

## CEPD Plans for Next Beach Renourishment

Plans for the next Captiva-wide beach renourishment project, scheduled for the winter of 2020-21, are underway. The nourished area extends along 4.9 miles of shoreline between Redfish Pass and Blind Pass. Fill placement along northern Sanibel and Bowman's Beach is not included as interlocal agreements have not yet been established. Inclusion of these segments may be considered if agreements are negotiated.

The objectives are to restore and maintain a uniform 90-foot beach width, achieve a 10-year nourishment interval between major projects, and implement smaller scale interim sand placement events as needed to address storm impacts and persistent erosional hot-spots.

The project fill volume estimate is 900,000 cubic yards of sand over 25,600 linear feet of Gulf shoreline. These estimates are based on beach profile surveys performed by CEPD's engineers in October 2017 immediately following Hurricane Irma. Fill volume and distribution may be revised depending on beach conditions at the time.



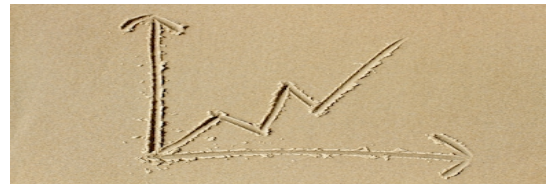
**Nourishment construction during 2013-project**

The total estimated project cost is \$30.4 million. It assumes no Federal participation. The 2013-14 agreement with the Army Corps of Engineers reduced the federal cost-sharing due to lack of public easements and public access to a level so low CEPD did not pursue it. It does, however, include FEMA reimbursement for damage from Hurricane Irma. State cost-sharing is subject to available State legislative funding and project ranking within the State's Local Government Funding Requests. It is not guaranteed, but Captiva's project has been highly ranked in the past. For planning purposes,

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## Who Owns Your Beach? – 4 Lines in the Sand

Ownership of the land and sand in front of your home can be confusing. There are 4 lines in the sand that you need to know about: Coastal Construction Control Line, Mean High Water Line, Erosion Control Line, and Land Survey Property Boundaries.



**Coastal Construction Control Line (CCCL)** - The CCCL is the current regulatory line established by the state that defines the portion of the beach dune system subject to severe fluctuations based on a 100-year storm surge, storm waves, or other weather conditions. This line is sometimes referred to as the Coastal Construction Setback Line (CCSL) that was established in 1978 and subsequently revised in 1991 as the current CCCL. The CCCL places regulatory constraints on construction seaward of the line that provides protection for Florida's beaches and dunes while assuring reasonable use of private property. The DEP regulates construction of structures and activities seaward of the CCCL which can cause beach erosion, destabilize dunes, damage upland properties, or interfere with public access. Property may not be modified or constructed seaward of this line without approval from the Florida DEP. Also, the Florida Building Code establishes a base flood elevation for buildings located seaward of the CCCL. Lee County has recently modified the Land Development Code to establish a prohibition on any construction seaward of the old CCSL, with certain exceptions for public access.

**Mean High Water Line (MHWL)** - Mean High Water is the average of all high-water heights measured over a 19-year epoch. The Mean High Water Line is the boundary between the foreshore immediately bordering navigable waters owned by the state and upland that is privately

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## Rare Meteotsunami Hits the Islands

A meteorology-induced tsunami, called a meteotsunami, came ashore at the Castaways Inn, just south of Blind Pass on December 20. A meteotsunami is formed by storm systems moving rapidly across the water, such as a squall line. According to the National Weather Service, it is dependent on several factors such as the intensity, direction and speed of the disturbance as it travels over water. It is a rapid rise in water that just happens once, unlike a tsunami where the waves occur every 60 to 90 minutes. It is not the same as storm surge, which is driven by winds from storms and hurricanes.

The southwest Florida coast was under a gale warning that day because of a strong cold front moving across the area, with strong southerly winds ahead of the front expected to make a quick shift westerly into gale-force strength. The biggest meteotsunami recorded in Florida occurred at Daytona Beach on July 3, 1992, when a 10-foot wave caused by a collapsing thunderstorm generated the disturbance. Because waters are so shallow off Sanibel, a meteotsunami could not reach that height here according to experts at the Weather Service.

The wave hitting the Castaways was thigh-high as it reached Sanibel-Captiva Road. Its height upon reaching shore was estimated to be at least five feet. Tony Lapi,



*Beach goes run from meteotsunami at the Castaways Inn north of Blind Pass on December 20, 2018*

president of Sanibel Captiva Beach Resorts, which includes the Castaways, was quoted in *the Sanibel Chronicle* as saying, "If the city of Sanibel hadn't cleared out the three culverts under San-Cap Road last spring that were plugged up, the water could've just stayed put, but it flowed out. The breakwall in front of Castaways that was built 50 years ago created a tremendous looking splash but I wouldn't have called it a tsunami- more like a rogue wave. This was not that big of an event."

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## Mike Mullins Elected Chair

At the December 12, 2018 Board meeting, CEPD Commissioners elected Mike Mullins to succeed Dave Jensen as Board Chair. The Board re-organizes officers at its first regular meeting in December pursuant to the District Rules of Procedure. Michael Lanigan was elected Vice Chair. Harry Kaiser and Bob Walter were re-elected as Secretary and Treasurer respectively. CEPD officers generally serve a one-year term.

Commissioner Mullins has served as a CEPD Commissioner continuously since 2006 and has been re-elected for 4 terms. Mullins previously served as Chair from 2009-2013. Commissioner Jensen served as Chair from 2015 through December, 2018 and has served previously as Chairperson in years past. Commissioners are elected by registered Captiva voters and serve 4-year terms. All registered Captiva voters are eligible to run. Commissioners are not compensated for their service.

## Who Owns Your Beach? – 4 Lines in the Sand

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owned. It is critical in determining the ECL prior to the construction of a beach restoration project.

Erosion Control Line (ECL) - The ECL establishes the boundary of upland ownership by the state when a beach restoration project is constructed. Courts have ruled sand added to the beach seaward of the ECL is owned by the state and held in trust for the public. The ECL was established based on the location of the Mean High Water Line at the time of construction. However, landowners retain the right to have access to the water, the right to reasonable use of the water, the right to accretion and reliction, and the right to the unobstructed view of the water. In other words, the ECL is the fixed property line between private and public lands. A landowner does not own this part of the beach in front of the property and the land seaward of this line does not convey with a sale of the adjacent upland parcel.

Land Survey Property Boundary Line - A land survey is an important document for property owners because it shows the limits of fee simple ownership and property boundaries. A survey may also show easements, land improvements, roads, flood zone classification, and water boundaries. However it often does not depict the CCCL, the MHWL or the ECL, and without these lines shown, you may think you own more land in front of your home than you legally do.

## DeSantis Signs Executive Order Reforming Florida's Environmental and Water Policy

Called the *Achieving More Now for Florida's Environment* executive order, Florida's newly elected governor Ron DeSantis said, "Our water and natural resources are the foundation of our economy and our way of life in Florida. The protection of water resources is one of the



most pressing issues facing our state. That's why today I'm taking immediate action to combat the threats which have devastated our local economies and threatened the health of our communities."

The order has five major components:

- Appropriates \$2.5 billion over the next four years to restore the Everglades and water protection.
- Creates the Blue-Green Algae Task Force to work to reduce these algae blooms over the next five years.
- Starts the next phase of the South Florida Water Management District's Everglades Agricultural Area Storage Reservoir Project.
- Creates the Office of Environmental Accountability and Transparency to organize scientific research so all agency actions align with environmental policies.
- Appoints a Chief Science Officer to organize, monitor, and collect scientific data to ensure communication between the agencies and Floridians regarding environmental issues.

Although the largest blue-green algae blooms have been on the mainland, the bayside of Sanibel and Captiva have also been impacted. Moreover, red tides are believed to feed on the algae as it breaks down when it hits salt water. So, the Governor's proactive stance is good news for the Lee County barrier islands.



Lake Okeechobee and the Everglades Agricultural Area

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the range of costs is from \$12.5 million with State and County cost-sharing to \$18.9 million without State cost-sharing assuming CEPD contributes \$2 million from its reserves. See a more detailed list of estimated costs and sources below.

The eligible State cost-sharing is estimated at 21.77% for the project. Based on applying the interlocal agreement for the previous 2013-14 renourishment project to the proposed project, the County's cost-share is estimated at 37.19%.



Construction is anticipated for the winter of 2020-21. Bidding should occur in early summer. Beach fill placement will take approximately 4 months, with another 2 months for mobilization and demobilization. Public access to the project area will be open except in the immediate vicinity of construction.

### 2020-21 Estimated Beach Renourishment Project Costs

Assuming funding from FEMA claim, state and county cost-share, and \$2 million CEPD reserves

Engineering, design, construction admin.	\$ 1,320,000
Monitoring and surveys (6)	780,000
Dredger and equipment mobilization	7,500,000
Dredging and sand filling	17,536,800
Dune and plant re-vegetation	210,000
Post construction monitoring	490,000
Contingency	<u>2,573,680</u>
<i>Total expenses plus contingency</i>	<u>\$30,410,480</u>

Less: estimated funding sources	
FEMA claim for Hurricane Irma	\$ 850,000
State cost-share	6,435,316
County cost-share	8,600,248
CEPD reserves	<u>2,000,000</u>
<i>Total cost-share</i>	<u>\$17,885,564</u>

*Estimated cost to Captiva Property Owners* \$12,524,910



CEPD Urges You to Vote



If you are a registered Captiva voter, you have the opportunity to determine whether the CEPD may finance the cost of a beach nourishment, erosion control and coastal protection project by issuing general obligation bonds maturing not later than (11) years from their issuance date in a principal amount not exceeding \$18,000,000, with the interest not exceeding the maximum legal rate, which bonds shall be payable from special assessments levied in amounts sufficient to pay debt service on such bonds on all benefitted property within Captiva Island. For details of the project, see Page 1.

Rare Meteotsunami Hits the Islands

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James Evans, Sanibel natural resources director, according to the *Chronicle*, said assessment of the beach didn't find any significant damage. "There was no major erosion. We saw accretion of sand in some areas from that cold front and some erosion in others, but nothing major. With the incremental rise of sea levels, though, we need to be aware (of) meteotsunamis as one of the threats we face as we continue to build up the dune with vegetation to protect our beaches."

**SAVE THE DATE**

3/11/2019	Regular Board Meeting	1:00 pm
4/8/2019	Regular Board Meeting	1:00 pm
4/9/2019	Tentative Apportionment Public Hearing*	5:01 pm
5/13/2019	Regular Board Meeting	1:00 pm
6/10/2019	Regular Board Meeting	1:00 pm
7/8/2019	Regular Board Meeting	1:00 pm
8/12/2019	Regular Board Meeting	1:00 pm
9/12/2019	Tentative Budget Hearing	5:01 pm
9/26/2019	Regular Board Meeting	1:00 pm
9/26/2019	Final Budget Hearing	5:01 pm
10/7/2019	Regular Board Meeting	1:00 pm

Location: South Seas Island Resort, 5400 Plantation Rd., Captiva, FL. The public is welcome.

\*Location: Captiva Civic Association

