

**INDIAN RIVER COUNTY, FLORIDA
MEMORANDUM**

TO: Jason E. Brown, County Administrator

THROUGH: Richard B. Szyrka, P.E., Public Works Director

FROM: Eric Charest, Natural Resources Manager

SUBJECT: Sector 7 Beach and Dune Restoration Project Easement Status
and Project Options

DATE: June 23, 2021

DESCRIPTION AND CONDITIONS

Since 2018, County staff and project consultants have been actively working at designing, monitoring and permitting the Sector 7 Beach and Dune Restoration Project, as well as obtaining the easements necessary for the project to be deemed viable, cost effective, and constructible. Staff had previously presented information to the Board of County Commissioners (BCC) regarding the need for high percentages of signed easements for a successful project. At the July 14, 2020 regularly scheduled County Commission meeting, the BCC concurred with staff that a 90% or greater number of signed easements would be targeted as the goal in order for the Sector 7 Beach and Dune Restoration Project to move forward with construction.

This information has been disseminated through targeted mass mailings, BCC Commission meetings, Beach and Shore Preservation Advisory Committee special call and routine meetings, e-mails, phone calls, newspapers and webinars. Local Homeowner/Condo Associations groups, Civic groups and Nature Conservancy groups have also been instrumental in reaching out to the targeted property owners with regards to the County's requests for easements.

To date, the success of the efforts above can be seen in the number of easements the County has received, reviewed and recorded (presented below).

SECTOR 7 (82 Properties Total)

	As of September 22, 2020 BCC Meeting		Current as of June 23, 2021		Linear Feet (approx. 10,740)	% of project
	#	%	#	%		
Properties						
Granted Easements	41	50%	51	62%	6,225	58%
Signed Easements Under Review Recording (In-Process)	10	12%	8	10%	1,151	11%
Denied Easement – No Sand	5	6%	14	17%	1,880	17%
Pending Responses	26	32%	9	11%	1,484	14%

Timelines necessary for the successful completion of the Sector 7 Beach and Dune Restoration Project require that pre-construction monitoring activities commence over the summer 2021, with on-beach construction activities beginning on or about November 1, 2021.

SECTOR 7 BEACH AND DUNE RESTORATION PROJECT HISTORY

The Sector 7 Beach and Dune Restoration Project had previously gone out to bid on July 26, 2020, with the bid opening taking place on September 9, 2020. Two (2) responsive bids were received for Sector 7 project. Funding was available between the Beach Restoration Fund, FEMA Project Worksheets, a Local Government Funding Request (LGFR) Grant issued by the Florida Department of Environmental Protection (FDEP) and insurance proceeds to cover the costs associated with the Sector 7 Beach and Dune Restoration Project. However, prior to award of bid at a September 22, 2020 BCC meeting, it was determined that an insufficient number of easements had been obtained to allow for a viable, constructible project. Staff at that meeting had obtained direction from the BCC to not move forward with the award of bid, but rather to put the construction project on hold while continue seeking the remaining easements necessary to demonstrate a constructible project for the 2021/2022 construction timeframe. Staff was also directed to make requests for extensions to the funding sources (FEMA and the FDEP).

It is important to note that prior to the Sector 7 Beach and Dune Restoration project being put on hold, the County had spent more than \$600,000 on the design, permitting and pre-construction monitoring that is required of a project of this magnitude, in addition to countless staff hours. County staff had also arranged to rent property in the immediate vicinity of the Sector 7 project area to be used as a means for ingress and egress for nourishment related activities on the beach. This property has since been sold and the agreement is no longer in place. The closest public access to the Sector 7 project area is approximately 1.8 miles to the south (Round Island Beach Park) which may require that off-road dumps travel seaward of the mean high-water line from Round Island to the project area in order to deliver sand.

SECTOR 7 BEACH AND DUNE RESTORATION PROJECT EASEMENT STATUS UPDATE

As of June 23, 2021, of the targeted eighty-two (82) easements within the Sector 7 project area, fifty-one (51) easements representing 62% of the Sector 7 easements have been received by the County, verified for proper execution and recorded. An additional eight (8) easements representing 10% of the Sector 7 easements are in process of review/recording. Fourteen (14) properties within the Sector 7 project area have denied the easement request outright, and will therefore not be receiving sand. These denials represent 17% of the total easements being sought. Nine (9) properties representing 11% of the easements within the Sector 7 project area have not officially responded following multiple requests for easements by the County and others. At this late date, these nine (9) properties are considered as denials for the purposes of this agenda item.

SECTOR 7 (82 Properties Total as of June 23, 2021)

Properties	#	%	Targeted %
Granted Easements	51	62%	90%
Signed Easements Under Review/ Recording (In-Process)	8	10%	
Denied Easement – No Sand	14	17%	
Pending Responses (considered denials)	9	11%	

In the near future, the County is faced with the need to begin an additional round of pre-construction monitoring in order to assess current field conditions prior to the 2021/2022 construction window. These monitoring efforts are anticipated to cost more than \$200,000.00 and will potentially require modifications to the permitted fill templates which need to be completed in advance of on-beach nourishment activities. Many of these monitoring efforts are a duplication of tasks completed last year prior to the project being put on hold due to the lack of easements obtained.

As stated above, County staff has been unable to obtain ingress-egress access to Sector 7 beaches as there is no public access suitable for the beach restoration project.

SECTOR 7 FEEDER BEACH DESIGN

The Sector 7 Project has been designed to place an estimated 294,496 CY of beach compatible sand along 2.2 miles of the project area. This project is designed to maximize the fill volume while avoiding adverse impacts to nearshore hardbottom.

Within the limits of the project area, the nearshore hardbottom is not uniformly distributed. The nearshore hardbottom is further from the shoreline near the northern limits of the project site as compared to the southern limits of the project site. Because of this, the project is designed for significantly more sand to be placed along the northern portion of the project where conditions permit, with reduced amounts placed in the southern portion to not impact the nearshore resources. This northern portion of project may only make up approximately 24% of the linear feet of the project (approximately 0.5 miles), but makes up approximately 43% (approximately 130,000 CY) of the total volume of sand for the entire project.

The benefit of this “feeder beach” design is to nourish the southern portion of the project through natural long-shore north to south sand movement. The additional sand placed along the northern limits of the project site will move along the shoreline to the south to “nourish” the southern portion of the project site where nearshore hardbottom limits the volume of sand that can be placed. This is expected to maximize the benefit of the project by lengthening the design life of the project.

Of the easements required within this estimated 0.5 mile stretch of “feeder beach” (17 properties) as of June 23, 2021, the County has received signed easements from properties making up 0.1 miles of the feeder beach (4 properties), with approximately 0.2 miles of beachfront declining the easements (8 properties), 0.02 miles of beachfront property undergoing internal review for proper execution of easement agreement (1 property) and another estimated 0.18 miles of property owners not committing to granting or denying the project (4 properties). Failure to receive a signed easement from the property owners does not allow the County the ability to construct a beach on those properties. Based on the above, approximately 0.4 miles of the 0.5 miles of “feeder beach” will not receive 43% (130,000 CY) of

the 294,496 CY of sand estimated for the 2.2 miles of project area.

FUNDING

Funding for the Sector 7 Beach and Dune Restoration Project was included in the FY 20/21 budget in the amount of \$9,900,000.00.

Partial funding for the Sector 7 Beach and Dune Restoration Project is made available through FEMA funding as shown in the table below. Additionally, insurance proceeds and FDEP Local Governmental Funding Requests (LGFR) grants are also made available for this project.

SECTOR 7

FEMA Hurricane Matthew	\$1,725,896.18
FEMA Hurricane Irma	\$382,033.74
FEMA Hurricane Dorian	\$2,145,296.13
FDEP Grants	19IR2 \$307,538.00
Insurance Proceeds	\$1,372,843.91
Total Funding	\$5,933,607.96

Account Name	Account Number	Budgeted Amount
Sector 7 Beach and Dune Restoration Fund	12814472-066512-17001	\$9,900,000.00

AVAILABLE OPTIONS

As the current percentage of executed easements for the Sector 7 Beach and Dune Restoration Project is below the targeted amount of 90%, with the current executed easements representing 62% of the necessary project easements, staff is seeking guidance from the BCC as to how to proceed with the Sector 7 Beach and Dune Restoration Project knowing that required pre-construction monitoring related expenses in the amount of \$200,000.00 are anticipated to be incurred over the summer, well in advance of any on-beach related construction activity beginning on or after November 1, 2021.

The following options are available:

Option 1: While seeking the remaining easements necessary for a viable project, perform pre-construction monitoring in accordance with permit conditions and adjust permit templates accordingly. Prepare bid documents and advertise in July, with a bid opening in September. Prior to award of bid, come back to the BCC to reassess the number of easements obtained in order to determine constructability of the project. It is estimated that this approach could cost in excess of \$200,000.00 and still may not yield a constructible project based on lack of easements. However, at this time the County has no viable access to the Sector 7 beach which will make the project more expensive.

Option 2: Move forward with pre-construction monitoring and related construction activities utilizing a modified fill template on the properties that do not have a recorded easement agreement in place. This approach allows for placement of beach compatible material seaward of the Erosion Control Line (ECL) on state sovereign submerged lands and does not require upland property owner permission. This will significantly reduce the amount

of storm protection offered in the original design of the project, and also significantly reduces the amount of material needed for construction (reduces quantity of material by approximately 35% project wide). The reduction in sand is not expected to be realized as a reduction in the cost of the project, as logistically constructing a beach under these conditions will require significant additional efforts to avoid any activities taking place landward of the ECL on those properties without an easement. In an area such as Sector 7 with narrow, Critically Eroded Beaches, constructing a beach under those restrictions poses significant difficulties in construction activities and may even result in the project being deemed as not buildable from a construction standpoint. Additionally, by adding sand at the ECL and seaward, this could create an irregularly shaped berm system which may lead to adverse impacts to those oceanfront homeowners. Furthermore, by not constructing the design template, the County could potentially be jeopardizing FDEP and FEMA funding sources. Please also be aware, that at this time, the County has no viable access to the Sector 7 beach which will make the project more expensive.

- Option 3: Determine the project to not be constructible in the FY 2021/2022 construction window and do not pursue pre-construction monitoring at this time. As the permits for the Sector 7 Beach and Dune Restoration Project are valid for 15 years, staff can once again seek extensions on the funding currently available (FDEP LGFR Grant and FEMA funds) and potentially pursue construction in the 2022/2023 construction window. However, as the project seems to be at an impasse based on lack of stakeholder support, it is possible that FDEP and FEMA could withdraw available funding for this project. Additionally, staff will continue to try and solve the beach access issue as the County has no viable access to the Sector 7 beach.
- Option 4: Determine the project to not be constructible at all based on lack of stakeholder support in executing the easement agreements and beach access not being available. This approach would require that both FEMA funding and the FDEP Grant funds be surrendered by the County, and any future projects that may be sought would be subject to being funded solely by the County should no additional funding sources be found.

On June 21, 2021, a presentation of the status of the Sector 7 Beach and Dune Restoration project was made by the Coastal Division to the Beach and Shores Preservation Advisory Committee (BSPAC). After lengthy discussion, the BSPAC unanimously backed Option 3 as their recommendation to the Board of County Commissioners.

RECOMMENDATION

Staff recommends Option 3 to the Board. While staff is of the opinion that the easement issue is at an impasse, staff will continue to reach out to property owners to obtain easements. Staff will also reach out to the FDEP, LGFR Grant staff, and FEMA to inquire about extending the funding for an additional year. Staff also requests the Board authorize staff to investigate the purchase of property within Sector 7 for beach access to enhance our funding options for future Sector 7 beach nourishment projects. Additionally, staff has been unable to locate property that could be used for construction access to the Sector 7 beach, thereby substantially increasing the cost for the project even if easements are obtained.

APPROVED AGENDA ITEM FOR JULY 6, 2021