



Follow us on



news from the Florida Shore and Beach Preservation Association

April 2016

## THE 2016 LEGISLATIVE SESSION

by Debbie Flack



It officially ended Friday, March 11, cordially and as scheduled. The final bill of the 2016 Session was Legacy Florida, the Amendment 1 initiative for the Everglades and springs. This was a great ending. After an entire year that included two regular sessions, three special sessions, lawsuits and political maneuvers, everyone was just pleased to go home.

Leading up to the final week, all the chatter had been about the possibility of a large number of vetoes after greatly reducing the Governor's \$1 billion in tax cuts and economic incentive priorities, some even suggesting the rare occurrence of veto overrides by the House and Senate. Fast forwarding from the session's end, and even before the Legislature had transmitted the \$82.3 billion budget to the Governor, we unexpectedly had the answer. During the week following session the Governor released a six-page veto list of member projects—lots of water projects, PECO projects, trust fund sweeps, health-care programs/facilities, and cultural and other grants programs. While totaling over \$256M, it was not as bad as many had predicted, perhaps because HB 5001 which became the 2016-17 General Appropriations Act, with the Governors' signature the day it was received, had exceptional legislative support (not a single nay in the Senate, and 119-1 in the House).

*Continued on next page*

### Inside this Edition

#### Orville T. Magoon

##### **In Memoriam**

July 18, 1928 – March 19, 2016

*FSBPA benefited from Orville's professional contributions over the decades, while our conferences were greatly enhanced by his wonderful wines.*

#### **Mechanisms for Hurricane Sedimentation of Hardbottom Resources**

Michael Jenkins, Ph.D., P.E.

....Page 12

#### **Briefs Around Florida Ahead of the Tide**

....Page 16

#### **FDEP: Agency Updates**

....Page 19

### **SAVE THESE DATES!** **2016 Annual Conference** **September 14-16**

**Naples Grand Beach Resort**  
**Naples, Florida**

### **2017 Tech Conference** **February 8-10, 2017**

**Hutchinson Island Marriott**  
**Stuart, Florida**

The 2016 Legislative Session was comparatively successful for Florida's beach program. What follows is a review of procedural and funding milestones, the list of final funded beach nourishment projects and their state cost-shares, appropriations observations, and thoughts relative to charting FSBPA's course and strategy for the coming year.

---

## THE HIGHLIGHTS

Before beginning 2016, it was reassuring to know our primary objective for the 2015 Session, ensuring that beaches were part of Amendment 1 implementation and eligible for its only funding source, the Land Acquisition Trust Fund (LATF), had been realized. While its overall importance or value is still not clear, it is the only game in town and it is a certainty that we cannot sustain a consistent level of state beach funding relying solely upon General Revenue.



Our goal for 2016 was once again to secure an adequate annual state funding source(s) for beaches. Our reasoned and “justified” number remained in the \$50M range. However, we also knew that it was clearly not good timing with the \$250M Legacy package and other water-related crises and returning priorities. This multi-year beach program goal translated into simple objectives for the session: **To increase annual program funding including trust funding from the Amendment 1 LATF, make some portion of this doc stamp allocation recurring which was not the case for the current fiscal year, and supplement with non-recurring General Revenue.** DEP's and Governor's recommendations as well as the **starting point for the 2016-17 appropriations process were all \$25M in total beach funding.**

As noted in the March *Shoreline*, by mid-February the individual FY 2016-17 budgets of the House and Senate passed their respective chambers. HB 5001, the **House appropriations bill included \$30M (\$19.9 in General Revenue, \$10.1 in non-recurring LATF)**. There was no project listing, or partial project funding unlike the past few years. The House implementing bill already included a “notwithstanding provision” relieving the minimum 10% statutory requirement for inlet management/sand bypassing projects for the coming fiscal year.

**The Senate's budget (SB 2500) provided a total statewide beach management project allocation of \$28,140,270, all trust funded.** SB 2500 made an unexpected and significant step forward by making a **large part of the allocation recurring**. To reconcile the differences in the House and Senate versions of the budget, the budget conference process began Friday, February 26 and came to a close Monday evening, March 8.

The **Conference Committee phase**, Chaired by Rep. Albritton with Senator Hays, as Vice-Chair, ended after only three offers were exchanged. Despite beach funding being bumped to the **full Chairs** (Speaker-designate Corcoran and Senator Lee), we had reason to be cautiously optimistic. The House started things off (Offer #1) with a bang going from \$30M to \$40M. The Senate's response two days later was to go up just \$2 M to \$30 M. **How much better things would have been if the Senate would have taken House Offer #2 that held firmly at \$40M, increasing LATF to \$29.2 M and sustaining \$10M in recurring!** Proviso as part of this final offer during the committee phase of the Conference process had funding for projects in DEP's LGFR numbered 1 thru 19 (excluding 10, Gulf County's St. Joseph Peninsula), and partial funding for Project #20 (South Siesta beach nourishment) — separate inlet funding for construction and design through Project #4, totaling \$3.5M, with equal cost sharing by the state and local sponsor — and post-construction monitoring of less than \$1 million. But it didn't happen that final night of conference committee meetings and time ran out. Nor was it remedied by the full Chairs at their single meeting on Agriculture/Natural Resources issues a few days later.

Beaches lost almost \$8M from the high of \$40M in the final committee offer, and yes it could have been far worse as was the case for many other resource management programs. We were at least above our starting points in both chambers. However, from the House's final conference committee offer of \$40M, we had lost two projects with major funding requests for construction, and included no funding for inlet management. Fortunately, Port Everglades IMP received Senate supplemental funding at the close of the conference process.

Statewide beach funding for FY 2016-17 is in the books. Once again the Governor did not veto anything associated with the program. **The total is \$32.6 M (\$21.2M in trust funds (LATF), and \$11.4 M in General Revenue).** I am pleased to report **\$10.1 M of the LATF allocation is recurring.** It's further worth noting positively that this **funds 17 beach project state funding requests in their entirety** for FY 2016-17, **design funding for one inlet project** as well as post-construction monitoring. Included in the 17 beach projects are 5 of the 8 beach projects only partially funded in the current fiscal year. This was an important part of this year's advocacy strategy; and we won't forget the remaining three projects that ended this session as the next three beach projects on the list for construction funding! Making these projects whole is important for our successful governmental partnership and the credibility of the program going forward.

## BUDGET HIGHLIGHTS

Line item 1602 details the beach funding appropriation for FY 2016-17 by source and proviso.

- Proviso specific to beach projects reads as follows:

*Funds in Specific Appropriation 1602 are provided to the Department of Environmental Protection's Beach Management Funding Assistance Program (BMFAP) Local Government Funding Requests for*

Fiscal Year 2016-2017, from the Beach Restoration and Nourishment Projects List for projects one through seventeen, excluding project number ten, which has not secured a local cost share pursuant to section 161.101(15) Florida Statutes, and is not ready to proceed. In order to maximize time-sensitive 2016 federal dollars, funds in Specific Appropriation 1602 are provided to project number twenty-seven.

- This proviso translates into the state funding amount requested by the local sponsor for the following projects in ranked order:

Fiscal Year 2016-2017 Beach Management Projects							
# LGFR	Project	Local Sponsor	Project Phase C=Construction, D=Design	Federal	State	Local	Total
1	St. Johns County Shore Protection Project	St. Johns County	C	\$14,490,000	\$1,703,196	\$2,206,804	\$18,400,000
2	Duval County Shore Protection Project	City of Jacksonville	C	\$2,492,632	\$826,300	\$935,910	\$4,254,842
3	Ft. Pierce Shore Protection Project	St. Lucie County	C	\$6,221,000	\$1,044,500	\$1,044,500	\$8,310,000
4	Segment III/ Broward County Shore Protection Project	Broward County	D	\$707,154	\$250,237	\$252,247	\$1,209,638
5	Blind Pass Ecozone Restoration	Lee County	C	\$0	\$877,500	\$877,500	\$1,755,000
6	Long Key / Upham Beach Groin Replacement	Pinellas County	D,C	\$0	\$2,735,000	\$2,735,000	\$5,470,000
7	South Amelia Island Beach Nourishment	Nassau Co./ SAISSA	D,C	\$0	\$313,680	\$486,320	\$800,000
8	North Boca Raton Segment/ Palm Beach County Shore Protection	City of Boca Raton	D	\$287,700	\$106,150	\$106,150	\$500,000
9	Nassau County Shore Protection Project	City of Fernandina Beach	C	\$632,800	\$107,834	\$124,366	\$865,000
11	Miami Beach Segment/ Dade County Shore Protection Project	Miami-Dade County	C	\$3,019,445	\$1,400,000	\$1,420,875	\$5,840,320
12	Charlotte County Beach Restoration	Charlotte County	C	\$0	\$1,061,747	\$1,311,402	\$2,373,149
13	Jupiter Island Beach Nourishment	Town of Jupiter Island	D,C	\$3,227,438	\$1,065,561	\$5,108,022	\$9,401,021
14	Longboat Key Beach Nourishment	Town of Longboat Key	D,C	\$0	\$1,449,284	\$4,910,015	\$6,359,299
15	Wabasso Beach Restoration	Indian River County	D,C	\$0	\$900,000	\$900,000	\$1,800,000
16	Navarre Beach Nourishment	Santa Rosa County	D,C	\$2,317,187	\$5,657,689	\$5,657,690	\$13,632,566
17	Sand Key Segment/ Pinellas County Shore Protection Project	Pinellas County	C	\$15,700,000	\$4,647,520	\$4,722,480	\$25,070,000
27	Mid-Reach Segment/Brevard County Shore Protection Project	Brevard County	D,C	\$16,335,000	\$6,990,750	\$7,634,250	\$30,960,000
			<b>TOTAL</b>	<b>\$65,430,356</b>	<b>\$31,136,948</b>	<b>\$40,433,531</b>	<b>\$137,000,835</b>

- Proviso related to post-construction monitoring reads:

*From the funds in Specific Appropriation 1602, \$932,976 is provided for post-construction monitoring projects identified in the Department of Environmental Protection's Beach Management Funding Assistance Program for Fiscal Year 2016-2017 monitoring costs and activities, and no funds are provided for post-construction monitoring costs beyond year three or for projects receiving construction funds in Fiscal Year 2016-2017.*

- There were no inlet projects funded by the Legislature last session for FY 2015/16. Rectifying this critical omission was a specific focus of FSBPA's efforts throughout this year's appropriations process. It started out well in the Senate with them, in absence of any indication otherwise, considering the 10% threshold using base funding of \$25M. Initially, the House was silent on the issue. We were completely surprised and delighted that at the conclusion of the Committee Conference process phase it was the House Offer (#2) that included design and construction funding only through Project #4 of \$3.5M. When the conference process got to the full Chairs, inlet management was back to where it ended last session, without any new funding, despite considerable play to the contrary along the way. Fortunately, the Senator Jones inlet

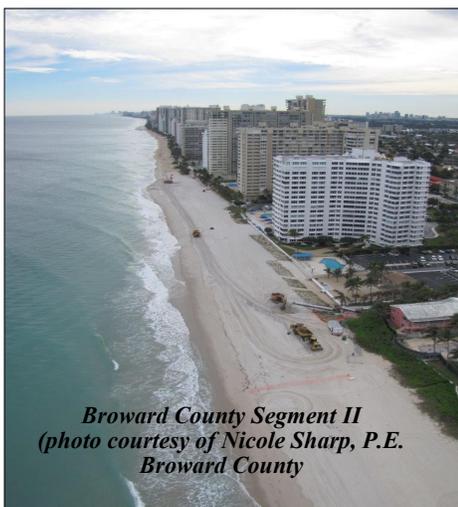
provisions in Chapter 161 (ss.161.143(5)(c), F.S.) envision the use of unencumbered funds for inlet management, so recently a number of inlet projects have received reappropriated funding as a result of DEP’s reprogramming efforts.

The final night’s **supplemental funding of \$492,500 for the Port Everglades inlet management project** meant inlet management/sand bypassing, as a separate component and priority list, wasn’t completely ignored again for FY 2016/17. Most importantly funding for this specific project puts the emphasis where it should be statutorily, and not on minimal funding activities that don’t adequately capture the expressed legislative intent aimed at tackling major inlet policy issues as well as physical impacts and problems vs. routine maintenance and monitoring.

- To summarize with regard to those projects that we identified before session for special emphasis given their partial funding in the current fiscal year: There were 8 projects (of 21 projects funded in 2015/16) that were identified and tracked as part of this session’s appropriations process. These 8 partially-funded projects had a price tag of \$20.6M to make them whole. That was a big hole to climb out of. Yet, for the **upcoming fiscal year**, despite a very modest increase in funding, the **18 projects receiving funding were funded at the level of state funding requested by the local government sponsor**, including full funding for 5 of last year’s partially funded subgroup. Most importantly, a bad practice and precedent was not repeated!



#1 ranked project for FY 2016-17, St. Johns County  
Aerial Image taken 2013 - 4 boxed photos taken 4-1-16 -  
Photos courtesy of Press Tompkins, P.E., St. Johns County



*Broward County Segment II  
(photo courtesy of Nicole Sharp, P.E.  
Broward County*

Next Page

---

## APPROPRIATIONS-RELATED OBSERVATIONS

1. There are **two issues begging for FSBPA's and DEP's immediate attention** – the growing struggle to **ensure projects on DEP's priority project lists are viable**, and **top ranked inlet projects** and their corresponding funding amount and purpose **better reflect the legislative policy intent of Section 161.142, F.S.**

The last two sessions the Legislature took extraordinary action to avoid tying up limited state dollars for two big ticket restoration projects in Northwest Florida on DEP's priority list. \$16 M in a program struggling to get over the \$30M annual threshold deserves more than a bureaucratic 18-month solution to contract or revert two fiscal years later. These are not simple readiness-to-proceed or timing issues which sometimes occur unavoidably or unexpectedly. These had to do with the most basic concerns regarding the viability of the project.

Despite good intentions, the message regarding **inlet management** is still muddled. FSBPA, the Board of Directors, and fortunately our supporting cast of experts, has to do a better job in the messaging and packaging, starting now! We must also work with DEP to revisit whether the ranking process should continue to rely on the project's overall score without considering the phase, benefit/cost or amount of the specific annual funding request.

2. **Balanced legislative support between the House and Senate, as well as regionally, is essential for any future beach initiative that blends reasonable and consistent statewide beach funding with statutory changes that ensure the integrity of the annual project ranking and selection process using criteria that better demonstrate the exceptional economic benefits of maintaining Florida's beaches.** This year we worked with DEP on legislation to improve statutory ranking criteria and the annual project selection process (HB 877, SB 1566). It didn't go far enough for certain lawmakers and some of you, but it didn't pass for reasons that had nothing to do with beaches or the bill itself. It is hard to imagine it won't be back in 2017; however, ROI and tourism/storm damage reduction measures will most likely be revisited.
3. This session, we tried to encourage the more traditional budget approach mostly relying on DEP's funding request rather than last year's individual project listing and allocations, knowing it lead to the partial project funding and its consequences, and its ease for vetoing. We might otherwise have increased overall funding by getting more members involved in support of specific projects, but the unpredictable cost of doing so wasn't worth the risk.

4. We started this year with a few less projects than in recent years and a total request for beach and inlet projects of less than \$90 M. Full state funding of 18 projects for 2016-17 should take a nibble out of the project backlog. While we really can't predict with any certainty the significance of recurring Amendment 1 trust funds, knowing beaches will have \$10M in the base budget for 2017/18 is a comforting starting point to build upon!
  
5. It is important not to fixate on a single number to judge the effectiveness of Florida's beach program in any given year. State funding of \$32.6 M for FY 2016-17 doesn't tell the full story. FSBPA has argued for years that program effectiveness should be measured by the **contribution** of its partners. **As usual, this year's funding profile is most revealing. Florida's beaches stand to benefit from potentially a \$137M cumulative program in the coming fiscal year, even without considering its single inlet management project or post-construction monitoring. Anticipated federal cost-sharing is more than twice the State's appropriation and local governments' contribution is substantially more than the state's share as well. It is a successful partnership whose sustainability must not be taken for granted.**

---

## GOING FORWARD

In the weeks and months ahead FSBPA, through the Board of Directors and staff, will begin to develop a framework for what we hope and intend will be a major beach initiative for 2017. Many of us and a number of key decision-makers know it is not by accident Florida has the best beach program in the nation. Now is the time to remind other beneficiaries, especially elected officials at the state and local level, of this.

Yes, FSBPA will be trying to get us in position for next session in terms of messaging and involving more coastal legislators, relying on each of you to help us do so. Success will be dependent on the greater active involvement of all our members as well as growing support and involvement from all coastal communities and interests that benefit from the beach program. Let's work together toward a successful initiative that promotes "Beaches" in 2017— seeking increased and consistent state funding, a long-term planning/budgeting component, and a project ranking/selection process that ensures confidence that the best projects rise to the top on an annual basis.

Our shared success over the years reflects the level of cooperation, coordination and the mutual efforts of FSBPA and the "beach" coalition, especially our local government members including elected officials, the beach program folks, in-house and contract lobbyists, as well as other community and professional interests, and this alone should give us the framework to once again get it done.

## SUBSTANTIVE BILL REPORTS

Diana Ferguson (FSBPA legislative services, Rutledge-Ecenia) prepared the following brief summary of the bills we tracked this session for our members. FSBPA's interest in these select bills arises from our obligation to assess legislation that impacts uncommitted revenue sources available to the statewide beach management program, as well as recognizing our members may have other important resource protection or tourism-related priorities. Tracking substantive legislation simply reinforces our primary focus on changes to Chapter 161, the Beach & Shore Preservation Act, beach funding, fiscal impacts to local cost-sharing for beach projects, and program eligibility.

The following bills were submitted to the Governor for final action on March 30. He has until April 14 to act on these bills:

### Legacy Florida

HB 989 by Representatives Harrell and Caldwell provides a minimum of 25% of the Amendment 1 allocation or \$200M annually, whichever is less, for Everglades Restoration. This includes the Comprehensive Everglades Restoration Plan (CERP), the Long-Term Plan (often referred to as "Restoration Strategies"), and the Northern Everglades and Estuaries Protection Program. The bill also provides a minimum of 7.6% of the Amendment 1 allocation or \$50M annually, whichever is less, for Springs Protection and \$5M annually for Lake Apopka.

### State Lands

As filed, HB 1075 contained language that would have expanded the use of Florida Forever dollars for "pumps and pipes" for water infrastructure. However, that language was removed in committee and does not appear in the enrolled version of the bill. As passed, the bill reorganizes the acquisition and disposition procedures for all state lands into one chapter of law and modernizes those statutes. It requires the Acquisition and Restoration Council to give priority to proposed Florida Forever projects that can be acquired in less than fee simple and projects that contribute to improving springs or groundwater. It also requires the Department of Environmental Protection (DEP) to update its database of conservation lands to include state and local conservation lands and easements. The bill was amended on the Senate floor to authorize the Florida Fish and Wildlife Conservation Commission (FWC) to create springs protection zones that restrict the speed and operation of vessels in order to protect and prevent harm to springs.

**Next Page**

---

## Tax Package

Among many other provisions, HB 7099 by the House Finance and Tax Committee and Representative M. Gaetz provides that a coastal county which meets certain criteria may use up to 10 percent of its tourist development tax revenue to reimburse expenses incurred in providing public safety services, including emergency medical services and law enforcement services, which are needed to address impacts related to increased tourism and visitors to an area. The county must generate a minimum of \$10M in annual proceeds from tourist development taxes, have at least three municipalities, and have an estimated population of less than \$225,000, excluding the inmate population. Counties that levy a tourist impact tax as an area of critical state concern are excluded. The governing board of a county or municipality may not use such taxes to supplant the normal operating expenses of an emergency medical services department, fire department, sheriff's office or police department. The Board of County Commissioners must, by majority vote, approve such reimbursement upon receipt of a recommendation from the tourist development council.

**[Back to Main Page](#)**

---

Courtesy of Billy L. Edge, P.E., Ph.D., Dist. M. ASCE, UNC Coastal Studies Institute

## Orville Tyler Magoon (July 18, 1928 – March 19, 2016)

On March 19 in Santa Barbara, CA, Orville Tyler Magoon passed away surrounded by his wife, Karen, and children. He was 87. Mr. Magoon was a native of Hawaii, who was born July 18, 1928. His life was one dedicated to our planet and its coastal treasures and to the people who surrounded him.

Following his graduation from Punahou School class of 1946, Orville Magoon received his under-graduate degree in Civil Engineering from the University of Hawaii in 1951 and an M.S. degree in Civil Engineering from Stanford University in 1952. After thirty years of experience in the field of coastal planning, design, construction and rehabilitation of coastal structures, Mr. Magoon retired as Chief of the Coastal Engineering Branch of the Planning Division of the US Army Corps of Engineers, South Pacific Division in July, 1983. He continued to be active in coastal zone management and coastal engineering through lectures at universities and symposia and his writing. Orville balanced his time between coastal engineering and managing Guenoc Winery and Guenoc Ranch in California where he produced award-winning wines, including the Genevieve Chardonnay named for Orville's mother and which was honored in *The Wine Spectator*.



After his retirement from the Army Corps of Engineers in 1983 as a coastal engineer, he continued to dedicate his life to finding solutions to coastal issues, all the time managing the family estate winery in Lake and Napa Counties, called Guenoc, and once owned by Lillie Langtry, British actress and legend. In 2004 he retired from Guenoc to San Francisco with his wife, Karen. There he continued to work for better understanding of our beaches and coastal structures.

During his years of government service, Orville Magoon served on several committees and panels, including the Permanent International Association of Navigation Congresses (PIANC) Committee on Waves, on a number of National Aeronautics and Space Administration panels involved with remote sensing and satellite imagery of coastlines and the National Academy of Engineering.

Orville served as President of the Coastal Zone Foundation as well as Vice Chair of the Coastal Engineering Research Council for forty years and still had time to serve as President of the American Shore and Beach Preservation Association for ten years. In 1978 a series of Coastal Zone conferences was initiated by Orville, seeking solutions to coastal issues and held biannually, hosting up to 1500 people. He continued to organize international, focused conferences on topics such as coastal structures, Coastlines of the World, Sand Rights, California and the World Ocean, Ocean Wave Measurement and Analysis resulting in over sixty of volumes of written proceedings.

Orville Magoon received several national and international awards during his career including the Jim Purpura National Coastal Engineering Award from FSBPA and the Murrough P. O'Brien Award from ASBPA. He also received the William Wisely, Arthur M. Wellington Prize, International Coastal Engineering Award and the Moffat-Nichol Awards from ASCE in recognition of his service to the coastal engineering and coastal zone management. His contributions to the profession were recognized with Distinguished Member of ASCE and Honorary Member of JSCE. Recognizing his devotion to students, Texas A&M University established the Orville T. Magoon Scholarship in 2003 which is given annually to one or more students who exhibit a strong interest in the field of coastal engineering and sustainability.

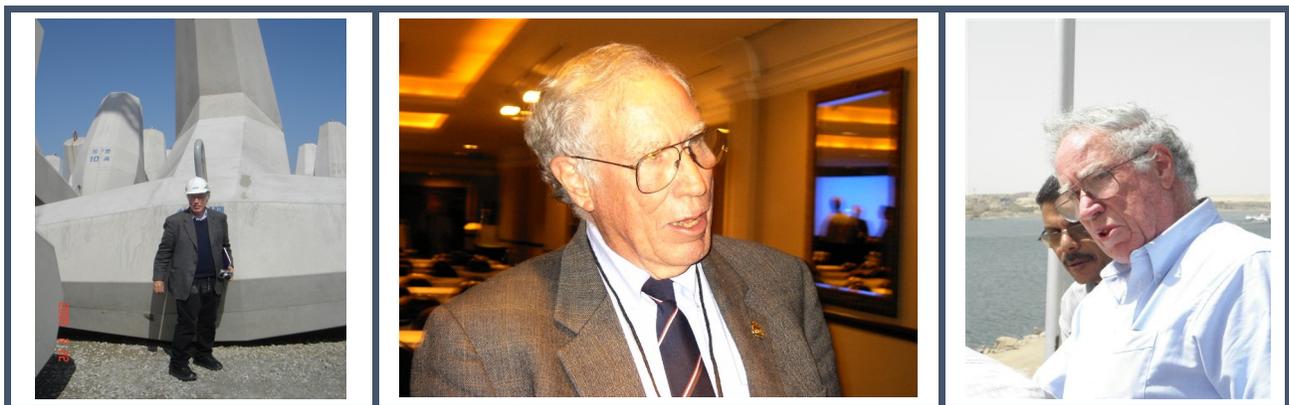
In recognition of his eminence in his profession, the American Society of Civil Engineers created the Orville T. Magoon Sustainable Coasts Award in 2014 which is given annually. This award is given to a leader who promotes the concept of sustainability in coastal engineering research, design, construction and management.

He is recognized by his friends and colleagues as a tireless mentor, leader, and friend to everyone. Orville loved gathering mushrooms; he loved nature and animals; cats were drawn to him as well as anyone who ever met him.

Orville Magoon is survived by his brother Eaton Harry Huha "Bob" Magoon, children Melissa, Marshall and their spouses Brian and Jena, as well as Mary and Matthew, grandson Spencer and great grandson Bradley; and Orville's wife Karen, her children Aaron and Bridget, Aaron's spouse Yvonne, and grandchildren, Uli, Matti and Mori.

Two memorial celebrations of Orville's life are planned, the first on Sunday, May 1 at 2 pm at the Unitarian Universalist church at 1187 Franklin in San Francisco, and the second on Saturday, June 18, at 1pm at the Bay Club Santa Clara, 3250 Central Expressway, Santa Clara.

In lieu of flowers, contributions can be made to the Orville T. Magoon Sustainable Coasts Award in c/o American Society of Civil Engineers, ATTN: Jane Alspach, 1801 Alexander Bell Drive, Reston, VA 20191; please mark the contribution for Permanently Restricted Fund.



## Mechanisms for Hurricane Sedimentation of Hardbottom Resources

Michael Jenkins, Ph.D., P.E.

Coastal Engineering Principal, Applied Technology and Management, Inc., West Palm Beach, Florida

Reef sedimentation with fine, silty sediments has been observed on both the east and west coasts of Florida due to major hurricanes. The first known report of such behavior was made by Dr. Chen from the University of Florida following hurricane Donna in 1960. Additional reports have occurred following other major storms, notably hurricane Andrew in 1992 and most recently hurricanes Charley, Francis and Jeanne in 2004. Impacts from the combined storms in 2004 were observed on both the east and west Florida coasts (Figure 1). Sediment deposits from a few inches to several feet thick have been observed covering hardbottom. In some areas this sedimentation has been attributed by some interests to nourishment/dredge activity, though a factual review of the circumstances and the material itself suggests otherwise. No correlation is evident between these impacts and established nourishment projects. In all of these cases the deposited sediment has consisted predominately of fine (cohesive) clays and silts that are materially unlike typical surficial nearshore (and nourishment) sediments in the region (Figure 2).



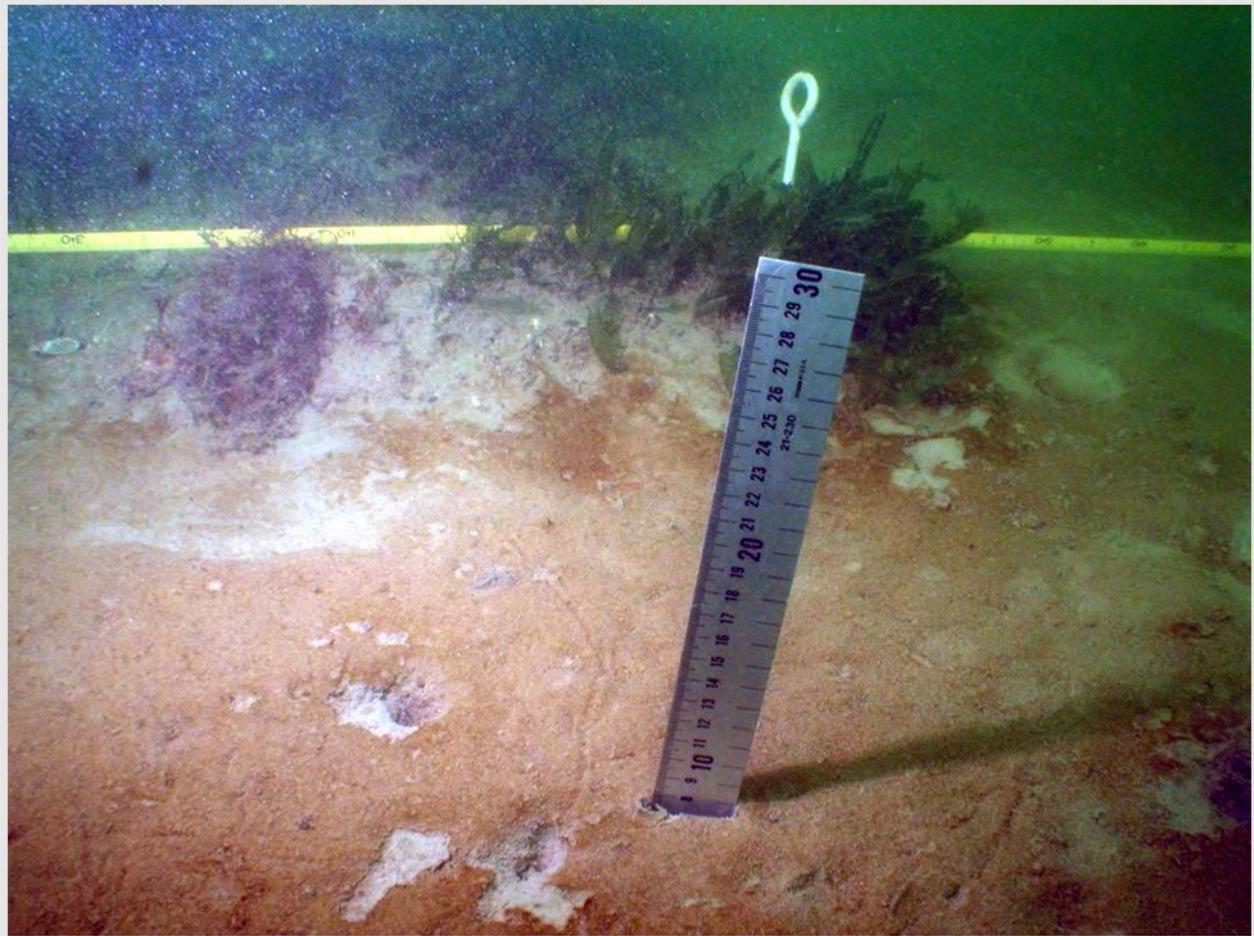
**Figure 1. Known sedimentation event locations associated with the 2004 hurricane season. Impacts were observed on both the east and west Florida coasts.**



**Figure 2. Sediment deposits are fine clay/silt with significant cohesion**  
*(photo courtesy of Cheryl Miller; Coastal Eco-Group)*

The source and processes which cause these events have been issues of some debate. Two theories have been previously proposed. One theory assumes that upland discharges during and after the storm are the source and mechanism. The locations of the deposits however do not support this theory as we would anticipate deposition would be greater nearer the source (coastal inlets) and would diminish with distance (longshore and offshore). Observed deposits have shown no correlation with inlet location. The deposits are not proportional to potential upland discharge points and are no more prevalent near coastal inlets than other areas. A second theory postulates that the material source is deep-water sediment deposits which are transported by the hurricane onto the continental shelf. While there are deep-water clay/silt sediments beyond the shelf, the mechanism for movement of this material up the continental shelf into the nearshore by the hurricane is problematic. In some instances the required travel distance is very large (on the order of tens of miles) and these sediments occur in very deep water. In addition both theories fail to explain the correlation between these sedimentation events and hardbottom areas. It is the impact to these resources that has consistently raised concern. In fact, the impacts from these sedimentation events to benthic resources can be locally very significant. Impact areas can be quite extensive (on the order of several acres). In these areas direct burial smothers everything underneath, and the silt/clay material is particularly lethal to many filter feeding species (Miller and

Kosmynin, 2008). Photosynthesis and recruitment is reduced and the impacts can linger for many years (Figure 3).



**Figure 3. Sediment burial results in smothering of benthic organisms and is lethal to filter feeding species (photo courtesy of Cheryl Miller; Coastal Eco-Group)**

Based on a review of available bathymetric and geotechnical data, it is evident that the source of material is not from the land or deep ocean but is attributable to buried sources in the vicinity of the observed sedimentation events. It is well established that significant sub-surface deposits of clay/silt material are present within the nearshore throughout Florida. These deposits are associated with estuarine type environments that existed in these areas when sea levels were much lower than they are today. In general these deposits exist at sub-surface depths in excess of 3 to 4 feet; beyond the depth of regular disturbance by wave energy. It is only during particularly energetic events (such as a major hurricane) that there is sufficient energy to remobilize these sediments. These fine sediments remain in suspension in the nearshore until more quiescent conditions allow for their

deposition. The correlation between these sedimentation events and nearshore hardbottom is likely explained by the underlying geology. Depressions in the limestone bedrock are features which commonly accumulate clay/silt material. Such depressions occur in nearshore areas where limestone basement is prominent. These are also the same areas where the limestone is exposed as hardbottom resources. Once in suspension, these sediments deposit in the lee of exposed hardbottom outcrops in the area.

While Florida has been lucky of late regarding hurricanes, it is certain that we will be impacted by a major storm at some point, and reef sedimentation impacts will occur again. While such events are naturally occurring there is a strong potential that nourishment activities will be blamed for the impacts, as has occurred with previous events. Further, in today's social media environment it is more likely than ever that such reports will enter the public domain without sufficient understanding of the underlying cause. As such it is important that we educate relevant stakeholders and the public at large regarding this phenomena and add these events to the list of anticipated impacts from the next major storm.

Reference:

Miller, C. and Kosmynin, V. 2008. "The Effects of Hurricane-Deposited Mud on Coral Communities in Florida." Proceedings of the 11<sup>th</sup> International Coral Reef Symposium. Ft. Lauderdale. 7-11 July, 2008. Session 18.

**[Back to Main Page](#)**

## Briefs Around Florida

### Sea Turtle Conservancy Gets Ahead of the Tide

By Gary Appelson

Sea Turtle Conservancy (STC) is proud to announce the release of a series of short, 5-minute videos about sea level rise (SLR) and the need to protect Florida's beaches in an era of rising seas. The video series, *Ahead of the Tide*, was produced in partnership with the nonprofit film-maker CAVU.

The first video in the series highlights the importance of beaches to all Floridians as told in their own words. To produce the video series STC and the talented CAVU production team traveled the state interviewing climate scientists and legal scholars at three universities, local coastal government officials and planners, high school and college students, surfers and other beachgoers, federal agency officials, and public figures such as one of Florida's favorite authors, Carl Hiaasen.

Sea level rise is projected to have serious and long-lasting impacts to the state's globally-important sea turtle nesting beaches. Our hope is that this series of short, powerful films will help to serve as a Call-to-Action for Floridians, elected leaders, and coastal communities to address and plan for SLR in order to protect Florida's most valuable asset -- its natural sandy beaches -- for sea turtles, for people and for Florida's beach-dependent coastal economies.

STC has long been concerned about impacts to the nesting beach resulting from rising seas. How will Florida adapt to sea level rise and maintain viable nesting habitat for sea turtles? Will the state permit the wide-spread armoring or "hardening" of the shoreline with sea walls? Or will we pursue policies that encourage long-term shoreline resiliency and beach protection while discouraging shoreline hardening? STC is working to highlight these concerns and increase public awareness about SLR by focusing attention on impacts to the nesting beach and promoting strategies that can help ensure the long-term protection of the beach. Public awareness and involvement on these issues is critical in a state like Florida, where many decision makers still deny the realities of SLR and where state coastal development and management laws fail to even acknowledge climate change or sea level rise.

**Next Page**

Sea walls are bad for the active beach and bad for sea turtles. When exposed, sea walls redirect wave energy to areas immediately in front of and to the sides of the walls. This refracted wave energy results in increased erosion around the wall and interferes with the beach's ability to naturally recover from storms. Sand locked up behind sea walls is effectively removed from the



**West of Blue Mountain Beach**

beach system and is no longer available to help naturally replenish beach sand lost to erosion. Sea walls also deter female sea turtles from nesting and cause nests to be laid in sub-optimal habitat seaward of the wall where they are more susceptible to sea water inundation and erosion. Sea walls effectively block sea turtles from accessing the preferred upper portions of the beach.

SLR skeptics often argue that ocean levels have been rising and falling for millennia and sea turtles are just as adapted to rising seas as they are to periodic hurricanes and other major storm events. It is certainly true that in the distant past sea levels were much higher and Florida's beaches and barrier islands were located further inland than they are today. And undoubtedly sea turtles simply nested wherever those beaches were located and they adapted as sea levels slowly rose and fell. What is different for sea turtles now, as they are forced once again to adapt to shifting shorelines, is that Florida's beaches are no longer undeveloped and free to move inland as seas rise. Instead, they are lined with homes, businesses, and high-rise condos.

As seas rise and beaches wash away and recede, turtles that come ashore to nest are finding that their habitat literally is being squeezed between the rising sea and the immovable line of development. STC believes there are many specific policies that can be implemented to help coastal communities adapt to rising seas, while also protecting our natural beaches both for sea turtles and for people. Most importantly, we have to start taking action and making smarter decisions about the management of our coasts in an era of rising seas. We have to get "Ahead of the Tide."

The first chapter in the series, [Florida's Lifeblood](#), can be viewed on STC's website. You can view the remaining nine chapters at [www.aheadofthetide.org](http://www.aheadofthetide.org), a joint website set up by multiple organizations to advance our common campaign to address SLR in Florida.

**Next Page**

## Briefs Around Florida

### **BOEM proposed rule to replace written guidelines**

On March 21<sup>st</sup>, the Bureau of Ocean Energy Management (BOEM) released a proposed rule that would provide additional clarity and certainty for the Marine Minerals Program's Negotiated Noncompetitive Leasing for the Use of Sand, Gravel and Shell Resources on the Outer Continental Shelf. The proposed rule describes the negotiated noncompetitive agreement process for qualifying projects and codifies new and existing procedures. The public comment period is open through May 23, 2016.

BOEM's press release and rule summary are located through the following links:

[http://www.boem.gov/press03212016/?utm\\_source=Copy+of+PRrel%3A+BOEM+publishes+proposed+rule+on+Marine+Minerals+Program&utm\\_campaign=Marine+Minerals+Rule&utm\\_medium=email](http://www.boem.gov/press03212016/?utm_source=Copy+of+PRrel%3A+BOEM+publishes+proposed+rule+on+Marine+Minerals+Program&utm_campaign=Marine+Minerals+Rule&utm_medium=email)

[https://www.regulations.gov/#!documentDetail;D=BOEM\\_FRDOC\\_0001-0354](https://www.regulations.gov/#!documentDetail;D=BOEM_FRDOC_0001-0354)

Follow us on



*Drone image courtesy of  
Sarasota County and  
Humiston & Moore Engineers*

Thank you to all the local sponsors and consultants for sharing their beach project photos with us. We are gaining momentum with our followers.

Please email Jackie ([jackielarson@fsbpa.com](mailto:jackielarson@fsbpa.com)) updates and photos about your projects to share with our followers.

**Back to Main Page**

## Beaches, Inlets and Ports Program News

### New Environmental Manager

Mr. Gregory Garis has been promoted to an Environmental Manager, supervising the permit managers. Greg has dual Bachelor's degrees from Florida State University in Geography and Political Science, and a Master of Science degree from Florida International University in Environmental Science with an emphasis on biological management. He worked for the National Park Service at Biscayne National Park for six years, and has been the DEP permit manager for Southeast Florida for three years.



Chiu Cheng has left the Department to return to academia. That means we are down two permit managers! See a map of the temporary staff responsibilities for both beach and port projects at <http://www.dep.state.fl.us/beaches/publications/pdf/JCP-Managers.pdf>

### Nearshore Hardbottom Biological Monitoring

Many beach restoration projects in south Florida have nearshore hardbottom in the vicinity of the project. Monitoring is necessary to accurately locate and evaluate hardbottom functioning in order to provide reasonable assurance of predicted impacts. The "Standard Operating Procedures for Nearshore Hardbottom Biological Monitoring of Beach Nourishment Projects" has been developed by DEP staff in conjunction with private monitoring firms who have conducted the majority of the nearshore hardbottom monitoring in the state of



Florida. The purpose is to provide guidance to applicants on protocols that have been approved for previously permitted projects, and to make the permitting process more efficient, predictable and consistent. It is not a rule, and will be refined as any new or better methodologies become available. A webinar will be held in the near future to discuss the document and answer questions about hardbottom monitoring procedures. Please see <http://www.dep.state.fl.us/beaches/> for a copy.

**2016 Annual Conference**  
**September 14-16**  
**Naples Grande Beach Resort**

Be sure to mark your calendar and make plans to join us for the 2016 Annual Conference which will be held, September 14-16, at the Naples Grande in Naples, Florida. This will be our second visit to Naples. More details and a Call for Papers will be available soon!



[Back to Main Page](#)

**Shoreline**

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

**Officers****Chair**

Leanne Welch, Palm Beach County

**Vice-Chair**

Jim Trifilio, Okaloosa County

**Secretary-Treasurer**

Don Donaldson, Martin County

**Directors**

Virginia Barker, Brevard County  
 Richard Bouchard, St. Lucie County (Past-Chair)  
 Steve Boutelle, Lee County  
 James Gray, Indian River County  
 James Houston, USACE ERDC  
 Gary McAlpin, Collier County  
 Tamara Pigott, Lee County VCB  
 Andy Squires, Pinellas County  
 Marty Smithson, Sebastian Inlet District  
 Laird Wreford, Sarasota County

**Chair Emeritus**

Allen Ten Broek

**Ex Officio**

USACE Jacksonville District, Matt Schrader  
 USACE Mobile District, *(vacant)*  
 FDEP, Fred Aschauer, Jr. and Trina Vielhauer  
 Michael Barnett, TetraTech  
 Chuck Broussard, Weeks Marine  
 Brett Moore, Humiston & Moore Engineers

**FSBPA Staff**

**President:** Debbie Flack  
**Executive Director:** Jackie Larson  
**Governmental Affairs Director:** Lisa Armbruster  
**Office/Conference Manager:** Teri Besse

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

**September 14-16, 2016**

**2016 FSBPA Annual Conference**

**Naples Grande, Naples, Florida**

**February 8 - 10, 2017**

**2017 Tech Conference**

**Hutchinson Island Marriott, Stuart, Florida**

## OTHER DATES OF INTEREST

**October 25-28, 2016**

**ASBPA 2015 National Coastal Conference**

**Long Branch, NJ**

**[Back to Main Page](#)**