

Effective Planning Key to Project Success

Can we ever forget the disheartening news delivered by Col. Alan Dodd, Commander of the Jacksonville District Army Corps of Engineers, to the Captiva community and the CEPD Board of Commissioners on July 25th of last year? At an afternoon CEPD public meeting, Colonel Dodd explained that the Army Corps had made the decision to rescind funding for Captiva's beach nourishment project. The Corps had cancelled the July 2013 bid opening with their dredging contractors for fall construction of the project due to public parking and easement policy issues.



The northern S-curve before renourishment



The same area after renourishment in January 2014

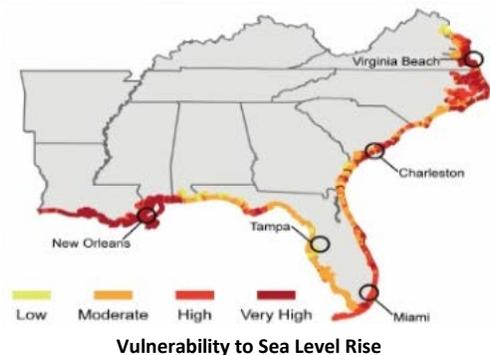
Fortunately, the CEPD had a two-track strategy already in place: the first track, proceed with the Corps should funding become available; the second track, be in a position to proceed with the project without the Corps.

While sponsors of major beach projects might have required up to a year to regroup after receiving such a blow from the Corps, the CEPD had the complete project, design, plans, permits and specifications, out to bid within two weeks of receiving the bad news.

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Changing Sea Level - A Rising Concern

In the Winter 2012 Newsletter, CEPD reported on the impact of sea level rise on South Florida ("Sea Level Rise May Require Adaptation"). At that time, sea level rise along Florida's coastline was projected to be 27 inches by 2060. The Third National Climate Assessment Report, "Climate Change Impacts in the United States," released May 6, 2014, confirmed that climate change is affecting Americans in every region of the U.S. and key sectors of the national economy. "Certain types of extreme weather events with links to climate change have become more frequent and/or intense... In addition, warming is causing sea level to rise and glaciers and Arctic sea ice to melt, and oceans are becoming more acidic as they absorb carbon dioxide."



Vulnerability to Sea Level Rise

According to the report, sea level rise in Florida will be 1 to 4 feet by 2100, threatening tourism, the water supply, and public health. The report raises several alarms:

- An increase in the number of Category 4 and 5 hurricanes that will threaten the Atlantic and Gulf coasts;
- A rise in the number of days when the temperature hits at least 95 degrees, endangering humans, livestock, and crops and increasing the threat of wildfires;
- Rising sea levels that will cause saltwater to spill over more often into fresh water aquifers and wells, threatening crop production as well as drinking water;
- More storms that will flood low-lying areas along the coast where most Floridians live.

Jim Beever with the Southwest Florida Regional Plan-
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Beaches Under Valued and Under Appreciated

A new study by James R. Houston of the U.S. Army Engineer Research and Development Center states that increased funding to preserve and restore Florida's beaches makes good economic sense but too little is being invested to preserve them. Houston's study shows that if Florida were a country, it would be the world's leading international tourist attraction. Florida beaches are the most visited beaches in the U.S. The number of day visits annually is more than double that of the U.S. national parks. He reports that Florida beach tourists pay \$6.4 billion a year in federal, state, and local taxes.

Economic Value of Florida's Beaches

If Florida were a country, it would have the most tourist visits in the world:

Country	Tourists (Millions)
Florida	87.3
France	79.5
United States	62.3
China	57.6
Spain	56.7

However, this valuable asset is under appreciated and under funded. The President's 2012 budget had only \$16.5 million for Florida's beach renourishment and only \$2 million in 2013 - less than 1/2 of one percent of the \$3.2 billion in taxes the federal government receives from Florida beach tourists. Houston says Florida beachgoers pay in federal tax revenues \$3.95 per day-visit but only 2 cents per day-visit is spent in federal funds to nourish the beaches. The State of Florida does not do much better: \$21.5 million went to beaches in 2013 which is just 1.0 percent of the taxes it receives from beach tourists.

Economic Value of Florida's Beaches

If Florida were a country, it would have the 2nd most spending by tourist in the world:

Country	Spending (Billions)
United States	\$90.5
Florida	\$67.2
Spain	\$59.9
France	\$53.8
China	\$48.5

Florida's beaches erode and need periodic renourishment. In 2010, the Florida DEP declared that almost 400 of Florida's 825 miles of shoreline were critically eroded. What's worse, we are doing it to ourselves, reports Houston. Inlets that have been improved for navigation are responsible for up to 85% of erosion on Florida's east coast. The navigation improvements are for economic benefit but at the expense of the economic benefits of beaches. To put into perspective, if Florida's beaches are neglected to the point where there is just a 1% reduction in international visitors coming to Florida's beaches,

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How to be a Good Citizen at the Beach

Sun, sea, and sand are important to the thousands of residents and visitors that enjoy Captiva Island's beautiful beach. Since travelers to Captiva come from all parts of the nation and world, the Captiva Erosion Prevention District has prepared a guide for anyone unfamiliar with the coastal environment to spread the word on how beach lovers can make the beach safe and enjoyable for everyone while protecting the beach environment. When complete, the guide will be distributed to island hotels and vacation rental agencies for distribution to their guests and renters.

Some ways to protect the beach:

- ALL vehicles (including golf carts, ATVs, beach buggies, etc.) are not to be parked or driven on the beach or dune area.
- Dunes are nature's protection from the waves and tides of coastal storms. Plants build and anchor the dune system. While they can tolerate harsh beach conditions including wind, salt spray and scarce nutrients, they cannot withstand the pounding of feet and beach gear. Dunes and their vegetation are protected by law and should not be disturbed.
- Protecting beach wildlife and their unique habitat will preserve natural resources for future generations. Leave all living organisms in their native habitat where you find them on the beach.
- Walk with care and avoid nesting areas.
- Pets are not allowed at Hagerup Beach Park with the exception of guide dogs accompanying impaired persons. Other areas of the beach require dogs to be on leash.
- Alcohol, glass, and fires are prohibited.
- Please fill any holes you may create if digging in the sand. Holes create a walking hazard for pedestrians and become an obstacle for nesting turtles.
- Shore birds can find their own food that is much healthier than food in your picnic basket but they are good at



Unthinking beachgoers placed their chairs in the middle of a newly-planted dune.

begging and hovering. Feeding them can make them more aggressive and should be avoided.

- Enjoy the fragrant salt air and leave cigarettes at home or in the car. Smoking can ruin the beach effect for others.
- Dispose of your litter in the trash cans provided or take it home.

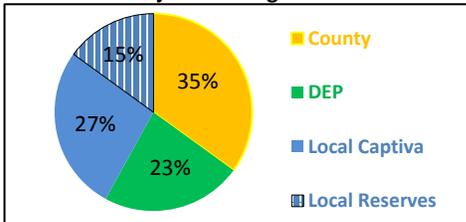
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In just four weeks, on August 22, the CEPD awarded a construction contract to Great Lakes Dredge & Dock, a process that typically takes eight weeks to complete.

With the Great Lakes contract executed, the District fast tracked the pre-construction meeting with representatives from Lee County, State, and Federal agencies. Then, thanks to the very much appreciated help from the Florida Department of Environmental Protection, CEPD was able to expedite the very timely issuance of the "Notice to Proceed."

The 2013/14 Beach Renourishment Project commenced sand placement on Oct. 7, 2013 with completion on Dec. 16 for Captiva and Dec. 26 for Sanibel. Approximately 6 miles of shoreline were nourished with 864,192 cubic yards of sand from a borrow area located 8.3 nautical miles offshore of the center of Captiva Island. The average added Captiva Island beach width was 69.7 feet. The project also included a dune rehabilitation and vegetation component with the placement of over

Project Funding Sources



Final Project Cost

State DEP	\$4,693,196
Lee County	7,154,200
Local Captiva	5,700,000
Local Reserves	<u>3,096,799</u>
Total	\$20,584,195

250,000 sea oats, the largest ever planted on Captiva.

With formal weekly progress meetings, the construction of the new beach was completed on time, within budget, and with no cost overruns of the Great Lakes bid price due to typically expensive change orders. In just five short months, the CEPD went from *no* project to a *completed* project. Captiva's beaches were restored and the sole evacuation route protected.

In the absence of Corps funding, both the Florida DEP and Lee County increased their contributions. Of the \$7.1 million total from Lee County, \$6.1 million was for Captiva beaches – which represents a 300% increase over their

contribution to the previous renourishment.

Lee County's contribution toward Captiva's beaches represents 33% of the total bed taxes generated from Captiva's tourism for the eight years ('05 – '13) since the previous '05 renourishment. This compares very favorably to the County's Tourist Development Council's policy of 26% earmarked for "beach and shoreline."

Changing Sea Level - A Rising Concern (Continued from Page 1)

ning Council said in the May 7 edition of the *News-Press* that Ft. Myers residents can expect shifts in rainfall patterns, crop losses, and flooding in the downtown district along the south bank of the Caloosahatchee. "There's going to be major road problems," Beever added. "The approaches to the bridges will go underwater first. The Sanibel causeway is built to accommodate some sea level rise, but the approaches will be underwater."

The Report said global climate is projected to continue to change over this century and beyond, "but there is still time to act to limit the amount of change and the extent of damaging impacts." Both mitigation (efforts to reduce

To see the complete Third National Climate Assessment Report, go to: <http://nca2014.globalchange.gov/>

future climate changes) and adaptation (efforts to reduce the vulnerability of society to climate change impacts) can minimize the damages from human-caused climate change and adapt to the pace and magnitude of future changes. Mitigation of future climate change will largely be determined by choices humans make about emissions. Lower emissions of heat-trapping gases and particles mean less future warming and less severe impacts.

There are three types of adaptation options for rising sea levels: protect (such as building levees or other "hard" methods or structures), accommodate (such as raising structures or using "soft" or natural protections such as wetland restoration), and retreat. The report says that planning for mitigation and adaptation is becoming more widespread. However, current efforts are not sufficient to avoid increasingly negative social, environmental and economic consequences, according to the report.

Beach renourishment is one of the best protections against sea level rise. Recognizing this, the CEPD Board of Commissioners is taking rising sea levels into consideration in its next beach renourishment project. In its permit renewal application, CEPD has requested to build additional height and width to the beach to provide even more protection to homes and infrastructure.

**Beaches Under Valued and Under Appreciated
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Federal tax revenues would drop \$32 million – 15 times the Fed’s 2013 funding!

Houston says the competition among beach destinations is worldwide and if Florida’s beaches are allowed to deteriorate, tourists have many other choices. Beach-lovers from Great Britain or Germany can go to Spain’s Costa del Sol; Canadians can choose Bermuda or the Bahamas; and Chinese and Japanese tourists have the many beaches in Australia. He states “it is folly to not support restoration and maintenance of the very infrastructure (beaches) that ...attracts beach tourists.” He further states “Without actions, not only do local and state communities and the Nation ultimately suffer significant economic impacts, but we all lose the esthetic and recreational benefits of Florida having beaches that have been recognized as world class for their beauty and sheer fun.”

2014-15 Beach Funding

The Florida legislature approved the state’s 2014-15 budget of \$77,100,000,000 (\$77.1 billion). Although the House and Senate versions for funding for beach and inlet projects varied greatly (\$27.7 million and \$49.2 million respectively), the two bodies agreed on \$47,271,537 (\$47.3 million). Of the \$47.3 million, \$38.6 million is for beach projects, \$1.6 million for post-construction monitoring, and \$7.1 million for inlet management. In turn, according to Senator Alan Hays, this money “will provide an additional \$137 million in local and federal

funds.” Moreover, a significant feature was that line-item appropriations for individual projects are not part of the legislation.

Maintaining a beach can be costly. Aside from the \$47.3 million the state appropriated this year, over the past 6 years, \$152 million has been appropriated by the state for beach projects. Locally, 26.4% of bed taxes collected by Lee County is earmarked for beach and shoreline projects including beach renourishment. Over the last 8 years, bed tax collections on Captiva have totaled \$18,850,260.

The beaches are the number one reason tourists come to Florida and tourism is Florida’s biggest industry. \$71.8 billion was spent by tourists in Florida in 2012, which in turn generated \$4.3 billion in tax revenue. The funding by the state and the willingness of local jurisdictions to earmark funding for beach renourishment is a step in the right direction in providing needed additional funding to preserve and maintain such a valuable asset.

SAVE THE DATE

8/13/14	Regular Board Meeting	1:00 pm
9/5/14	Tentative Budget Hearing	5:01 pm
9/22/14	Regular Board Meeting	3:00 pm
9/22/14	Final Budget Hearing	5:01 pm
10/8/14	Regular Board Meeting	1:00 pm
11/12/14	Regular Board Meeting	1:00 pm
12/10/14	Regular Board Meeting	1:00 pm

Meetings are held at Tween Waters Inn, 15951 Captiva Dr., Captiva, FL 33924. The public is welcome.