

EXECUTIVE SUMMARY

Recommendation to approve an Emergency Truck Haul beach renourishment for a portion of the Vanderbilt and Naples beaches; approve a six year design and permitting plan for the FY2013/14 Vanderbilt, Park Shore and Naples beach renourishment; and direct the County Manager or designee to review the scope of the Marco Island beach renourishment and discuss options with the Coastal Advisory Committee (CAC), Tourist Development Council (TDC) and Marco Island with respect to a commensurate level of renourishment consistent with County wide funding reductions.

OBJECTIVE: A limited emergency truck haul beach renourishment project is being planned for severely eroded portions of the Vanderbilt and Naples beaches. Staff is seeking concurrence and a recommendation to move forward with this emergency renourishment.

A six year design and permitting plan has been developed for the next major beach renourishment of the Vanderbilt, Park Shore and Naples beaches. Approval of the design and permitting plan is the next step in project development; is the critical path in project implementation and balances the project scope with the funds available. Staff is seeking concurrence and a recommendation to move forward with this six year design and permitting plan.

Staff is also recommending that the Marco Island beach renourishment planned for December 2012 be reviewed and options presented back to the Board of County Commissioners (BCC) in the immediate future that balance the level of renourishment with funding reductions associated with the recent Federal Emergency Management Agency (FEMA) \$11,200,000 de-obligation.

CONSIDERATIONS: The BCC directed staff in the 2011 joint Collier County and City of Naples workshop to maximize the interval between major beach renourishments. Funding however, is currently only available for a six year beach renourishment design that duplicates the FY 2005/06 renourishment.

This project is being scope managed and will consist of the following components:

1. Perform Emergency Truck Haul beach renourishments on the Vanderbilt and Naples Beaches for an estimated cost of \$650,000. The area covered would be from the La Playa (R26) to just north of the Ritz (R30) approximately 4,000 linear feet (LF) on Vanderbilt Beach and in Naples from Lowdermilk Park (R61) to the Naples Golf and Beach Club (R63.5) or 2,500 LF of beach. The beach will be elevated to the top of the scarp at the vegetation line. The beaches will be higher (1-2 feet) at the vegetation line and extend the entire width of the beach to the Mean High Water (MHW) line. The beaches cannot be made wider. The sand must have a turtle friendly slope (1:4) so the renourishment at both locations will be very limited. Preliminary estimates are 12,000 cubic yards (CY's) at Vanderbilt and 12,000 CY's at Naples. Since sand is not placed in the water, a United States Army Corps of Engineers (USACE) permit is not required and an emergency renourishment can be authorized by the Florida Department of Environmental Protection (FDEP). If this work begins in November,

both locations can be completed by the first of the year (see attached map). An Emergency Declaration will need to be approved by the BCC declaring a State of Emergency and authorizing emergency repairs to these beaches.

2. Execute a modified 2005/2006 six year design by placing approximately 420,000 CY's of sand on the Vanderbilt, Park Shore and Naples beaches for an estimated cost between \$15,000,000 and \$17,500,000. This would continue the overall six year design life and renourish the beach hot spots to an extent to achieve a true six year life. This design will utilize renourishment gaps in the beach where no renourishment is needed to achieve a six year design life. The design does not address renourishment at Clam Pass Beach Park or Barefoot Beach. Additionally, it does not remove groins at Park Shore or address the need for a jetty spur south of Doctors Pass. The gaps in renourishment will be in Vanderbilt Beach between R22+300 to R25+500; in Park Shore from R47+500 to R50 and on Naples Beach from R64+500 to R68+200 and R72+600 to R79 (see attached map). Although the design and permitting will be for a six year project, the project will continue to be scope managed at contract award if available funding is not sufficient to execute the project.

Execution of a six year design will also result in a reduction of engineering, design and permitting costs. Once developed a change order will be processed reducing the engineering scope of work and costs.

Savings on the project cost could be expected if this project is combined with similar projects from the Captiva Erosion Control District and/or the City of Longboat Key to share mobilization costs and take advantage of economies of scale. The economies of scale are significant as well as early bidding before contractors have committed their production capacity to other projects. It is anticipated that the construction cost for this project will be between \$15,000,000 and \$17,500,000 with mobilization and economy of scale savings. The project will be scaled to accommodate the available budget prior to contract approval.

The Fish and Wildlife Service (FWS) through the United States Army Corps of Engineers (USACE) has directed that a Biological Opinion (BO) for Piping Plovers will be required before any federal permit will be issued. This will prohibit renourishment taking place sooner than September 15, 2013. The Florida Department of Environmental Protection (FDEP) permit will be issued in time sufficient to support this schedule.

Renourishment is currently planned to occur on the shoulders of turtle nesting season. Renourishment is planned to begin on September 15, 2013 instead of November 1, 2013 and ending on June 1, 2014 instead of May 1, 2014. Staff believes that this schedule will provide significant contractor flexibility in executing and pricing this project. Prior to award, staff will present schedule options, pricing and recommendations to the BCC for decision making. Although the Conservancy does not support renourishment during turtle nesting season, it also will not object to this renourishment schedule.

3. Execute a review of the Marco Island beach renourishment and erosion control structures rebuild to assure that expenditures are consistent with funding level reductions for beaches/inlets throughout the County. This work is currently planned for December 2012

and consists of the rebuilding of five erosion control structures and placement of up to 104,000 CY's of sand to renourish the southernmost portion of the main Marco Island Beach for normal and storm induced erosion through TS Debbie. The renourishment incorporated a 10 year beach design scope of work. Potential savings could be as much as \$200,000 depending on approved scope.

FISCAL IMPACT: Funding for this project will be from Tourist Development Tax Category A funding within Tourist Development Council (TDC) Beach Renourishment Fund 195. A Fund (195) pro-forma budget analysis has been prepared and is attached for reference.

The estimated construction costs for the three renourishment projects under consideration can be summarized as follows:

Project Description	Project Range
TDC Beach Renourish (195)	
Collier Beach Renourishment	\$15,000,000 to \$17,500,000
MI Beach Renourishment	\$3,000,000
Emergency Truck Haul	\$650,000
Total Projects	\$18,650,000 to \$21,150,000

The final contract values of the projects under consideration and other matters need to be finalized before the funding picture is complete. The status of the following items is being evaluated and will be presented to the BCC prior to contract approval:

- Final scope review of Marco Island beach renourishment (potential cost reduction)
- Project savings from shared mobilization and economies of scale (potential cost reduction)
- FDEP Cost Share opportunities (potential funding source)
- Potential Federal Emergency Management Agency (FEMA) funding from TS Fay; TS Debbie and potentially TS Isaac (potential funding source)
- Restore Act funding (potential funding source)
- Reversal or negotiated settlement of the de-obligated \$11,200,000 (making additional funds available)
- Negotiated settlement of FDEP cost share overlap reimbursement (making additional funds available)

GROWTH MANAGEMENT IMPACT: There is no impact to the Growth Management Plan related to this action.

ADVISORY COMMITTEE RECOMMENDATIONS: At the September 13, 2012 Coastal Advisory Committee (CAC) meeting, the six year design and permitting plan along with the emergency truck haul was approved by an 8 to 1 vote.

LEGAL CONSIDERATIONS: This item has been reviewed by the County Attorney's Office, requires majority vote, and is legally sufficient for Board action. – CMG

RECOMMENDATION: Recommendation to approve the Emergency Truck Haul project; the six year design and permitting plan for the Vanderbilt, Park Shore and Naples beaches and direct the County Manager or designee to review the scope of the Marco Island Beach renourishment project and return to the Board with specific recommendations consistent with funding constraints.

Prepared by: J. Gary McAlpin, P.E., Coastal Zone Management, Natural Resources Department

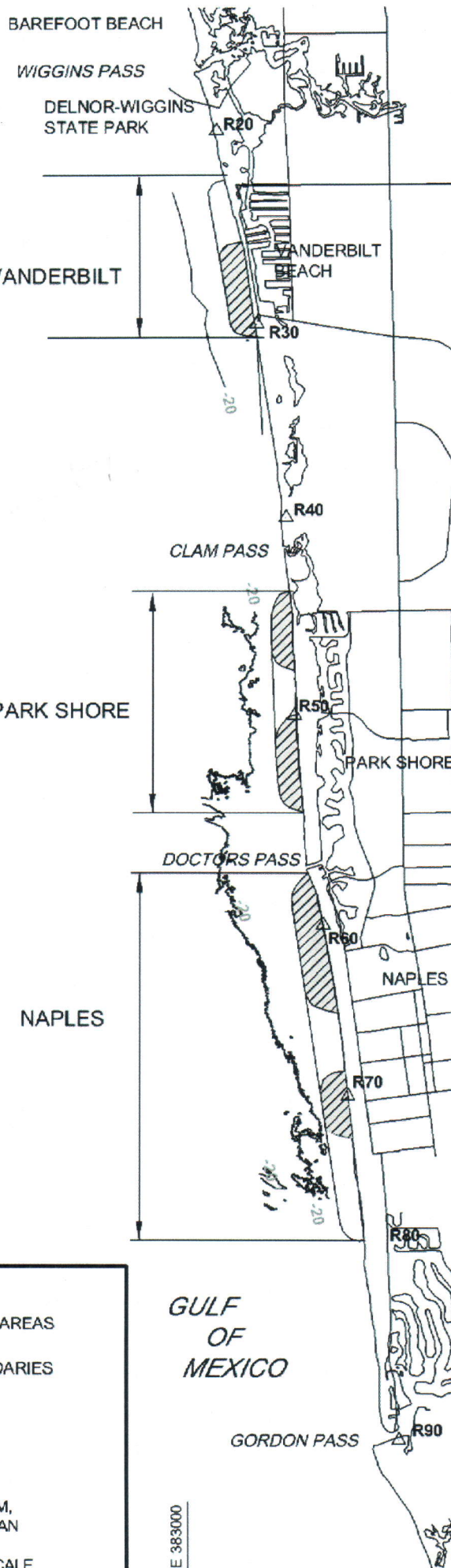
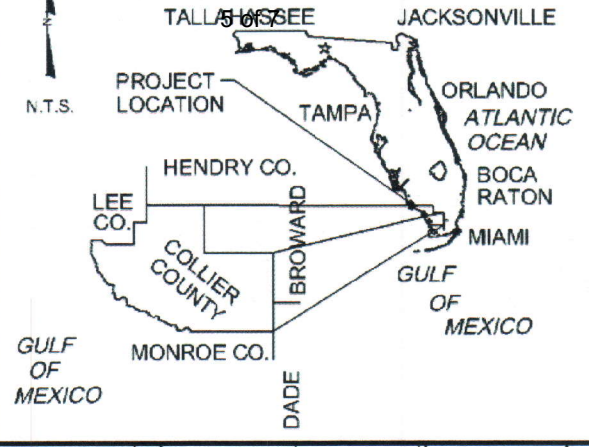
Attachments:

1. Map identifying the planned six year renourishment for the Vanderbilt, Park Shore and Naples Beaches.
2. Fund 195 budget pro-forma.
3. Emergency Truck Haul Renourishment Map.

Attachment #1

September 24, 2012

New Business 7-c



E 383000

N 700000

N 680000

N 660000

E 403000




N 680000

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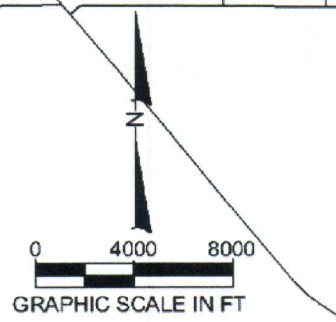
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LEGEND:

-  2013 PROPOSED FILL AREAS
-  2013 PROJECT BOUNDARIES
-  FDEP MONUMENTS

NOTES:

1. COORDINATES ARE IN FEET BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83).
2. FILL WIDTHS ARE NOT TO SCALE.



TDC Beach Renourishment Capital Fund (195)

Pro-forma analysis

Assumes set aside of de-obligated FEMA funds, a \$2M DEP reimbursement set aside, the addition of a \$650,000 truck haul renourishment in FY 13 and a Renourishment funding scope of \$15,000,000.

9/12/2012

TDC Beach Renourish 195 Capital			FY 2013	FY 2013	FY 2014	FY 2015
Line	Project No.	Description	Budget	Pro Forma	Pro Forma	Pro Forma
1		Expenditures				
2	70004	Doctor's Pass Dredging	-	-	-	800,000
3	80096	Collier Beach Design & Construction	490,000	490,000	15,000,000	-
4	80166	Marco Renourish Design	100,000	100,000	-	-
5	80171	Beach Tilling	15,000	15,000	40,000	40,000
6	80203	Laser Grade Marco	35,000	35,000	-	35,000
7	80210	Wiggins Pass Channel	1,700,000	1,700,000	-	-
8	80211	MI Beach Renourishment	3,000,000	3,000,000	-	-
9	88030	North Truck Haul Renourishment	-	650,000	-	-
10	90020	TDC Beach Project Admin-FEMA Recovery	-	100,000	-	-
11	90033	Biological Monitoring	-	-	-	125,000
12	90044	Vegatation Repairs-Exotic Removal	75,000	75,000	75,000	75,000
13	90060	Clam Pass Ebb Tide Study	-	-	-	450,000
14	90096	Naples Pier Maintenance	80,000	80,000	82,400	84,900
15	90522	Wiggins Pass Dredging -Channel Engineering	-	-	-	50,000
16	90527	Beach Cleaning-Naples	76,900	76,900	79,200	81,600
17	90533	Beach Cleaning-County/Marco	109,600	109,600	112,900	116,300
18	90536	City/County Monitoring	200,000	200,000	206,000	212,200
19		Sub Total Projects	5,881,500	6,631,500	15,595,500	2,070,000
20		Reserves for Contingency	-	-	-	-
21		Cap-Reserve for Catastrophe	5,500,000	-	-	500,000
22		Cap-Reserve for Pier	79,000	-	-	-
23		Cap-Reserves for Future Beach renourishment	14,000,000	-	-	1,234,900
24		Cap-Reserve Unrestricted	225,800	-	-	-
25		Reserves-DEP	4,900,000	2,000,000	-	-
26		Reserv-FEMA De-obligation	-	11,200,000	-	-
27		Sub Total Reserves (99195)	25,400,600	13,200,000	-	1,734,900
28		Trans to 001 Beach Turtle Monitoring	160,000	160,000	163,200	166,500
29		Trans to 184 Interest Redirection	150,000	150,000	150,000	25,000
30		Trans to 185 Project Management & Admin	647,100	647,100	647,100	647,100
31		Trans to 710 Grant Related	-	-	-	-
32		Trans Tax Coll Revenue Collection Expense	120,200	124,700	124,700	124,700
33		Sub Total Transfers	1,077,300	1,081,800	1,085,000	963,300
34		Fund Total-Expenditures	32,359,400	20,913,300	16,680,500	4,768,200
35						
36		Revenues				
37		TDC Revenue (2/3 Category A)	4,809,000	4,988,300	4,988,300	4,988,300
38		Reimbursements General	-	-	-	-
39		Reimb FDEP for MI Renourishment	1,000,000	1,000,000	-	-
40		Restore Act Funds	-	-	TBD	-
41		DEP Cost Share	-	-	TBD	-
42		Interest	150,000	150,000	150,000	25,000
43		Carry Forward	26,698,300	26,877,600	11,804,700	5,600
44		5% Rev. Reserve	(297,900)	(297,900)	(256,900)	(250,700)
45		Fund Total-Revenues	32,359,400	32,718,000	16,686,100	4,768,200
46						
47		Fund Balance/Carry Forward	-	11,804,700	5,600	-

