

## **Resolution 11-145**

**A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF MANATEE COUNTY, FLORIDA, AUTHORIZING THE NATURAL RESOURCES DEPARTMENT TO FILE A LONG-RANGE BEACH EROSION CONTROL BUDGET PLAN WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; SUPPORTING THE PROJECTS FOR WHICH FUNDING IS REQUESTED; CONFIRMING MANATEE COUNTY'S ABILITY TO SERVE AS LOCAL SPONSOR FOR PROJECTS AND THE COUNTY'S ABILITY TO FUND THE APPROPRIATE LOCAL SHARE OF PROJECTS; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, Public Works projects and studies relating to beach erosion control, beach preservation, marine environmental protection, and hurricane protection are eligible for state funding consideration under the provisions of Chapter 161, Florida Statutes; and

**WHEREAS**, in order to qualify for State of Florida beach project funding, current State of Florida policy requires submission of a long-range beach erosion control plan by the local government entity which coordinates a county's beach erosion control program; and

**WHEREAS**, beach erosion control projects in Segment II (along the Gulf coast of Anna Maria Island, encompassing the cities of Anna Maria, Holmes Beach, and Bradenton Beach) have been and are planned to be conducted by Manatee County as local project sponsor, with subsequent reimbursement of the federal and state shares of the eligible costs; and

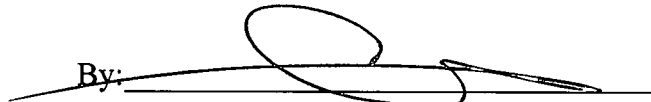
**WHEREAS**, the Board of County Commissioners of Manatee County has determined that it is in the best interest of Manatee County to pursue all available funding in order to restore and maintain the beaches of Manatee County;

**NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MANATEE COUNTY, FLORIDA:**

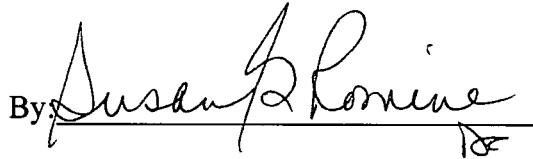
- Section 1. The Manatee County Natural Resources Department is authorized and directed to file a long-range beach erosion control plan with the Florida Department of Environmental Protection.
- Section 2. The Manatee County Board of County Commissioners supports beach erosion control projects for which funding is requested from the State of Florida.
- Section 3. Manatee County is able to serve as local sponsor for such projects and is able to provide the appropriate local funding share to implement beach erosion control projects.
- Section 4. This Resolution shall become effective upon adoption.

**ADOPTED** by the Board of County Commissioners of Manatee County, Florida, with a quorum present and voting, this 21<sup>st</sup> day of June, 2011.

BOARD OF COUNTY COMMISSIONERS  
MANATEE COUNTY, FLORIDA

By:   
Carol Whitmore, Chairman

ATTEST: R. B. Shore  
Clerk of the Circuit Court

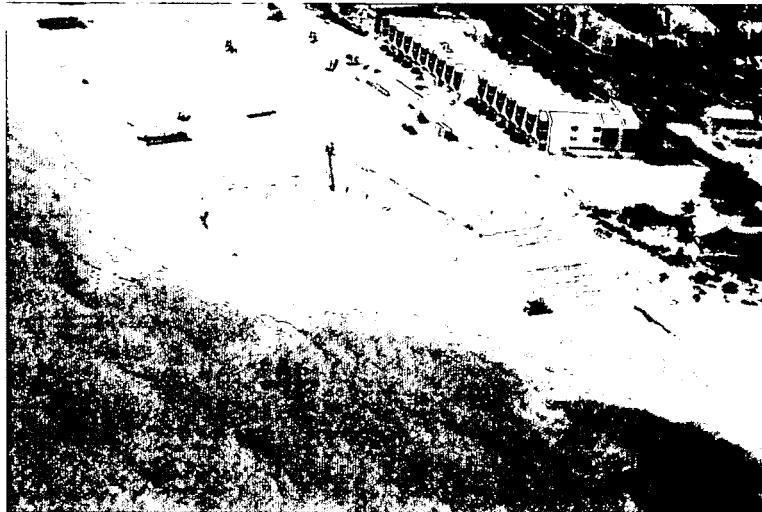
By:   
Susan P. Romine





**Manatee County  
Anna Maria Island Shore Protection Program**

**Fiscal Year 2011-2012  
Local Government Funding Request**



Submitted By:  
Manatee County  
Natural Resources Department  
415 10th Street West  
Bradenton, FL 34205

Submitted to:  
Florida Department of Environmental Protection  
Bureau of Beaches and Coastal Systems  
Tallahassee, FL 32399

August 5, 2010

**MANATEE COUNTY  
FISCAL YEAR 2011-2012 LOCAL GOVERNMENT FUNDING REQUEST**

**Project Name:** Anna Maria Island Shore Protection Program

**Project Description:** The Anna Maria Island shoreline extends between Florida Department of Environmental Protection (FDEP) monument R-1 (at the north end of the island) and R-41 (at the south end of the island), within Manatee County. The federally-funded project area extends between R-12 and R-36 and was last renourished in 2002/2003, with another 213,000 cubic yards added in 2005/2006 to replace sediment lost due to 2004 hurricane activity. The congressionally authorized project (R-12 through R-36) is scheduled for renourishment in 2014/2015. The shoreline between R-7 and R-10 is not included in the Federal project area but has been previously nourished by Manatee County. The shoreline between R-10 and R-12 has not previously been included in the Anna Maria Island beach nourishment projects due to the past inability to obtain construction easements from upland property owners along this section of shoreline. A Feasibility Study was developed for the shoreline between R-1 and R-7 (the North Study Area) and the shoreline between R-36 and R-41 (the South Study Area) and submitted to the Department of Environmental Protection in January 2007. The 2009 annual monitoring survey of the Anna Maria Island was conducted in October 2009.

The initial construction of the Coquina Beach, Beach Nourishment Project (R-35+790 through R-41+365) and the City of Anna Maria Island Beach Renourishment Project (R-7 through R-10) are presently scheduled for construction in 2010/2011. Manatee County has identified a borrow area located offshore of the north end of Anna Maria Island. The proposed Coquina Beach project area incorporates a 600 foot gap in the beach nourishment project between R-37+250 and R-38. Between these monuments, beach compatible sediment will be mechanically placed above the MHW line only. The estimated volume to be placed within the Coquina Beach project area is approximately 169,000 cubic yards based on analysis of 2008 beach monitoring data. An artificial reef will also be constructed as mitigation for nearshore hardbottom burial as a result of renourishment of the Coquina Beach segment (R-35+790 through R-41+365). The County has addressed all FDEP RAIs and received the Notice of Completeness letter dated April 1, 2010. The FDEP permit was issued on July 23, 2010.

Manatee County, in coordination with the City of Longboat Key is conducting an Inlet Management Plan Study for Longboat Pass. The primary focus of the Inlet Management Plan is to assess the existing coastal processes of Longboat Pass and vicinity. This information will be used to improve regional sediment management in order to better conserve the sediment resources of the area, and improve the efficiencies of the erosion control programs while maintaining navigation through the pass and protecting local natural resources.

Manatee County has retained Coastal Planning & Engineering, Inc. to engineer the replacement of the Manatee County Public Beach Pier. The Manatee Public Beach Pier was closed due to loose and spalling concrete falling from the underside of the pier deck. The JCP Application was submitted during a meeting held at DEP-BBCS on April 2, 2009. The RAI #1 was issued on May 1, 2009, for which a response was developed and submitted on May 17, 2010. RAI #2 was issued on June 18, 2010, for which a response was submitted on July 29, 2010. Coastal Planning and Engineering performed a survey of the Public Beach Pier Repair project area in December 2008. The survey was used to develop the design and permit application. On behalf of Manatee County, Coastal Planning and Engineering, Inc. submitted a request for a De Minimus Exemption to remove the existing pier on April 9, 2009. The De Minimus Exemption approval was issued on June 23, 2009 and was conditioned such that pier removal operations occurred outside of sea

turtle nesting season. The removal of the existing pier is complete. County approval on the scope of work was received on January 08, 2010 and work is underway on the project to design the T-section and secure approvals for construction in 2011. The issuance of the FDEP permit is anticipated for November 1, 2010. No FDEP funding is anticipated for this project.

Coastal Planning & Engineering, Inc. is the County consultant for the sand tightening of the jetty at the south end of Anna Maria Island. The FDEP's recommended action is to place a geotube along the north side of the existing jetty to evaluate the effects of sand tightening the structure. The County has concurred with this concept has included the geotube design with the JCP permit application for Coquina Beach. The final geotube permit design was submitted with the County's response to RAI #3 on December 1, 2009 and received no further comment from the FDEP. The FDEP permit was issued on July 23, 2010. Pre-construction services for the geotube construction began with development of plans and specs in the 2<sup>nd</sup> quarter of 2010. Bidding will occur within the 3<sup>rd</sup> quarter with construction planned for the 4<sup>th</sup> quarter of 2010, or the 1<sup>st</sup> quarter of 2011.

Manatee County received FDEP approval of the Port Dolphin Pipeline Corridor Geotechnical Investigation Scope of Work on January 7, 2010 and has issued the work assignment authorization. Coastal Planning and Engineering, Inc. has commenced work on this investigation. Geotechnical investigations occurred in the 2<sup>nd</sup> quarter of 2010 and the design of the borrow area is expected to be complete in the 1<sup>st</sup> quarter of 2011. As of this report, it is the intention of the County to utilize the approximately 500,000 cy available within the pipeline corridor for placement along portions of the north end of Anna Maria Island with construction occurring in late 2011 or early 2012. The sediment placement on the previously unnourished north end of Anna Maria Island will help to alleviate some of the erosion pressures along that stretch of shoreline.

Manatee County plans to replace three beach erosion control groins at Cortez beach. The groins are severely deteriorated and require replacement. The groins are intended to protect a portion of Gulf Drive which is subject to damage from erosion. The three groins will be removed and replaced with adjustable groins. The groin permeability can be adjusted through manipulation of the panels in the groins. The County anticipates replacement of the groins in late 2011. A scope of services will be provided to the FDEP for review in August, 2010.

The schedule and budget presented in this plan assumes that the shoreline between R-7 and R-10 and R-36 to R-41 (including the geotube at the Longboat Pass jetty) will be renourished and nourished (respectively) in 2010 or early 2011, and the mitigative artificial reef constructed in the same period. If this construction does not occur in 2010, it is assumed the FDEP construction funds will roll over to the FY 2011-2012 with construction occurring in 2011. Beach nourishment along the entire shoreline from R-7 to R-10 and from R-12 to R-41 is anticipated for FY 2014-2015. The following budgetary analysis includes the entire shoreline between R-1 and R-41.

**Use of Requested Program Funds:** Funds requested for FY 2011-12 will be used to support engineering and monitoring of the constructed Coquina Beach/City of Anna Maria shore protection projects, assuming construction does occur in 2010. Additionally, the requested funds will be used to support geotechnical investigations, federal coordination, permitting and design in support of the planned 2014-2015 federally-authorized (R-12 through R-36) beach renourishment construction project and the Longboat Pass Inlet Management Plan Study. The schedule and budget presented here assumes that the shoreline between R-7 and R-10 and R-36 to R-41 (including the geotube intended to "sand tighten" the north jetty at the Longboat Pass) will be constructed in 2010. If this construction does not occur, the construction funds are anticipated to roll over to FY 2011-2012.

### **Additional Ranking Criteria**

#### **Will this project enhance or increase the longevity of a previously-constructed project?**

North Project Area: Yes, the 2014/2015 renourishment will increase the longevity of the planned 2010 nourishment project (R-7 to R-10).

Central Project Area: Yes; it is a renourishment of the Congressionally authorized Central Beach Renourishment Project (R-12 through R-36)

Coquina Beach Project Area: Yes, the 2014/2015 renourishment will increase the longevity of the planned 2010 nourishment project (R-35+790 through R-41+365).

Cortez Groins: Yes, the groins will help anchor the Central project and will protect Gulf Drive from erosion damage.

#### **Will this project nourish a previously restored shoreline?**

Yes; the Central Beach Renourishment Project and the planned 2010 projects (North Project Area and the Coquina Beach Project Area).

**Rate of Erosion as determined by the Bureau based on long term data (ft/yr):**        -3 ft/yr

### **Severity of Erosion**

The shoreline between FDEP monument R-1 and R-41 in Manatee County has a “critically eroded” classification.

(<http://www.dep.state.fl.us/beaches/publications/pdf/CritEroRpt07-10.pdf>) (FDEP, 2010).

In the 30 year period from 1946 to 1977 the beaches of Anna Maria Island lost approximately 2.67 million cubic yards of sand. The majority of the losses occurred along the beaches of the City of Anna Maria at an average rate 89,000 cubic yards of sand per year. Between 1974 and 1985 several of the southern beaches along Anna Maria Island continued to erode, while the City of Anna Maria’s beaches experienced a gain of approximately 150,000 cubic yards. The number and intensity of storms impacting the island played a significant role in the erosion of the beaches. The historic erosion rate developed by the FDEP for Anna Maria Island is approximately 3 feet per year.

### **Project Benefits**

The value of recreational facilities is measured through the percentage of property zoned commercial or recreational.

The publicly owned property consists of approximately 15,700 feet (40%) of shoreline. There are four public beaches along Anna Maria Island; Anna Maria Bayfront Park, Manatee County Public Beach in Holmes Beach, Bradenton Beach, and Coquina Beach. Anna Maria Bayfront Park is located near the fishing pier at the north end of the island and overlooks Tampa Bay. Holmes Beach is located toward the middle of the island and Bradenton Beach and Coquina Beach are located at the south end of the island. Bradenton Beach and Coquina Beach have lifeguards, restrooms, showers, picnic areas with grills, shade areas, and playgrounds. The public beaches and parks do not charge an entrance fee to visitors for the use of the facilities. The beaches along Anna Maria Island are accessible to the public through approximately 112 public access points and approximately 2100 parking spaces available throughout the project area.

Single and multifamily residences, hotels, motels and restaurants comprise 34,405 feet (88%) of shoreline and provide visitors with lodgings, dining and resort accommodations. A portion of

these structures are landward of the publicly owned property. Enclosed with this document is a copy of hotel and motel licensee information along Anna Maria Island as well as a map of public access points and available public parking spaces.

**Threat to Upland Properties**

As part of the Anna Maria Island Feasibility Study, the expected value of erosion and flood damage is estimated for differing storm probabilities. Storm damage reduction benefits were calculated by computing the assessed value of the parcels seaward of the storm recession distance for the 10 year and 20 year storms (Manatee County Property Appraiser's Office, 2006).

**Storm Damage Losses Based on Storm Recession**

Shoreline Reach	Return Period (Years)	Storm Recession (ft)	Approximate Storm Damage (million \$)
Reach 1 (R-1 -125 feet to R-2)	10	195	10.4
	20	317	14.1
Reach 2 (R-2 to R-3)	10	195	0
	20	317	0
Reach 3 (R-3 to R-7)	10	195	18.9
	20	317	97.7
Reach 4 (R-36 to R-41+300 feet)	10	228	0
	20	292	0

**Reach 1 (R-1-125 feet to R-2):**

Based on storm recession calculations, 15 houses on 6.59 acres will be impacted by the 10 year design storm and 23 houses on 9.96 acres may be impacted by the 20 year design storm in Reach 1. The approximate property values of habitable structures seaward of the 10 and 20 year recession line along Reach 1 is 10.4 million dollars (assessed value) and 14.1 million dollars respectively (Manatee County Property Appraiser's Office, 2006). The habitable structures in Reach 1 were built between 1948 and 1987. In general, houses in this reach built in 1951 and earlier were constructed without piles while houses constructed after 1951, in general, have been built on piles. Approximately 350 feet of North Shore Drive centered along R-1 would also be impacted by the storm damage losses based on storm recession from the 10 and 20 year return periods.

**Reach 2 (R-2 to R-3):**

Neither the road nor the structures along Reach 2 would be impacted by the recession caused by a 10 or 20 year storm. Approximately 19.48 acres and 31.37 acres would be impacted by the 10 and 20 year storm events, respectively.

**Reach 3 (R-3 to R-7):**

For the 10 and 20 year return periods, storm surge elevations of 5.5 feet and 8.2 feet, respectively have been estimated (FDNR, 1987). During a 10-year return period, the loss of 22 properties and 19.48 acres totaling an assessed value of approximately \$18.9 million is possible. The seawalls along this stretch of shoreline range in elevation from 6.6 feet to 7.8 feet. Flooding of the seawalled properties is expected during both the 10 and 20 year storm surge events. The 66 properties and 31.37 acres along the Reach 3 shoreline, which could be lost during the 20-year storm event, have a total assessed value of \$97.7 million dollars (Manatee County Property Appraiser's Office, 2006). The principal roads along Reach 3 (North Shore Drive and Gulf Drive) would be impacted by the 10 and 20-year return period storms.

**Reach 4 (R-36 to R-41+300 feet):**

Along the southern portion of the shoreline, the structures consist of one rest area facility built approximately 100 feet landward of the vegetation line and lifeguard stations built on or slightly seaward of the vegetation line. A 10 year storm event would create a loss of 26 acres along the Reach 4 shoreline. A 20 year storm event would create a loss of 33.26 acres along the Reach 4 shoreline. The principal roads along Reach 4 would be impacted by both the 10 and the 20-year return period storms.

**Use of Innovative Applications of existing technologies**

The 1992/1993, 2002 and 2005 Beach Nourishment dredging projects were constructed with a total volume of 7.7 million cubic yards of beach compatible material using hydraulic fill placement from two separate borrow areas located offshore of the project area. It is anticipated that the same method of dredging and deposition will be used for future beach renourishment projects.

The Feasibility Study developed for the north and south ends of Anna Maria Island proposes that the use of groins for the north end of the island should be considered in greater detail to evaluate the viability of their use to assist in erosion control.

To alleviate erosion along the south end of the island at Coquina Beach, the FDEP's has recommended the placement of a geotube along the north side of the existing jetty to evaluate the effects of sand tightening the structure.

The adjustable groins will provide the County with the opportunity to control the amount of littorally-transported sediment, trapping some to control beach erosion near Gulf Drive while allowing some transport to move down-drift to the southern beaches. The groins will also provide the down-drift anchor to the Central Beach Renourishment project.

**Nourishment Interval (years)**

- Northern Project Area: 8 years
- Central Project Area: 10 years
- Coquina Beach Project Area: 3 years; however it will be incorporated into the Central Project area for initial construction.

**Project Performance**

Within the central project area (R-7 to R-36), the October 2009 shoreline had an average beach width gain of 67.6 feet compared to the pre-construction shoreline. Four of the profiles at the southern end of the project area (R-30, R-33, R-34 and R-35) had eroded past the pre-construction MHW shoreline. The MHW shoreline at R-35 has the most landward position (with a loss of 17.8 feet). The MHW shoreline at R-7 has the most seaward position (with a gain of 276.5 feet). This shoreline gain at R-7 is due to the presence of a sediment salient in this area which has somewhat dissipated and moved further south since the last beach survey. The MHW shoreline at R-18 has the second most seaward position within the project area with a total gain of about 109 feet.

Between the May 2002 (post-construction) survey and the October 2009 (monitoring) survey the project area MHW shoreline eroded 71.1 feet on average (51% loss), which is indicative of both



profile equilibration and beach erosion. This represents an average overall beach width decrease of 9.7 feet per year. On average, the October 2009 MHW shoreline is approximately 89.4 feet landward of the 2002 constructed MHW (35.8 feet landward of the design MHW). There is an area of high erosion apparent in the southern portion of the project area.

**Is this project being planned or constructed in cooperation with another Local Government? Explain.**

Local communities, the Cities of Anna Maria, Holmes Beach and Bradenton Beach, cooperate financially to defray the overall costs of the program. The 2014/2015 beach nourishment project will combine three separate project areas along Anna Maria Island in an effort to combine mobilization costs for regional savings. Manatee County also coordinates with the Town of Longboat Key on projects related to Longboat Pass. Manatee County and the Town of Longboat Key are currently coordinating in the development of an Inlet Management Study for Longboat Pass.

**Mapping - Maps are provided as attachments.**

Maps are to scale at a minimum of 1"=200'

Mapping elements include:

- Project Boundary with Critically Eroded Shoreline

**Please note that the entire Anna Maria Island shoreline is designated as Critically Eroded**

- Range Monuments
- Beach Access and Parking- Primary and Secondary, including access widths.
- Public Lodging Establishments- locations and length of property boundaries along project Shoreline.
- Comprehensive Plan designations of Commercial and Recreational Facilities and associated property boundaries along the project shoreline.

<b>Length of Project Boundary in Feet:</b>	R-1 to R-10 and R-10 to R-41	<u>37,248</u>
<b>Length of commercial or recreational property fronting the project shoreline:</b>		<u>17,041</u>
<b>Percentage of project shoreline designated as commercial or recreational property:</b>		<u>46%</u>
<b><u>Current contract eligibility or proposed new eligibility</u></b>		<u>100%</u>

**Eligibility: Access Points and Public Lodging Establishments:**

Location/Name	Address	R- Mon	Type of Access	Width of Access/ Frontage	Total units or parking spaces	No. Public	Eligible shoreline
Public Pier	Alamandara Rd.	R-1	Secondary	90	33	33	1,832
Sycamore Avenue street end	Sycamore Avenue	R-7	Secondary	20	3	3	178
Elm Avenue	Elm Avenue and N. Shore Drive	Between R-7 and R-8	Secondary	20	5	5	49
Palm Avenue street end	Palm Avenue	Between R-8 and R-9	Secondary	20	15	15	812
Palmetto Avenue street end	Palmetto Avenue	Between R-8 and R-9	Secondary	20	11	11	601
Peppertree Lane	Peppertree Lane and Gulf Drive	R-1	Secondary	20	8	8	Overlap
Gulf Drive	Gulf Drive and 85 <sup>th</sup> St	R-11	Secondary	20	40	40	1,320
81 <sup>st</sup> street	Street end	R-11	Secondary	20	8	8	442
79 <sup>th</sup> Street	Street end	Between R-11 and R-12	Secondary	20	7	7	Overlap
78 <sup>th</sup> Street	Street end	Between R-11 and R-12	Secondary	20	6	6	Overlap
77 <sup>th</sup> Street	Street end	R-12	Secondary	20	5	5	284
74 <sup>th</sup> street	Street end	Between R-12 and R-13	Secondary	20	20	20	1,076
73 <sup>rd</sup> street	Street end	Between R-12 and R-13	Secondary	20	6	6	Overlap
72 <sup>nd</sup> street	Street end	R-13	Secondary	20	11	11	Overlap
71 <sup>st</sup> street	East of Gulf Drive	Between R-13 and R-14	Secondary	0	3	3	Overlap
71 <sup>st</sup> street	Street end	Between R-13 and R-14	Secondary	30	8	8	452
70 <sup>th</sup> street	Street end	Between R-13 and R-14	Secondary	30	7	7	Overlap
69 <sup>th</sup> street	Street end	Between R-13 and R-14	Secondary	30	5	5	294
65 <sup>th</sup> street	Street end	Between R-14 and R-15	Secondary	20	9	9	495
Gulf Drive	Street end	R-17	Secondary	40	4	4	251
52 <sup>nd</sup> Street	Holmes Blvd. Intersection	Between R-17 and R-18	Secondary	0	3	3	Overlap
52 <sup>nd</sup> Street	Street end	Between R-17 and R-18	Secondary	40	19	19	1,043
50 <sup>th</sup> Street	Street Parking	R-18	Secondary	20	33	33	1,762
49 <sup>th</sup> Street	Street Parking	Between R-18 and R-19	Secondary	20	25	25	Overlap
Gulf Drive	Street Parking	Between R-18 and R-19	Secondary	0	9	9	Overlap
46 <sup>th</sup> Street	Street end	R-19	Secondary	20	5	5	Overlap

Location/Name	Address	R- Mon	Type of Access	Width of Access/ Frontage	Total units or parking spaces	No. Public	Eligible shoreline
45 <sup>th</sup> Street	Street end	Between R-19 and R-20	Secondary	10	11	11	591
Manatee County Public Beach Access	Gulf Drive and Manatee Avenue	Between R-20 and R-21	Primary	400	293	281	3,040
39 <sup>th</sup> Street	Street end	R-21	Secondary	30	6	6	Overlap
38 <sup>th</sup> Street	Street end	R-21	Secondary	20	3	3	Overlap
37 <sup>th</sup> Street	Street end	Between R-21 and R-22	Secondary	20	12	12	Overlap
36 <sup>th</sup> Street	Street end	Between R-21 and R-22	Secondary	20	11	11	Overlap
35 <sup>th</sup> Street	Street end	R-22	Secondary	20	6	6	Overlap
34 <sup>th</sup> Street	Street end	Between R-22 and R-23	Secondary	20	3	3	Overlap
31 <sup>st</sup> Street	Gulf Drive Intersection	Between R-23 and R-24	Secondary	0	12	12	Overlap
30 <sup>th</sup> Street	Gulf Drive Intersection	Between R-23 and R-24	Secondary	30	17	17	928
28 <sup>th</sup> Street	Street Parking	R-25	Secondary	20	5	5	284
25 <sup>th</sup> Street	Street Parking	Between R-26 and R-27	Secondary	20	5	5	284
23 <sup>rd</sup> Street	Street Parking	R-28	Secondary	20	9	9	495
10 <sup>th</sup> Street	Street Parking	Between R-30 and R-31	Secondary	0	10	10	Overlap
Bridge Street	Lot Parking	Between R-32 and R-33	Secondary	0	50	50	Overlap
Coquina Beach	Beach Parking	From R-34 to R-41	Primary	7,560	1,167	1,167	8,880
North Boat Ramp Coquina Beach	Boat Ramp	Between R-36 and R-37	Secondary	0	33	33	Overlap
South Boat Ramp Coquina Beach	Boat Ramp	R-40	Secondary	0	130	130	Overlap
Coquina Beach Club	1906 Gulf Dr.	Between R-28 and R-29	Lodging	218	16	16	218
Tortuga Inn	1325 N Gulf Drive	T-30	Lodging	164	90	90	164
White Sands Beach Resort	6504 Gulf Dr N	Between R-14 and R-15	Lodging	109	21	21	109
Water's Edge Condo #1065	5806 Gulf Drive #1065	R-15	Lodging	204	2	2	204
Sailfish Gulf Suites	3718 Gulf Dr N	R-21	Lodging	110	4	4	Overlap
AMI's Tropical Isle Inn, LLC	101 22 <sup>nd</sup> St N.	Between R-28 and R-29	Lodging	298	14	14	298
Nautilus Condominiums	7100 Gulf Drive	R-13	Lodging	105	35	35	Overlap
Mainsail Anna Maria Island	101 66 <sup>th</sup> St.	Between R-14 and R-15	Lodging	113	12	12	Overlap
Rod & Reel Motel	877 N Shore Dr.	R-1	Lodging	99	11	11	Overlap

Location/Name	Address	R- Mon	Type of Access	Width of Access/ Frontage	Total units or parking spaces	No. Public	Eligible shoreline
Seaside Inn Beach Resort	2200 Gulf Dr N	R-28	Lodging	149	10	10	149
Silver Surf Motel	1301 S Gulf Dr	T-31	Lodging	182	50	50	182
Seaside Beach House Condo	102 68 <sup>th</sup> St. #104	R-14	Lodging	107	4	4	107
Smuggler's Cove Beach Resort	1501 N Gulf Drive	Between R-29 and R-30	Lodging	225	24	24	225
Sunset Terrace Condo	2312 Gulf Drive #202	Between R-27 and R-28	Lodging	213	6	6	213
Tiffany Place Condo	7000 Gulf Drive #109	Between R-13 and R-14	Lodging	226	1	1	Overlap
Bali Hai Apartments	6900 N. Gulf Drive	Between R-13 and R-14	Lodging	225	42	42	Overlap
Blue Water Beach Club	6306 Gulf Dr	R-15	Lodging	212	30	30	212
Beach House Resort	1000 Gulf Drive	Between R-30 and R-31	Lodging	201	10	10	97
Cedar Cove Motel	2710 Gulf Dr	R-25	Lodging	102	16	16	102
Coconut Condo Collective	100 73 <sup>rd</sup> St.	Between R-12 and R-13	Lodging	106	18	18	Overlap
Club Bamboo Condominium Association Inc.	2502 Gulf Drive N	R-26	Lodging	376	43	43	333

### **10-Year Project Schedule and 5-Year Estimated Budget**

**Does this project have Congressional Authorization?** Yes; the entire island was initially congressionally authorized, but the entire shore protection project was not constructed. The Central Project Area of R-12 through R-36 was initially constructed and renourished with a federal cost share. The City of Anna Maria segment and the Coquina Beach segment will also be federally cost shared, but as a FEMA beach repair. The County is planning renourish the Federally authorized project area and additionally include the north end of Anna Maria Island and the Coquina Beach segment renourishment as part of the 2014/2015 project.

The Federal Shore Protection Project for Manatee County, Florida was authorized by Public Law 89-298 dated October 27, 1965, Title II – Flood Control Act of 1965, and was amended by Section 131 of the 1976 Water Resources Development Act. Resolutions approving the project under the provisions of Section 201 of Public Law 89-298 were adopted by the Senate Public Works Committee on 20 November 1975. The Chief of Engineers authorized the shore protection project for Manatee County on 19 December 1975.

**Does this project have a Federal Project Cooperative Agreement?** Yes

**What is the end date of the Federal Authorization?** 2043

**Federal cost share available for this erosion control project** Central Project Area: Yes, North Project Area: Yes, as FEMA funding

**Schedule and Budget (Include estimated phases for 10 years and estimated project costs for 5 years.):**

Year	Proposed Method	Description	Total Est. Cost	Federal Cost Share	State Cost Share	Local Cost Share
2011/ 2012	Longboat Pass IMP	Inlet Study	\$125,000	\$0	\$75,000	\$75,000
	Physical Monitoring	Entire Island	\$109,872	\$0	\$54,936	\$54,936
	Biological Monitoring	Coquina	\$232,790	\$0	\$116,395	\$116,395
	Aerial Photo	Entire Island	\$57,556	\$0	\$28,778	\$28,778
	Design\Const. Admin.	Port Dolphin	\$300,000	\$0	\$150,000	\$150,000
	Sand Search and Permitting	Port Dolphin (\$500,000 Port Dolphin cost share)	\$500,000	\$0	\$0	\$0
	Mobilization and Material Placement	Port Dolphin (\$5,000,000 Port Dolphin cost share)	\$5,000,000	\$0	\$0	\$0
	Engineering\Design\ Permits & Fed. Coord.	Federal Project Area (R-12 to R-36)	\$1,200,000	\$672,000	\$264,000	\$264,000
	Sand Source, Permitting and Fed. Authorization	Federal Project Area (R-12 to R-36)	\$650,000	\$364,000	\$143,000	\$143,000
	Construction	Cortez Groins	\$1,800,000	\$0	\$900,000	\$900,000
2012/ 2013	Physical Monitoring	Entire Island	\$97,718	\$0	\$48,859	\$48,859
	Biological Monitoring	Coquina	\$222,790	\$0	\$111,395	\$111,395
	Aerial Photo	Entire Island	\$59,282	\$0	\$29,641	\$29,641
	Monitoring	Cortez Groins	\$50,000	\$0	\$25,000	\$25,000
2013/ 2014	Physical Monitoring	Entire Island	\$100,650	\$0	\$50,325	\$50,325
	Biological Monitoring	Coquina	\$229,472	\$0	\$114,736	\$114,736
	Aerial Photo	Entire Island	\$61,060	\$0	\$30,530	\$30,530
2014/ 2015	Physical Monitoring	Entire Island	\$185,484	\$0	\$92,742	\$92,742
	Biological Monitoring	Entire Island	\$326,398	\$0	\$163,199	\$163,199
	Aerial Photo	Entire Island	\$62,892	\$0	\$31,446	\$31,446
	Monitoring	Port Dolphin	\$10,928	\$0	\$5,464	\$5,464
	Mobilization	Entire Island	\$2,500,000	\$1,400,000	\$550,000	\$550,000
	Structures	Entire Island	\$4,250,000	\$2,380,000	\$935,000	\$935,000
	Construction	2,150,000 yds @9\$/yd	\$19,350,000	\$10,836,000	\$4,257,000	\$4,257,000
2015/ 2016	Monitoring	Construction Monitoring	\$185,483	\$104,613	\$40,435	\$40,435
	Physical Monitoring	Entire Island	\$95,524	\$0	\$47,762	\$47,762
	Biological Monitoring	Entire Island	\$243,448	\$0	\$121,724	\$121,724
2016/ 2017	Aerial Photo	Entire Island	\$64,778	\$0	\$32,389	\$32,389
	Physical Monitoring	Entire Island				
	Biological Monitoring	Entire Island				
2017/ 2018	Aerial Photo	Entire Island				
	Physical Monitoring	Entire Island				
	Biological Monitoring	Entire Island				
2018/ 2019	Aerial Photo	Entire Island				
	Physical Monitoring	Entire Island				
	Biological Monitoring	Entire Island				
2019/ 2020	Aerial Photo	Entire Island				
	Physical Monitoring	Entire Island				
	Biological Monitoring	Entire Island				
2020/ 2021	Aerial Photo	Entire Island				
	Physical Monitoring	Entire Island				
	Biological Monitoring	Entire Island				

\*Budget assumes R-7 to R-10 and R-36 to R-41 (including geotube at Longboat Pass Jetty) constructed in 2010-2011. If not, assume construction funds from that year will roll over to 2011-2012.

**Local Government Support**

Does this sponsor have dedicated support staff whose sole priority is to manage beach erosion control activities? Yes

Name	Title	Email	Percent Commitment
Charlie Hunsicker	Director, Natural Resources Department	charlie.hunsicker@mymanatee.org	100%
<b>Mailing Address 1:</b>	PO Box 1000	<b>Phone:</b> 941.745.3727	
<b>Mailing Address 2:</b>	Bradenton, FL 34206	<b>Fax:</b> 941.741.3227	
<b>Office Street Address 1:</b>	415 10th Street West		
<b>Office Street Address 2:</b>	Bradenton, FL 34205		

**Quarterly Report Compliance:**

2009-2010	End Date	Report Sent	Compliant
Qtr 1 (Sept)	10/31/2008	10/12/2009	Yes
Qtr 2 (Dec)	1/31/2009	1/15/2010	Yes
Qtr 3 (Mar)	4/30/2009	4/6/2010	Yes
Qtr 4 (June)	7/31/2009	7/14/2010	Yes

**Revenue for the local cost share will be provided by:** The local sponsor, Manatee County, provides support through the use of funds dedicated to beach nourishment/renourishment provided by a one cent sales tax administered by the Tourist Development Council (TDC). The one cent sales tax is to be used solely for beach preservation and maintenance of the Gulf of Mexico beaches of Manatee County. The Cities of Anna Maria Island (Anna Maria, Holmes Beach and Bradenton Beach) have also adopted an annual operating budget to fund the Cities' on-going maintenance of the beach and park systems. Additionally, the County has adopted a Capital Improvement Program, which appropriates the funding necessary to cost share the Anna Maria Island Beach Renourishment Program with the State.

**Is the funding from a dedicated long term source for this project?** Yes

In order to acquire funding, a resolution from the local governmental entity must be provided by the application deadline which declares:

- Support from the Sponsor for the Proposed Project
- Willingness to serve as the Local Sponsor
- Ability to provide the full Local Cost Share
- Funding Source

**Has the local sponsor resolution been attached to the application fulfilling all of these requirements?** The local sponsor resolution will be sent under separate cover.

**Previous State cost-share for a feasibility or design/permitting phase of this project:**

The Florida Department of Environmental Protection (FDEP) has previously assisted in funding the 1992/1993 Anna Maria Island Beach Nourishment Project and the 2002 Anna Maria Island Beach Renourishment Project. The shoreline between FDEP monument R-1 and R-41 is included

in the FDEP's Strategic Beach Management Plan (FDEP, 2000) and the shoreline has been identified by the FDEP as an area of critical erosion.  
(<http://www.dep.State.fl.us/beaches/publications/pdf/sw-gulf.pdf>)

FDEP staff previously determined that 100% of the 2002 project area (R-7 through R-10 and R-12 through R-36) is eligible for State funding. The Feasibility Study for the Anna Maria Island shoreline from R-1 to R-7 and from R-36 to R-41 had indicated that with the level of parking and access at the time of the study, about 51% of the shoreline from R-1 to R-7 and 100% of the shoreline from R-36 to R-41 was eligible for State funding. The City of Anna Maria has since added numerous parking spaces which has now increased the percent eligible for State funding between R-1 and R-7 to 100% eligibility, based on FDEP analysis of the upgraded parking situation.

**Previous State Cost Share percentage:**

- North Project Area: 50% state cost share
- Central Project Area: 28.1% state cost share (considering federal cost sharing)
- Coquina Beach Project Area: 50% state cost share

**Designated Sea Turtle Refuge**

The beach nourishment projects associated with the project area provide environmental benefits that support a variety of marine species, including nesting sea turtles. Restoration of the foredune provides larger suitable nesting areas for sea turtles and an increase in the available nesting areas has been shown to correspond to increases in the nesting densities.

A cooperative Statewide Nesting Beach Survey (SNBS) program was established jointly by the Florida Fish and Wildlife Conservation Commission (FWC) and the US Fish and Wildlife Service (USFWS) in 1979. This program documents the total distribution, seasonality, and abundance of nesting sea turtles in Florida. These two agencies also established the Index Nesting Beach Survey (INBS), a more detailed monitoring program which collects data to measure the seasonal productivity of nesting sea turtles to allow comparisons between beaches and nesting seasons. The attached table presents sea turtle nesting statistics for the entire length of Anna Maria Island (FWC, 2008).

Although the beach length surveyed for sea turtle nests varied somewhat from year to year until the mid-1990s, it is still useful to compare nesting data to timing of beach nourishment projects. Between 1984 and 1992, prior to the initial beach nourishment construction, the Anna Maria Island shoreline had an average annual nesting rate of 64 sea turtle nests per year. Between 1992, the year of the initial beach nourishment project, and 2002 that average had increased to 171 turtles nesting per year along the shoreline. Between 2002 and 2005 an average of 125 turtles per year nested along the Anna Maria Island shoreline. There has been an average of 140 nests laid in the four years, following the 2005 renourishment project.

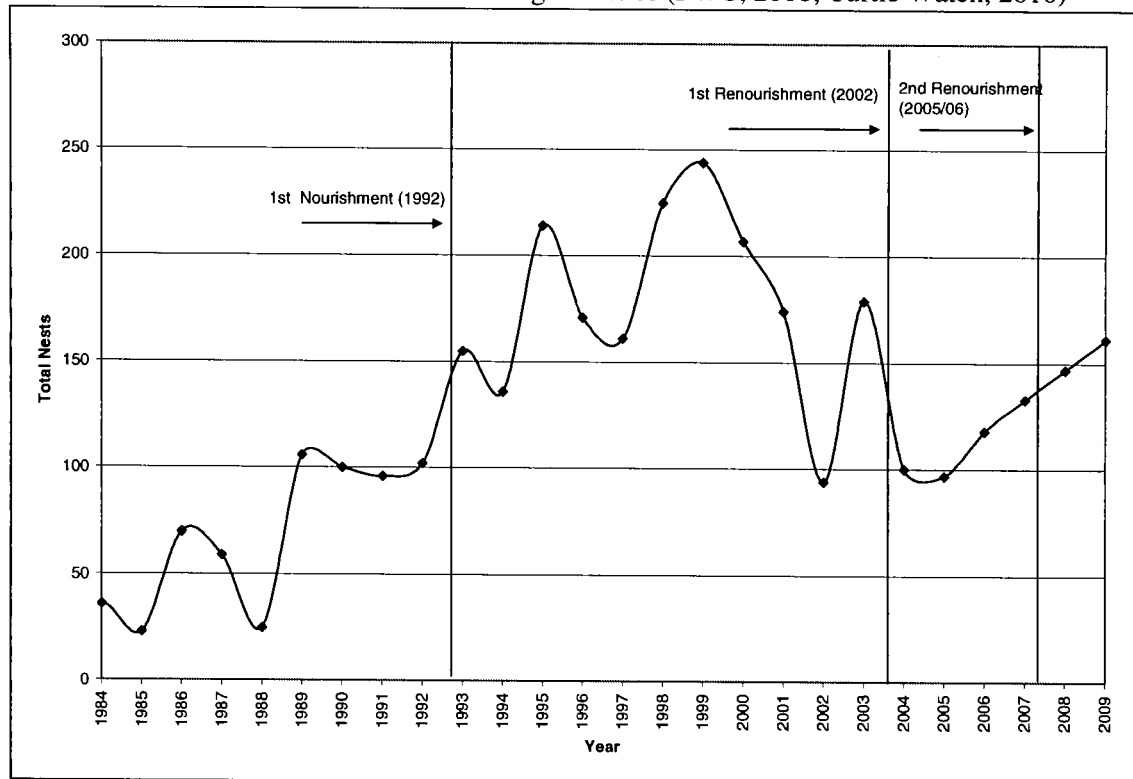
Anna Maria Island Sea Turtle Nesting Statistics (FWC, 2008; Turtle Watch, 2010)

Year	Beach Length (km)	Total Nests	Total False Crawls	Date of First Nest	Date of Last nest
1982	NA <sup>1</sup>	45	17	5/28/1982	7/17/1982
1983	3.3	20	29	5/29/1983	7/31/1983
1984	8.6	36	28	5/18/1984	8/1/1984
1985	9	23	37	5/18/1985	8/1/1985
1986	9.7	70	47	5/28/1986	8/14/1986
1987	11.3	59	84	NA	8/22/1987
1988	9.7	25	18	6/8/1988	8/14/1988
1989	9.2	106	138	5/6/1989	8/23/1989
1990	9.6	100	43	5/8/1990	NA
1991	7	96	70	5/6/1991	8/22/1991
1992 <sup>2</sup>	7	102	75	5/12/1992	8/19/1992
1993	11.3	155	89	5/24/1993	8/31/1993
1994	11.3	136	98	5/17/1994	8/22/1994
1995	11.3	214	136	5/18/1995	8/7/1995
1996	11.7	171	161	5/11/1996	8/25/1996
1997	11.7	161	168	4/29/1997	8/6/1997
1998	11.7	225	203	5/26/1998	8/27/1998
1999	11.7	244	190	4/30/1999	8/17/1999
2000	11.7	207	164	5/9/2000	8/16/2000
2001	11.7	174	178	5/2/2001	8/16/2001
2002 <sup>3</sup>	11.7	94	105	5/16/2002	8/5/2002
2003	11.7	179	180	5/10/2003	8/9/2003
2004	11.7	100	144	5/21/2004	8/18/2004
2005 <sup>4</sup>	11.7	97	83	5/14/2005	8/2/2005
2006	11.7	118	80	5/14/2006	8/10/2006
2007	11.7	133	183	5/6/2007	8/17/2007
2008	11.7	147	104	5/19/2008	8/2/2008
2009	11.7	161	145	5/8/2009	8/13/2009

Notes: 1. NA indicates that data was not available for that year. 2. The initial beach nourishment occurred in 1992. 3. The first renourishment occurred in 2002. 4. The beach storm damage repair project commenced in July 2005. 5. 2009 is the last year for which data was available.



Anna Maria Island Sea Turtle Nesting Statistics (FWC, 2008; Turtle Watch, 2010)



**References**

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