

**2:25 p.m.**

**Deciphering Between Project-Related and Regional Impacts  
to Coral Reef Communities Near the Miami Harbor Dredging  
Project – The Science Behind the Story**

**William Precht, Brooke Gintert, Jason Croop, Ryan Fura,  
Lindsey Precht, Kristian Rogers, Alex Schroeder, M. Strueben,  
and Martha Robbart, Dial Cordy and Associates, Inc., Miami,  
FL and Terri Jordan-Sellers, U.S. Army Corps of Engineers,  
Jacksonville District, FL**

**2:40 p.m. Discussion**

**2:50 p.m.**

**The Impacts of Dredging on Reefs: Lessons from the Port of  
Miami Expansion**

**Rachel Silverstein, Ph.D., Miami Waterkeeper, Miami, FL**

**3:15 p.m. Discussion**

**3:20 p.m. Professional Exchange Break**

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**Thursday, February 9, 2017**

**CONCURRENT SESSIONS**

**3:50 p.m. to 5:20 p.m.**

**SESSION G**

**3:50 p.m.**

**Comparisons of Florida Department of Environmental Protection (FDEP) and Federal Emergency Management Agency (FEMA) 100-yr (1% annual chance) Coastal Water Levels**  
Christopher Bender, Ph.D., P.E. and William Miller, Ph.D., P.E., Taylor Engineering, Inc., Jacksonville, FL and Ashley Kauppila, P.E., Taylor Engineering, Inc., Charlottesville, VA

**4:15 p.m.**

**Nearshore Morphology Response to Hurricane Matthew**  
Irene Watts, George Maul, Ph.D., and Gary Zarillo, Ph.D., P.G., Department of Ocean Engineering and Sciences, Florida Institute of Technology, Melbourne, FL

**4:40 p.m.**

**Numerical Simulations of Morphological Changes in Barrier Islands and Inlets Induced by Storm Surges and Waves**  
Yan Ding, Ph.D., Coastal Hydraulics Laboratory, U.S. Army Engineer Research and Development Center, Vicksburg, MS

**5:05 p.m.**

**Morphological Modeling of Inlets and Adjacent Shorelines on Engineering Timescales: Challenges and Model Improvements based on Recent Studies on the West Coast of Florida and North Carolina**  
Lindino Benedet, Joao Dobrochinski, Morjana Signorin, and Thomas Pierro, P.E., CB&I, Boca Raton, FL

**5:30 p.m.**

**Adjourn**

**SESSION H**

**3:50 p.m.**

**Development of a Decision Support Tool to Reduce Sea Turtle Dredging Entrainment Risk**  
Douglas Piatkowski, Bureau of Ocean Energy Management, Headquarters, Department of the Interior, Sterling, VA

**4:15 p.m.**

**Sea Turtle Relocation Trawling: Satellite-tags Providing New Data for the Gulf of Mexico**  
Kristen Hart, Ph.D., Margaret Lamont, Ph.D., Michael Cherkiss, Autumn Iverson, Andrew Crowder, Devon Nemire-Pepe, U.S. Geological Survey, Davie and Gainesville, FL and Jessica Mallindine and Michael Miner, Ph.D., P.G., Bureau of Ocean Energy Management Headquarters, Department of the Interior, New Orleans, LA

**4:40 p.m.**

**The New Age of Sea Turtle Permit-Compliance Monitoring: Using Laser-Sighted GPS to Enhance Coastal Lighting Evaluations**  
Joseph Scarola, Ecological Associates, Inc., Jensen Beach, FL

**5:05 p.m.**

**Advances in Coastal Mapping and Modeling for the Florida Beaches Habitat Conservation Plan (FBHCP)**  
Jennifer McGee, Ph.D., Florida Fish and Wildlife Conservation Commission, Tallahassee, FL, Amy Knight, Florida National Area Inventory, Tallahassee, FL, and Michael Flaxman, Ph.D., GeoDesign Technologies, Inc., San Francisco, CA

**5:30 p.m.**

**Adjourn**

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**Friday, February 10, 2017****CLOSING GENERAL SESSION****8:00 a.m. to 12:15 p.m.****8:00 a.m.****Shoreline Change in Response to Sea Level Rise on Florida's Panhandle Coast****James Houston, Ph.D., U.S. Army Engineer Research and Development Center, Vicksburg, MS****8:25 a.m.****Update on NMFS Southeast Regional Office's Endangered Species Action Section 7 Consultations****Rachel Sweeney, National Oceanic and Atmospheric Administration, National Marine Fisheries Service Southeast Regional Office, St. Petersburg, FL****8:50 a.m.****Beach and Barrier Island Restoration Project – Dauphin Island, Alabama****Scott Douglass, Ph.D., South Coast Engineers, Fairhope, AL****9:15 a.m.****The “Biggest,” the “Baddest,” and the “Bestest” – Coastal Restoration Cajun Style****Michael Poff, P.E., Coastal Engineering Consultants, Inc., Naples, FL****9:40 a.m.****Harbor Town Golf Links 18<sup>th</sup> Green Shoreline Stabilization and Marsh Restoration Project****Christopher Creed, P.E., Olsen Associates, Inc., Jacksonville, FL****10:05 a.m.****Professional Exchange Break****10:35 a.m.****Fast Tracking the Martin County Bathtub Beach Dune Project****Robert Barron, Coastal Management and Consulting, Coastal Growers, Inc., Boynton Beach, FL****11:00 a.m.****Long Term Success and Future Approach of the Captiva and Sanibel Islands Beach Renourishment Program****Thomas Pierro, P.E., Michelle Pfeiffer, P.E., and Stephen Keehn, P.E., CB&I, Boca Raton, FL and Kathleen Rooker, Captiva Erosion Prevention District, Captiva, FL****11:25 a.m.****Which Way Do We Go? Regional Sediment Management and Improved Inlet Management****John Duchock, P.E., Town of Jupiter Island, FL and Michael Jenkins, Ph.D., P.E., Applied Technology and Management, Inc., West Palm Beach, FL****11:50 a.m.****Chula Vista Bayfront Sea Level Rise Analysis & Emergency Shoreline Stabilization****Bryan Flynn, P.E., Robert Battalio, P.E., Nick Garrity, P.E., and Lindsey Sheehan, P.E., Environmental Science Associates, Tampa, FL and Linda Scott, Port of San Diego, CA****12:15 p.m.****Conference Adjourns****Next Page**

# 2017 Tech Conference Student Scholarships

The Florida Shore and Beach Preservation Association, organizer of the National Conference on Beach Preservation Technology, is pleased to announce that it will be awarding one student a \$500 stipend for travel and other expenses to the 2017 Tech Conference which will also include a registration waiver. In addition, four other students will receive a gift card and registration waiver to the conference. A poster presentation is required by the selected students. The posters will be displayed in the exhibit area and presented during the professional exchange breaks. Please click on the link below for further details and to view/print the flyer and application. Don't miss out on this excellent opportunity!

**The deadline for applications is January 9, 2017.**

[Click here for the Flyer and Application](#)

For more information, please contact Teri Besse  
Email: [teri@fsbpa.com](mailto:teri@fsbpa.com)

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# Jacksonville Beach, Florida - A tale of two Hurricanes

By Gabriel Todaro  
Intern, EN-WC  
U.S. Army Corps of Engineers  
Jacksonville District



**US Army Corps  
of Engineers®**



*Figure 1: Damage caused by the storm surge in Atlantic Beach during Hurricane Dora*

Hurricane Dora and Hurricane Matthew struck Jacksonville Beach, Florida almost 52 years apart but they will be tied together as the strongest hurricanes to directly strike the coastal city.

Hurricane Dora formed in the Atlantic Ocean on August 28, 1964. As it crossed the Atlantic, Dora continued to strengthen until peaking as a Category 4 hurricane on September 6. Hurricane Dora made landfall near St. Augustine, Florida as a Category 3 storm on September 10<sup>th</sup>. In Florida, nearly 10,000 homes received damage and 156,000 homes lost power. Floodwaters rushed up Atlantic Boulevard and onto A1A as the floodwalls that protected the beach were overwhelmed. Numerous houses fell into the Ocean as steady winds of greater than 65 mph pounded the coast. Figure 1 shows the water breaking through and washing away a house in Atlantic Beach, FL.



*Figure 2: Jacksonville Beach during the early 1960s*

Prior to the current shore protection project, the beach looked very different than it does today. Figures 2 and 3 show the conditions between 1928 and 1963. The beach was much narrower and there were not any dunes to protect the shoreline. A rock revetment and concrete seawall protected Jacksonville Beach prior to Hurricane Dora (Figures 4 and 5). Unfortunately, these defenses were inadequate to against the storm. During Dora, Jacksonville Beach faced severe coastal flooding from the storm.

Hurricane Dora resulted in the decision that better protection was needed along the Jacksonville shoreline. The

Rivers and Harbors Act of 1965 and House Document 519/89/2 in 1966 authorized the Duval County Shore Protection Project for Jacksonville Beach, Florida. The project was initially constructed in 1978 and has been re-nourished five times (1985-87, 1991, 1995, 2005, and 2011), in addition to the current ongoing renourishment project.



The project has resulted in an increase in the size and width of the beach. By 2012, dunes covered the area over the original rock revetment and they reached almost 20 feet in elevation. Between 1974 and 2012, the beach width was increased by approximately 300 feet and the height was increased by approximately 15 feet. There are sea oats that cover the dunes that aid in stabilizing the sand and help to prevent erosion to the beach, which adds another layer of protection to the shoreline.

This increased protection was tested in October of 2016 during Hurricane Matthew. Matthew originated from a tropical wave off the coast of Africa on September 22, 2016. Matthew became a hurricane on September 29 and quickly strengthened in a Category 5 storm the following day. After passing through the Caribbean as a Category 4 storm, Matthew moved north as a slightly weakened Category 3 storm. The hurricane moved up along the Florida coast and its eye moved within 12 miles of Jacksonville, Florida where it caused major damage to the beach.

The dunes were completely washed away in many places along the Jacksonville coast but ultimately they proved successful at defending the properties behind them. Unlike during Dora, there were only a few instances of coastal flooding during the storm, and these occurred primarily at areas where there were gaps in the dunes.

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Figure 3: Jacksonville Beach in 1928



Figure 4: Rock revetment at Jacksonville Beach in 1965



Figure 5: Rock revetment at Jacksonville Beach in 1963

Figures 6 and 7 show Jacksonville Beach post-Matthew. Figures 8 and 9 show devastation that was typical during Hurricane Dora. As seen in the photos, there was severe damage to the dunes but many of them survived Hurricane Matthew and were much more effective in protecting the local infrastructure than the revetment during Hurricane Dora.

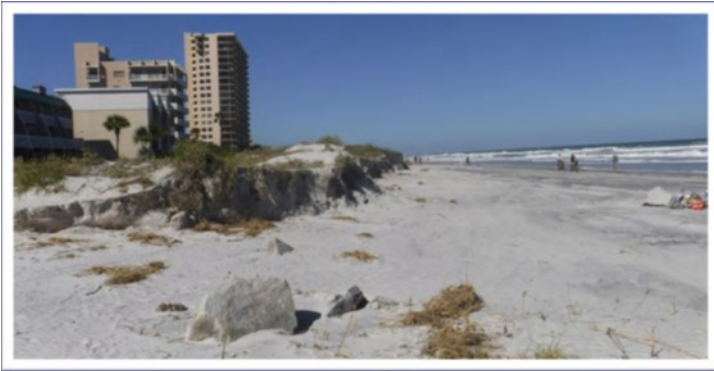


Figure 6: Dune erosion caused by Hurricane Matthew in October 2016



Figure 7: Dune erosion at Jacksonville Beach in October 2016



Figure 8: Damage from Hurricane Dora in 1964



Figure 9: House falling in water during Hurricane Dora

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Hurricane Matthew struck the Duval Shore Protection Project in the middle of its sixth renourishment. The hurricane delayed the renourishment and changed the goal from simply to renourishing the beach to also restoring the protective dune features. The contractor's dredge was fully booked with previous contractual agreements requirements that caused the restoration work to be paused on December 3, 2016. The work will be reinitiated in May of 2017.

The pictures below (Figures 10-11) show how the beach has changed from before the Shore Protection Project to 2011, at the time of the fifth renourishment.



Figure 10: Jacksonville Beach in 1973



Figure 11: Jacksonville Beach in 2011

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# FDEP Division of Water Resource Management Agency Updates



## **New Deputy Director**

Alex Reed will be joining the Division of Water Resource Management as a Deputy Director on January 3, 2017. Alex will oversee Submerged Lands and Environmental Resources Permitting and the Division's several coastal/beaches programs. Alex has served as the Program Administrator of the Department's Beaches and Mines Funding Assistance Program since 2009. In this role, Alex managed \$100M in grants, \$20-\$40M a year in annual beach funding appropriations and has been a vital component to the state's emergency response efforts.

Prior to working at the Department, Alex worked in various roles as a geologist and business strategist at URS Corp. Additionally, Alex was a successful small business owner as the proprietor of a campground in Pueblo, Colorado.

Alex earned a Bachelor of Science in Geology from Florida State University. Her managerial experience and extensive knowledge of Florida's coastal systems make her a valuable asset to the Division.

## **New Strategic Planning and Policy Manager**

Stephanie Gudeman has joined the Division of Water Resource Management as Manager, Strategic Planning & Policy. In this role, Stephanie will help manage the day-to-day responsibilities of the Division including legislative affairs, communications and public outreach, rulemaking and special projects. Stephanie, who most recently has been spearheading DEP's efforts on establishing the rule for public pollution notification, has extensive experience in environmental policy and regulation and will bring a wealth of knowledge to our Division.

Stephanie worked in the Division of Waste Management's Petroleum Restoration Program where she developed and implemented process improvement strategies and oversaw statewide program changes. She spent five years as an Environmental Specialist III in the Division of Water Resource Management's Joint Coastal Permit program.

Stephanie also worked at the Florida Legislature as an analyst for the House Majority Office, Senate Committee on Environmental Preservation and Conservation and Senate Select Committee on the Indian River Lagoon and Lake Okeechobee Basin.

Stephanie received a Master's degree in Chemical Oceanography from Texas A&M University and a bachelor's degree in Chemistry/Chemical Oceanography from the University of Rhode Island.

**Shoreline**

A monthly electronic publication of the Florida Shore & Beach Preservation Association.

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Florida Shore & Beach Preservation Association  
 PO Box 13146, Tallahassee FL 32317  
 Phone: (850) 906-9227 • Fax: (850) 462-3575  
[www.fsbpa.com](http://www.fsbpa.com) • [mail@fsbpa.com](mailto:mail@fsbpa.com)

**CALENDAR OF EVENTS****FSBPA Conferences**

**February 8 - 10, 2017**

**30th Annual Tech Conference**

**Hutchinson Island Marriott**

**Stuart, Florida**

**September 27-29, 2017**

**60th Annual Conference**

**Westin Fort Lauderdale Beach Resort**

**Fort Lauderdale, FL**

**OTHER DATES OF INTEREST**

**February 24-26, 2017**

**20th Annual Florida Marine Turtle Permit Holder Meeting**

**Wyndham Garden Hotel**

**Gainesville, Florida**

**February 28-March 2, 2017**

**ASBPA Coastal Summit**

**Washington, DC**

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