

Blind Pass Management Study Continues

At an April 21 public meeting, Captiva and Sanibel attendees were introduced to the purpose of the Blind Pass Inlet Management Study sponsored through a Lee County, CEPD, and City of Sanibel partnership and funded by Lee County. Through the evaluation of changes and trends in the inlet shoals and beaches adjacent to Blind Pass,



coastal engineers are developing maintenance options and a monitoring plan for the Pass. During the study's initial stage, coastal engineers documented a southerly flow of sand along Captiva's coast and across Blind Pass but a northerly flow from the north end of Sanibel into Blind Pass. While the study has a number of objectives, the importance of maintaining an open inlet, protecting infrastructure, and extending the life of beach nourishment projects was evident. Participants provided valuable feedback to coastal engineers and Lee County at this first of three stakeholder meetings.

Prior to the second stakeholder meeting in late summer, study engineers will use Delft 3D modeling to simulate and compare outcomes of proposed management studies and the evaluation of alternatives for Blind Pass. The alternatives will be a focus for the summer meeting.

To stay-up-to date on the study, the County Department of Natural Resources has established a website: www.leegov.com/natural_resources/blind-pass-2016-inlet-management-plan-study. The CEPD will notify Captiva property owners electronically of stakeholder meeting times and locations. To be placed on the CEPD email list to receive notifications, contact the office at 472-2472 to provide an email address.

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NOAA's New Technology Will Improve Forecasting; Predicts More Active Storm Season

Just in time for the 2016 Atlantic hurricane season, the National Oceanic and Atmospheric Administration has brought new technology online in the form of supercomputers and satellites to better predict storms. "We will know with higher certainty what areas will be affected so you don't have to evacuate areas unnecessarily" said Vijay Tallapragada of the Global Climate and Weather Modeling Branch at NOAA's National Centers for Environmental Prediction.

NOAA has activated two supercomputers that can plug in data from satellites, weather balloons, buoys, and other sources to create forecasting models. They can perform 5.78 quadrillion calculations per second, almost 4 times faster than the old system. The old system could focus on weather conditions in grids 17 miles square and run models every six hours. The new



NOAA's GOES-R Geostationary Weather Satellite

system can focus on 8 miles square grids and runs models every hour. "This will enable us to track the evolution of a hurricane in a six hour period to give us a better track and intensity forecast," Tallapragada said. The upgrade now makes it possible to predict the category of intensity two to three days in advance instead of one to two days.

In mid-October NOAA and NASA plan to launch the first of four satellites that focus on the western

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Healthy Beaches Drive Florida's Tourist Economy

The Office of Economic and Demographic Research (EDR) is the Florida Legislature's economic forecasting research arm. The Office was tasked to evaluate the strength of the relationship between Florida's beaches and the attractiveness of beaches as a tourism destination. EDR found that Florida's beaches are the most important feature of Florida's brand and tops the list as the #1 tourist attraction – higher than even theme parks! Healthy, beautiful beaches are critical to maintain Florida's brand and if not maintained, visitors will go elsewhere, the EDR reports. Because of this, beach renourishment was characterized by EDR as a form of control to ensure Florida's most important feature is a quality product when visitors arrive.

EDR also calculated a "return on investment" (ROI) for the state's beach management program using 2013 data. In that year, over 18.6 million visitors came to Florida just because of the beaches and spent over \$2 billion directly attributable to the beaches. The ROI was 5.4 times the money invested in the state's beach management program! Of the 17 state programs EDR evaluated, the investment in beaches ranked #3 among economic development programs.

The number of visitors and state tax revenues continue to grow in 2015: visitors increased



Wide restored beach on Captiva

12.7% over 2013 and revenues increased 15% over the same period. Beach-specific tourism data for 2015 is not available but it is reasonable to assume that it increased proportionately.

As is evident from the EDR analyses, the high return on investment suggests that more money should be spent on Florida's beaches. However, although half of Florida's beaches are critically eroded, only half are part of the statewide beach program. This fact leaves far too many worthy beach projects unfunded every year. Since

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University of Florida Study Shows More Sea Turtles Survive with Less Beach Debris

It may seem obvious that removing debris from the beach helps sea turtles nest. Now a new University of Florida study proves it. Clearing the beach of flotsam and jetsam increased the number of nests by as much as 200%; leaving it decreased the number by 50%!

From May to September, 2011 through 2014, Professor Ikuko Fujisaki and her colleagues at the



University's Institute of Food and Agricultural Sciences conducted an experiment near Eglin Air Force Base in the Florida Panhandle to determine the effects of large debris on sea turtle nesting. The area studied has one of the highest nesting densities of loggerhead turtles in the northern Gulf of Mexico.

Researchers recorded locations of nests and false
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2016 Beach Survey

It's been 2-1/2 years since the last beach nourishment project on Captiva was completed. In accordance with the project permit and the physical monitoring plan for the project, the second annual beach monitoring event began in late June. It consisted of topographic and bathymetric beach profile surveys along the entire project area.

Upon completion of the survey field work on the beach and in the Gulf waters, the data is processed and an engineering monitoring report is developed and submitted to the Florida Department of Environmental Protection and the CEPD. The report will summarize and discuss the construction of the project. It will include shoreline and volume changes to document the changes to the beach since construction. It will summarize and discuss the data, the performance of the beach fill project, and identify

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Florida Coastal Permitting Streamlined

Prior to 1995 activities such as beach restoration or nourishment, construction of erosion control structures and maintenance of inlets required a minimum of a coastal construction permit, environmental resource permits and sovereign submerged lands authorizations. The permits and authorizations were issued separately and by different state agencies. The potential for conflict between the permitting agencies resulted in delays and confusion among the agencies and the applicant. Fortunately, on



October 13, 1995, the Florida Department of Environmental Protection (FDEP) initiated concurrent processing of applications and consolidated these reviews and the assignment of responsibility into a single program called the “Joint Coastal Permit” (JCP), ensuring reviews were conducted in a timely manner.

More recently the FDEP updated the Joint Coastal Permit program. The new rules provide an expedited permit application review and longer permit duration. Some noteworthy revisions include:

- Most new JCP’s will allow for two maintenance dredging events or a permit life of 15 years, whichever is greater. Previous permits were only issued for 5 or 10 years.
- The permit application and supporting documents can now be submitted electronically in searchable format.
- Applicants that constructed and maintained a preceding project with no substantial changes in project scope for the new project will not be required to submit responses to a majority of items on the application if their project meets certain criteria that demonstrate the success of the previous project.

The Captiva Erosion Prevention District was last issued a JCP on December 11, 2014. The permit expires on December 11, 2029.

NOAA’s New Technology Will Improve Forecasting (Continued from Page 1)

hemisphere. These satellites will provide superior imaging with better resolution and increased speed for more accurate forecasts. It is the first major satellite technology advancement of its type since 1994.

NOAA predicts a more active Atlantic storm season than the last three years with a 70% likelihood of four to eight hurricanes. It calls this year a “near-normal” season, although the Agency emphasized this year’s prediction is difficult because of several climate influences like La Nina. For example, if La Nina were to occur during the peak months of the hurricane season, there would be more activity. NOAA’s outlook also predicts a 70% probability of one to four hurricanes that are Category 3 or higher. NOAA’s outlook does not predict the chances of a storm making landfall.

The Colorado State University Meteorology Project team predicts 12 named storms. They expect five to become hurricanes and two to reach major hurricane strength. These forecasts do not include Alex and Bonnie which have already occurred.

No matter which agency turns out to be closer in their predictions, the improved speed, reliability, and accuracy of this new technology makes everyone living in coastal areas feel a bit more secure.

2016 Beach Survey (Continued from Page 2)

erosion and accretion patterns. It will include a comparative review of project performance to expectations and identification of impacts attributable to the project. The report will include plots of survey profiles and graphical representation of volumetric and shoreline position changes. Results will be analyzed for patterns, trends, or changes between annual surveys and cumulatively since project construction.



Survey boat

CEPD’s engineers, CB&I, will present the report to CEPD commissioners during a fall regular board meeting. The public is welcome at all CEPD meetings.

Healthy Beaches Drive Florida's Tourist Economy

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passage of Amendment 1, both the dedicated historical (1998) beach management documentary stamp allocation and designated beach management trust fund are no longer in place, and the number of projects unfunded and the amount of funding for beach preservation have declined. It is essential to examine program procedures to ensure state funds are used to restore beaches in most critical need and that this funding it is supported by local and state decision-makers.

SAVE THE DATE

8/10/2016	Regular Board Meeting	1:00 pm
9/8/2016	Tentative Budget Hearing	5:01 pm
9/22/2016	Regular Board Meeting	3:00 pm
9/22/2016	Final Budget Hearing	5:01 pm
10/12/2016	Regular Board Meeting	1:00 pm

Meetings are held at Tween Waters Inn, 15951 Captiva Dr., Captiva

"Protect Our Beaches" Guide Available

Do you have renters, visitors, or guests whom you would like to inform about how they can help our beaches flourish? CEPD has a colorful card listing ways of protecting Captiva's beaches. Drop by the office at 11513 Andy Rosse Lane, Unit 4 and pick up as many as you want. Or call ahead at 472-2472 and we will have them ready for you

Sea Turtles and Less Beach Debris

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crawls (turtles emerge from the water but do not lay eggs). When researchers removed large debris like fallen trees, concrete, pipes, and metal fencing, sea turtle nests increased 200% and false crawls increased 55%. In sections where debris was not removed, nests declined by 46%.



Staked-out turtle nesting site

Worldwide, six of the seven sea turtle species are classified as threatened or endangered due to human actions and lifestyles. The turtles rely on open, unobstructed, sandy beaches to reproduce. In Southwest Florida, sea turtle nesting season runs from mid-April to mid-October. During this period, beachgoers are required to move furniture and other obstacles each night before dusk, fill in holes dug in the sand, and remove paper and trash. Now we know how much a difference this can make.

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