

City Council Chambers
735 Eighth Street South
Naples, Florida 33940



City of Naples

-SUBJECT-

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PRESENTATION OF STUDY AND REPORT TO BEACH RENOURISHMENT AD HOC COMMITTEE BY
MICHAEL STEPHEN, COASTAL ENGINEERING CONSULTANTS, INC.

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Commissioner Saunders asked the cost of pumping sand from two miles off the coast and Mr. Humiston estimated \$3.00 per cubic yard, based on the borrow area location. In response to Councilwoman Anderson-McDonald, Mr. Humiston advised that additional equipment would be needed to pump sand farther than two miles from shore, thereby increasing the cost per cubic yard. If the sand were imported by land from Bonita Springs, he said, it could cost as much as \$10.00 per cubic yard.

Commissioner Hasse referred to the Committee's study and asked if they had checked areas between the borings which were 3,000 feet apart. Mr. Humiston advised that any sand deposits found between the 3,000 foot points would not be of significant size to help the renourishment effort.

Mr. John Reynolds, Marco Island resident, referred to the largest sand deposit found by the Committee and asked why the entire deposit could not be used. Mr. Humiston, however, explained that because of a limestone rock layer in that deposit, only the top few feet were usable.

Mr. Humiston then presented a slide show delineating various impacts coastal structures and heavy storms have had upon area beaches. In aerial photographs, he pointed out the natural transportation and settling of sand by wave action. Several slides showing the affects that seawalls have on wave reflection and increased erosion were also presented. Many groins and other coastal structures, he said, with the exception of the Pier, help build up sand to the north of the structure; however, the beach to the south of such structures is virtually starved.

Mr. John Reynolds referred to the natural sand bar created off the coast of Tigertail Beach and said that he did not believe it should be used as a borrow site. Mr. Humiston assured him that the Committee had no intention of using that area because it found that the sand bar actually renourishes that particular Marco Island beach. Instead, he said, there is a small shoal area due west of Coconut Island which is being considered.

Mayor Putzell asked about proposed borrow areas in various passes to which Mr. Humiston stated that the Committee was only interested in environmentally attractive areas and ones which would not change the natural flow of the area. He also pointed out that the borrow areas must be approved by the Corps of Engineers before the permit process could begin.

In response to Mayor Putzell, Mr. Humiston indicated that State funding for this project could be as high as 75%. Preliminary estimates for the two projects, he said, are \$3.5-million for Vanderbilt, \$11-million for Park Shore/Naples. Mr. Crawford asked how much money the City/County would have to put in trust before such a project would be considered by the State; Mr. Humiston said that no set amount has as yet been established by the State. In response to Councilman Richardson, Mr. Humiston advised that he did not have with him the cost estimates for the project's preliminary design and implementation.

CITY OF NAPLES, FLORIDA

City Council Minutes

Date 12/09/87

COUNCIL MEMBERS	MOTION	S E C O N D	VOTE		A B S E N T
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Commissioner Hasse asked what the life expectancy of such a renourishment effort would be and Mr. Humiston estimated 75 years; however, if a major hurricane severely eroded the beaches, he said he would then recommend another renourishment effort. Mr. Bledsoe asked how much sand could be pumped from the various deposits. Mr. Humiston responded that there are hundreds of yards of sand in the gulf which could be used for this project.

In response to Commission Chairman Glass, Mr. Humiston noted that currently there is a renourishment effort in Pinellas County and engineers there are using a new technology wherein off-shore structures are placed in the water to weaken wave action thereby reducing erosion. Mr. Hasse asked if such structures could be placed in lieu of renourishing the beaches to build up the coastline; Mr. Humiston explained that such structures only maintain the sand which is already on the beach and are not for renourishment purposes.

Mayor Putzell referred to the slide presentation and the affect of coastal structures on erosion of such structures as timber groins. He asked if it would help the project if those structures were removed. Mr. Humiston, however, pointed out that because the renourishment project would virtually bury those structures, removal would not then be necessary.

In response to Mr. Graver, Mr. Humiston, however, explained that State funding for these projects was not currently available, but if the City and County authorized the detailing of sand information and preliminary design, the State permit approval process could begin taking approximately 12 months to complete. Mayor Putzell asked how much it could cost before the State would allocate funds for the project. Mr. Humiston, however, said that his Committee had not yet compiled those costs and noted the cost schedule from the Executive Summary (a copy of which can be reviewed from the meeting packet in the City Clerk's office). Mr. Humiston further pointed out that this presentation was only the Committee's preliminary findings and, further, the final report would be ready for review by the Council and Commission in the very near future.

Mr. Arthur Cooper, Marco Island resident, said that he believed that off-shore sand bars were depriving the beaches of much needed renourishment, but Mr. Humiston pointed out that natural sand bars tend to break apart and actually in time renourish the beaches.

Mr. George Keller, Collier County resident, asked if one major storm could completely destroy the renourishment effort. Mr. Humiston said that he did not believe so. In response to another member of the audience, Mr. Humiston advised that it was the Committee's objective to save as many coconut palm trees on the beaches as possible and, perhaps, even replace some which have been lost.

Referring to a renourishment project in Miami which is approximately 10 years old, Natural Resources Manager Staiger said that this was the first year

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City Council Minutes

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that "spot" renourishment was needed. Mr. Humiston pointed out that Miami Beach also had stronger wave actions.

Mayor Putzell asked for Commissioners' responses to the report. Mr. Hasse first confirmed for Marco Island residents that the Commission was currently studying the feasibility of including it in the County renourishment program; however, Vanderbilt Beach was considered first priority due to the heavy erosion. Mr. Glass said that he believed the Commission must first compile a realistic financial analysis of the project before authorizing approval and Mr. Saunders commented that the Commission must find a mechanism to fund this project, but added that private citizens must also contribute. Coastline hotels, for example, would benefit from an increased shoreline and could contribute to the project. Mayor Putzell said that the City would participate and contribute to the County's renourishment program in any way possible; Mr. Saunders pointed out that it was incumbent upon the City and County to work together to come up with appropriate funding for the project.

Mr. Harry Huber, Collier County Assistant Public Works Director, reiterated that this was only a preliminary finding and that the main objective would be to adopt a long-term beach management plan for both City and County. In response to Mr. Graver, Mr. Huber confirmed that the project could be done separately by the City or in phases. Mr. Richardson pointed out that a portion of this project would be added to the County's current Capital Improvement Program which has a shortfall of approximately \$70-million. He said that some steps should be taken to prioritize the projects and not authorize approval until all cost estimates have been completed.

Mr. Tom Kalbfus, Marco Island Tax Payer Association, asked if Marco Island would be taxed for the Vanderbilt Beach renourishment effort and expressed concern regarding possible double taxation. Mr. Saunders assured him that in no way would those residents be doubly taxed.

ADJOURN: 10:12 a.m.

EDWIN J. PUTZELL, JR., Mayor

JANET CASON
CITY CLERK

JODIE M. O'DRISCOLL
DEPUTY CLERK

These minutes of the Naples City Council were approved on _____.