

This document is intended to address questions asked regarding the federal easement and the Estero Island Beach Restoration Project. The project is designed to address the long term erosion trend documented by the State of Florida and the U.S. Army Corps of Engineers. It consists of placement of sand over about 4.6 miles from Bowditch Point to Sterling Avenue that will extend the width of the beach an average of about 160' beyond the 2001 location. It also adds vegetation near the landward edge of the sand placement to help trap and stabilize the beach sand, as well as a terminal rock groin at Bowditch Point to help keep the sand on the beach and out of the navigation channel. Initiation of the work is dependent upon getting easements. The total duration of the work is estimated at six months.

What is the Construction Process?

A cutterhead or hydraulic dredge will be positioned approximately 1.5 miles off the north end of Estero Island and 2 miles off Point Ybel on Sanibel Island in the Gulf of Mexico. The dredge will excavate sand mixed with salt water and pump it to Ft. Myers Beach via a pipeline. The pipeline may be floating or submerged, but will be clearly marked in accordance with Coast Guard regulations. Onshore the material will be transported thru a pipeline to the discharge point. At the discharge point, the material will travel thru an apparatus that is designed to separate the sand and water. This apparatus is known as a "*spreader*" and will direct the water in a rainbow pattern onto the beach.

Bulldozers will be used to push and shape the sand and direct the water flow down the beach, instead of into the Gulf of Mexico. This process enables the new sand time to settle out of the water mixture. Heavy construction equipment will then push the material to shape the beach as designed.

Metal stakes will be placed to mark the required final sand elevations. These stakes will be inventoried prior to placement to ensure they are removed promptly after construction.

The active construction area, from the discharge point to approximately 500 feet down the beach, will be closed to the public. This area will be marked off with caution tape and/or construction fencing.

As construction progresses, the pipeline will be extended down the beach. Pedestrian crossovers will be constructed across the pipe. The crossovers will consist of sand ramps approximately 12 feet wide, placed over the pipeline in intervals no greater than 500 feet apart. The pipeline will be 3 feet in diameter or less.

It is expected that construction activity will occur every day once initiated and continue around the clock. The active construction area is expected to move down the beach an average of 500 feet per day.

Why is an easement required?

A portion of the sand is designed to be placed on private property landward of the erosion control line. We cannot trespass on that property to build the project without permission from the owner. In addition, the particular easement we are seeking is required by the federal government in order to qualify for federal funding. The ten year term matches the term of the commitment from the federal government to help fund the project.

Why is new vegetation included as part of the project?

Dune plant communities stabilize beaches over time and their growth habits function to trap sand blown by wind and moved by waves from the surf zone to the dune area. This sand trapping leads to increases in dune height and beach width over time. Beach vegetation and dunes serve as a critical component to maintaining beach stability and serving as a source of sand to rebuild the beach after a storm event. Recognizing the function that dune vegetation serves in maintaining and restoring beach systems, Lee County changed its comprehensive plan to reflect the importance of dune vegetation in protecting tax payer investment in beach nourishment. The Town of Fort Myers Beach comprehensive plan also recognizes this. For the beach nourishment project the Town has developed the Managed Beach Zone program; a copy of this plan is available from Town Hall upon request

What type of vegetation will be planted in front of my property?

For each Managed Beach Zone, property owners will have a choice of three plant palettes that vary in plant composition. The palettes range from taller plant species (for more privacy) to shorter plant species. This vegetation is salt tolerant, drought tolerant, and all native to Fort Myers Beach. Many of the plants have colorful flowers that will add an aesthetic quality to your property.

Where will the vegetation be planted?

Property owners who agree to the easement also give permission for the contractor to plant a Managed Beach Zone seaward from the easement line a total width of 10-15 feet and at least 75% of the property width. This is the farthest limit that a Managed Beach Zone can be planted without additional agreement from the property owner. However, a property owner may wish to have a Managed Beach Zone planted *landward* of the easement line to increase property protection, for aesthetics, or for other reasons, the Town and County will work with property owners to design a specific plan that will position Managed Beach Zone plantings and dune walkthroughs in mutually beneficial locations.

How can I control my Managed Beach Zone?

Beach vegetation usually does not spread very fast out of the planted area. Foot traffic,

permitted beach raking, and natural processes typically limit the spread. However, if the area does spread beyond the Managed Beach Zone, you can receive a permit to trim the vegetation back. For irritating vegetation such as sand spur and nicker bean, you will receive guidance and information from the Town on how to control them regularly .

The easement refers to construction of a “*berm*”. What is that?

The word “*Berm*”, as used in the easement language, references the relatively flat part of the beach extending from the waterline to the upland property. It is simply the sand that will be placed on the beach. The elevation of the berm is designed at 4.1 NGVD 29. For reference, this elevation is approximately where the native vegetation begins. Sand will not be placed higher than this elevation.

What “*temporary structures*” will be erected?

The construction workers need small buildings to provide offices or sheltered workspaces. These buildings are on a sled type apparatus that is pulled by a large bulldozer. The size of the building(s) is typically similar to a portable tool shed (Approximately 10 feet high and 15 feet long). A portable sanitary facility may also be included with the structures.

How long will temporary structures will be on each individual easement area?

It is expected the structures will move an average of 500 feet down the beach each day with the active construction area. There will be days where the work crews encounter mechanical difficulties or inclement weather, which will cause work delays. However, it is not expected that the equipment or structures will be on any single easement area longer than five (5) days.

What is the Erosion Control Line (ECL)?

The ECL is the location of the mean high water line as surveyed in 2001. It is based on an elevation determined by the State of Florida. For Estero Island, the Mean High Water Line (MHWL) is 1.5’. This elevation references the National Geodetic Vertical Datum of 1929 (NGVD 29) and is determined by the Florida Department of Environmental Protection Agency (FDEP). The designated elevation varies slightly along the Florida coastline. For example, the MHWL at the south end of Estero Island is 1.42’ NGVD 29. The ECL has been approved, legally described and recorded. It represents a permanent boundary between private beachfront property and state owned land. Your property rights as a beachfront owner are protected by Florida Statute 161.191 and 161.201.

The “*Taking*” of trees and vegetation:

The intent of this provision is to allow the removal of any trees, brush, shrubs or other vegetation that impedes the placement of fill material. No trees six (6”) inches in

diameter or greater will be removed from the properties. If property owners have trees or vegetation they do not wish to be damaged or removed, this vegetation may be marked prior to construction and care will be taken to avoid it. If harm does come to a marked plant, it will be restored to pre-construction quality or replaced with like vegetation. Residents with trees or vegetation within the easement area that they wish not to be damaged or removed will have them identified on the Managed Beach Zone landscape plans.

How will the sand placement affect seawalls?

Sand will not be placed landward or behind any seawall. It is expected the contractor conducting the beach fill operations will place the sand next to the seawalls with a small tractor or 'Bobcat'. County personnel will videotape the pre-construction condition of all seawalls located in the project area. Any damage that occurs to the seawalls as a result of the construction activities will be repaired to pre-construction quality, at no expense to the owner. If residents are aware of any buried or covered seawall, they should alert Lee County Division of Natural Resources at (239) 533-8128.

What are the maintenance and Post construction Activities?

Activities the County intends to conduct within the easement area other than the initial construction activities are listed below. Although the scheduling for the activities listed may change during the life of the project, the County will make reasonable efforts to notify residents of the actual schedules.

Beach Profile Surveys – Immediately following construction and each spring / summer for three (3) consecutive years, the County will conduct beach profile surveys to monitor the beach erosion or accretion. In addition, two (2) additional surveys will be conducted biannually after the third year post construction, so surveys will be conducted for seven (7) years after construction. The surveys will be conducted on intervals of approximately one (1) profile every 500' feet laterally down the beach.

As a part of these surveys, monument control may have to be re-established landward of the easement area. This would consist of a survey crew traversing across the easement area and re-setting monuments that are currently in place. Although it may be required to place the monuments in new locations, County personnel will show the current locations to the residents, at the resident's request.

Compaction Survey and Tilling – Immediately following construction and prior to April 15 for three (3) subsequent years, County personnel will conduct a compaction survey to determine if tilling is required.

Compaction surveys consist of one or two persons traversing the beach and measuring the sand compaction on 500-foot intervals. Any required tilling is expected to be conducted with a tractor or large front-end loader raking the beach

to a depth of 24 inches. The tilling operations should not last longer than 1 day for any given easement and must be completed prior to April 15th each year.

Escarpment Surveys and Leveling – Immediately following construction, prior to March 1st, and weekly from May 1 to October 31 visual surveys for escarpments, or vertical formations of sand, will be conducted for two years after construction. If escarpments exceeding 18 inches in height and 100 feet in length are found, they shall be leveled by mechanical methods. It is expected that these mechanical methods will consist of a tractor with a box scrape or small bulldozer, however the Florida Department of Environmental Protection (FDEP) shall prescribe the method to be used.

Lighting Survey – A visual survey to detect lights or light sources will be conducted monthly beginning in April and extending thru August for the first turtle-nesting season following construction. (This activity will be conducted even if there is not a beach project.)

Marine Turtle Nesting Survey – Surveys will be conducted during construction and thru three (3) nesting seasons following construction to document nesting activities. It is expected the surveys will consist of daily patrols along the project area. (This activity will be conducted even if there is not a beach project.)

Nourishment Activities – It is possible that one nourishment could be conducted during the project life. A nourishment is a second or additional placement of sand on a restored beach. It involves the same type of construction activities as the initial restoration project, however it does not require the establishment of an ECL. The nourishment would require new authorization and funding agreements between the Town and the County at least before being initiated. Public input would help determine exactly what would be done and where. It is expected that post construction activities similar to those listed above, would be required following the nourishment.

Where can I see the permit documents?

This website has links to all the Florida Department of Environmental Protection permit information for the project....

http://bcs.dep.state.fl.us/env-prmt/lee/issued/0173059_Estero_Island_Lovers_Key_Beach_Restoration_Project/