

CEPD Newsletter

In This Issue...

- State Budget Benefits Beaches
- 2017 Blind Pass Maintenance Dredging Completed
- New Interactive Marine Life Exhibit Opened
- Mangroves Offer Substantial Protection
- Dire Prediction for Gulf Summer "Dead Zone"
- Annual Budget Process Begins



Commissioners

Dave Jensen
Chairman

davejensencaptiva@gmail.com

Mike Mullins
Vice Chairman

mycepd3@gmail.com

Harry A. Kaiser
Secretary

kaisercaptiva@aol.com

Bob Walter
Treasurer

bob@mycepd.com

Rich Stegmann
Commissioner

rich@mycepd.com

Administrator

Kathleen Rooker

kathleen@mycepd.com

State Budget Benefits Beaches

Increased beach funding was a part of the final state budget package that Florida Governor Rick Scott signed into law on June 2. Florida Shore and Beach Preservation Association (FSBPA) leadership and member governments including the CEPD ramped up their mutual efforts to gain legislator support for their initiative "Beaches 2017 and Beyond". The message of coastal interests was clear - Florida's beaches are losing ground, and the cost of doing nothing is too great!

Pinellas County's Senator Jack Latvala, Chairman of the Senate Appropriations Committee, and Representative Kathleen Peters made increased beach funding a priority. The beach champions were recognized in the legislative session for securing \$50 million for statewide beach and inlet management projects. This is the highest amount beaches have received in over a decade. Senator Latvala closed the state budget presentation by recognizing the precedent and importance of \$50 million to preserve Florida beaches and protect Florida's brand, and noted that he was "particularly appreciative."

Senator Latvala said "The communities up and down our Atlantic and Gulf coasts that depend so much on the beaches to keep tourists coming to Florida really appreciate that and I'm glad we were able to do it."

Such advocacy for sustaining healthy beaches is critical for Florida's economic well-being and storm damage protection. Lest we forget, Florida's beaches provide a return on investment of \$5.4 to every \$1 spent on beach projects and are an anchor for the state's tourism industry which provides over 1.4 million jobs.

2017 Blind Pass Maintenance Dredging Completed



Blind Pass completely closed in 2010



Dredger (top center) inland of the bridge



Dredger on Gulf side of Blind Pass

Since the 2009 County construction of the Blind Pass Restoration Project, which opened previously closed Blind Pass, Lee County has led 3 maintenance projects at the Pass to keep the Pass open and bolster portions of eroded beach south of the Pass and at the north end of Bowman's Beach. The latest project began in February and was completed in June.

According to Steve Boutelle and Mike Campbell of the Lee County Division of Natural Resources, the quality of the latest dredge was the best compared to the previous dredging events. "It was a clean cut" said Boutelle. Campbell explained the clean cut was due to the contractor's ability to work back and forth both landward and seaward of the bridge and to resweep both areas.

The pay volume of sand excavated was approximately 90,000 cubic yards. Construction was by Ferreira Construction and Coastal Engineering Consultants provided professional services in support of Lee County.

Throughout the year, Lee County and a Technical Advisory Committee made up of representatives from Lee County, the Florida Department of Environmental Protection, Captiva Erosion Prevention District, and the City of Sanibel have worked with senior coastal engineers at CB&I Coastal Planning & Engineering in the development of a Blind Pass Inlet Management Plan. A second public meeting to discuss the plan will be scheduled for the fall.

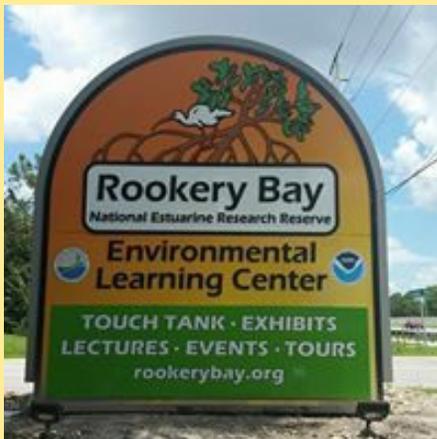
Funding for the dredging project and the Inlet Management Plan is provided by tourist tax revenue from Lee County Tourist Development Council and a grant from the Florida DEP.

New Interactive Marine Life Exhibit Opened

Interested in a day trip for you and your guests? Just to the south in Collier County, there is the Rookery Bay National Estuarine Research Reserve. Located at the northern end of the Ten Thousand Islands on the Gulf Coast south of Naples, the 110,000 acres of pristine mangrove forest, uplands and protected waters is one of the few remaining undisturbed mangrove estuaries in North America. Where rivers and streams meet the sea, a unique habitat is formed. A myriad of wildlife, including 150 species of birds and many threatened and endangered animals, thrive in the estuarine environment and surrounding upland hammocks and scrub.

For both kids and adults, the Research Reserve has opened a new, 180 gallon marine life exhibit at its Environmental Learning Center. More than a dozen species of marine animals are on display for guests to discover in this 'Estuary Encounter.' "The opportunity to observe and interact with a pygmy sea cucumber, horseshoe crab or lightning whelk provides guests with an intimate connection to our natural environment," said Keith Laakkonen, Reserve Director.

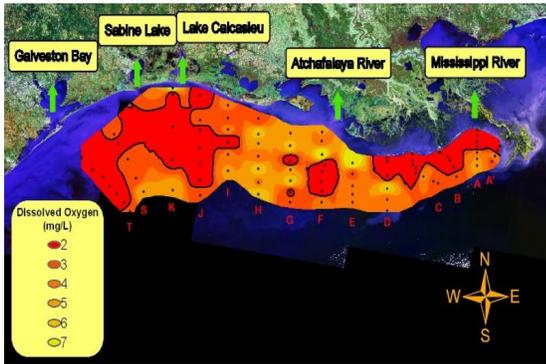
The exhibit features a partitioned, state-of-the-art display enabling visitors to interact with animals. It includes see through windows along the side for viewers to observe the diversity of species from different angles. It is designed to look and feel like Rookery Bay Reserve's natural environment with detailed rock formations and a mangrove themed overflow box. In addition to self-



A view of the 180 gallon "Estuary Encounter" with the view-through window



Kids are not the only ones fascinated by the displays at the Environmental Learning Center



Map of northern Gulf of Mexico showing forecasted "dead zones"



Scientist deploys sensor to detect oxygen levels in Gulf waters in 2015 (Photo: NOAA). To help reduce nutrient runoff, information is provided to farmers through the Runoff Risk Advisory Forecasts.



guided engagement with these animals, docent led programs are scheduled throughout the day.

"As we celebrate 40 years of coastal conservation we remain committed to bringing new and improved opportunities to build local knowledge and respect for our beaches, mangrove forests and estuarine waters. The more engaged our community members and visitors are, the more likely we are to appreciate, enjoy and protect this remarkable ecosystem for future generations," said Laakkonen.

The Rookery Bay Environmental Learning Center is open from 9:00 a.m. to 4:00 p.m. all year except federal holidays. Admission is \$5 for adults, \$3 for youth ages 6 to 12, and free for children under 6.

The Environmental Learning Center is located at 300 Tower Road, off Collier Boulevard between Naples and Marco Island. For more information on the Learning Center and features and activities of the National Estuarine Research Reserve, go to the Rookery Bay website, www.rookerybay.org.

Dire Prediction for Gulf Summer "Dead Zone"

Federal scientists forecast this summer's Gulf of Mexico "dead zone," an area of low to no oxygen that can kill marine life, will be the 3rd largest dead zone since monitoring began 32 years ago. This dead zone is 8,135 square miles or about the size of New Jersey. In it the low oxygen levels are not enough to support most marine life and habitats, threatening the Gulf's fisheries. It may also slow shrimp growth leading to fewer large shrimp and higher prices at the market. "Although there is some progress in reducing nutrients, the effects of the dead zone may further threaten the region's coast economics if current levels remain," said Rob Magnien, Director of NOAA's Center for Sponsored Coastal Ocean Research.

The Gulf's low oxygen and oxygen free zones are caused by excess nutrient pollution primarily from human activities such as agriculture and wastewater. This excess in turn stimulates the overgrowth of algae. The NOAA-sponsored forecast is based on nutrient run-off and river discharge data from the U.S. Geological Survey (USGS). The forecast assumes typical weather conditions and does not account for storm disruptions. This year's prediction is due mainly to heavy May stream flows that were about 34% above the average and had higher than average nutrient loads. The USGS estimates that 165,000 metric tons of nitrate, about 2,800 train cars of fertilizer, and about 22,600 metric tons of phosphorus flowed into the Gulf from the Mississippi and Alchafalaya Rivers in May.

The USGS operates over 3,000 real-time stream gauges, 60 real-time nitrate sensors, and tracks nutrient loads and concentrations throughout the Mississippi-Atchafalaya watershed. The watershed drains parts or all of 31 states.

Mangroves Offer Substantial Protection

The threat to coastal regions posed by climate change, overdevelopment, and other human caused stressors is well established. Among the most prized and valuable land throughout the world, shorelines every-

About Florida's Mangroves

- Red mangroves are the most well-known, typically growing along the water's edge. They are identified by their tangled, reddish "prop roots."
- Black mangroves usually occupy slightly higher elevations upland from the red mangrove and are identified by numerous finger-like projections that protrude from the soil around the tree's trunk.
- White mangroves usually occupy the highest elevation more upland than the other two. They have no visible aerial roots and are identified by the leaves. Leaves are elliptical, light yellow-green and have two distinguished glands at the base of the leaf blade where the stem starts.

All three species utilize the same method of propagation. Seeds sprout while still on the trees and drop into the soft bottom around the base or are transported by currents and tides to other suitable locations.

where are imperiled by sea level rise, beach erosion and flooding. But recently published NASA funded research has discovered a new, natural phenomenon that could offer an economic and ecological solution to coastal wetland protection—the spread of mangrove trees.

Mangroves are tropical trees that grow in coastal intertidal zones. Notable for their dense tangles of prop roots, they are highly effective shields for coastlines by reducing the force of breaking waves, decreasing erosion, and increasing sediment deposition. They are moving northward in Florida due to the lack of hard freezes. Once there they change habitats previously dominated by salt marshes into mangrove swamps.

The new study, published in *Hydrobiologia*, compares the coastal protection value of salt marshes with mangroves along Florida's East central coast and the overlying area of The Merritt Island National Wildlife Refuge in which NASA's Kennedy Space Center is located. The study came up with some startling results. Mangrove expansion was the clear winner in providing superior coastal protection over salt marshes. Mangrove habitats provide a staggering 800% more coastal protection and 470% more erosion prevention than salt marshes. They reduce the height of incoming waves by 90%. In other words, the study finds "mangroves provide more coastal protection services, and therefore more coastal protection value, than salt marshes in east central Florida."

Although the impact of impending climate change is uncertain, the study concludes that "Integrating ecosystem-based approaches and ecological engineering may offer a way to mitigate and adapt to the effects of rising seas and intensifying storms."

Save the Date!

2017 CEPD Meetings

Board Meeting	8/9	1:00 pm
Tentative Budget		
Hearing	9/7	5:01 pm
Board Meeting	9/21	3:00 pm
Final Budget		
Hearing	9/21	5:01 pm
Board Meeting	10/13	1:00 pm
Board Meeting	11/8	1:00 pm
Board Meeting	12/13	1:00 pm

Board Meetings are held at the Tween Waters Inn, 15951 Captiva Drive, Captiva, FL. The public is welcome.

Quick Links...

CEPD Website:

[Click here to go to our website](#)

Email:

[Click here to send an email to CEPD](#)

Telephone:

Annual Budget Process Begins

At their June 14th regular board meeting, CEPD Commissioners began the District's budget process considering and discussing a draft of the CEPD general budget for fiscal year 2017-18. Florida law requires the budget to be balanced. Since the 2013-14 fiscal year, Commissioners have held the general operating budget for the District steady and chosen not to increase the budget. While island properties may have seen an increase in property value over the last 4 years, Captiva property owners have seen a steady decline of the operating millage rate in each of those years. A millage rate of 0.3124 approved by CEPD Commissioners in FY 2014-15 had decreased to 0.2808 for fiscal year of 2016-17.

The final budget will be based on Captiva taxable property value which the Lee County Property Appraiser certifies to CEPD, a taxing authority, by July 1 of each year. The 2018 taxable value is \$1,404,126,344 which is a 3.8% increase over the 2017 value of \$1,352,048,774.

The CEPD Board of Commissioners will hold a publicly noticed Tentative and Final Budget Hearing for the new fiscal year which begins October 1. The Tentative Hearing will be held at 5:01 P.M. on September 7, 2017 and the Final Hearing will be held on September 22, 2017 at 5:01 P.M. preceded by the Regular Board Meeting at 3:00 P.M. All meetings are at Tween Waters Inn.

(239) 472-2472

Prior to the hearings, taxpayers will receive in the mail from Lee County the Notice of Proposed Property Taxes known at the TRIM notice. The millage and budget hearings are open meetings and are the best opportunities for taxpayers to provide input into and ask questions about the coming fiscal year's budget. The hearings are designed to ensure taxpayers awareness of the proposed millage changes, the proposed budget changes, and if any, the percent of change of the rolled back rate. The rolled back rate is the millage rate which provides the same property tax revenue as was levied during the previous year.