

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: October 16, 2007 (X) Consent () Regular
() Ordinance () Public Hearing

Department

Submitted By: Environmental Resources Management
Submitted For: Environmental Resources Management

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to adopt: a Resolution requesting that the Florida Department of Environmental Protection (FDEP) review a funding application and support funding for shoreline protection projects within its Fiscal Year 2008/2009 Beach Erosion Control Assistance Program.

Summary: The County is requesting that the State appropriate \$28,875 for the Ocean Ridge Shore Protection Project, \$75,000 for the Juno Beach Shore Protection Project, \$362,500 for the South Palm Beach Shore Protection Project, \$5,867,200 for the Singer Island Shore Protection Project, \$203,500 for the Jupiter/Carlin Shore Protection Project, \$681,000 for the South Lake Worth Inlet Management Plan, and \$80,718 for all permit-required monitoring associated with eligible projects. If the State Legislature approves funding for the projects, the County's matching share would be \$10,768,953. Districts 1+4 (SF).

Background and Justification: The FDEP is accepting project funding applications for FY 2008/2009. If the projects are found to be eligible, the FDEP will include them as part of its submittal to the Governor and Cabinet for approval and then forward it as part of the FDEP's Fixed Capital Outlay Budget Request to the State Legislature.

Attachments:

- 1. Resolution
- 2. Applications, including Location Maps

Recommended by: Richard E. Welsby 9/25/07
Department Director Date

Approved by: [Signature] 10/9/07
County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2008	2009	2010	2011	2012
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	_____	_____	_____	_____	_____
# ADDITIONAL FTE POSITIONS (Cumulative)	_____	_____	_____	_____	_____

Is Item Included in Current Budget? Yes _____ No _____
 Budget Account No.: Fund _____ Department _____ Unit _____ Object _____
 Program _____

B. Recommended Sources of Funds/Summary of Fiscal Impact

There is no fiscal impact until State funding is appropriated and a project agreement is executed. Potential fiscal impact to the County is \$10,768,953. The State and Federal share of each project's costs would be allocated to the County on a reimbursement basis. If State funds were to be appropriated for the projects and County funding is found to be insufficient to match the State-funded project, other funding sources could be considered, such as short-term borrowing, securing bonds, or delaying the design and construction of other projects already funded. **County funding for match will come from the Beach Improvement Fund, if available.**

C. Department Fiscal Review: *JP*

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Administrator Comments:

OFMB *Jim Don* *10-2-07*
01/10/07 *CW* *9/27/11* *Don J. Jacob* *10/3/07*
 Contract Administrator *10/3/07*

B. Legal Sufficiency:
Monna J. J.
 Assistant County Attorney

C. Other Department Review:

 Department Director

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RESOLUTION NO. 2007-_____

**A RESOLUTION OF THE BOARD OF COUNTY
COMMISSIONERS OF PALM BEACH COUNTY,
FLORIDA, REQUESTING THE STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION TO SUPPORT APPROPRIATION OF
FUNDS WITHIN THE BEACH EROSION CONTROL ASSISTANCE
PROGRAM FOR FISCAL YEAR 2008-09.**

WHEREAS, the Board of County Commissioners of Palm Beach County, Florida, is committed to a program of coastal restoration and preservation; and

WHEREAS, Palm Beach County wishes to effectively address beach erosion by construction of shore protection projects and restoration of its dunes; and

WHEREAS, Palm Beach County has a need to perform engineering design, environmental studies and monitoring of shore protection projects; and

WHEREAS, Palm Beach County has developed and funded a Shore Protection Program to act as the local sponsor for coastal projects; and

WHEREAS, the projects listed below are consistent with the coastal element of the Palm Beach County's Comprehensive Plan; and

WHEREAS, the Bureau of Beaches and Coastal Systems is preparing their Beach Erosion Control Long-Range Budget Plan to develop the Fiscal Year 2008-09 prioritized list of beach erosion control projects; and

WHEREAS, the public work projects listed below are eligible within the State of Florida's Beach Erosion Control Assistance Program under the provisions of Section 161.101, Florida Statutes

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, THAT:

Section 1: Palm Beach County is requesting that the State appropriate \$28,875 for the Ocean Ridge Shore Protection Project, \$75,000 for the Juno Beach Shore Protection Project, \$362,500 for the South Palm Beach Shore Protection Project, \$5,867,200 for the Singer Island Shore Protection Project, \$203,500 for the Jupiter/Carlin Shore Protection Project, \$681,000 for implementation of the South Lake Worth Inlet Management Plan, and \$80,718 for all permit-required monitoring associated with eligible projects.

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Section 2:

The foregoing Resolution was offered by Commissioner _____, who moved its adoption. The motion was seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

- Commissioner Addie L. Greene, Chairperson _____
- Commissioner John F. Koons, Vice Chair _____
- Commissioner Karen T. Marcus _____
- Commissioner Robert J. Kanjian _____
- Commissioner Mary McCarty _____
- Commissioner Burt Aaronson _____
- Commissioner Jess R. Santamaria _____

The Chairperson thereupon declared the Resolution duly passed and adopted this _____ day of _____, 20__.

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

PALM BEACH COUNTY, FLORIDA BY ITS BOARD OF COUNTY COMMISSIONERS

Sharon R. Bock, Clerk & Comptroller

By _____
Assistant County Attorney

By _____
Deputy Clerk

**FY 08-09 LONG RANGE BUDGET PLAN UPDATE
LEGISLATIVE BUDGET REQUEST FOR PALM BEACH COUNTY**

TOTAL COSTS

PROJECT	TASK										
	aerials	surveys	performance report	turtle/scarp/ lighting mon.	reef/SAV mon.	feasibility	fill	design permitting	structures/ construction	mitigation	total
Jupiter Carlin SPP	\$3,000	\$14,000	\$25,000	\$75,000	\$25,000			\$350,000			\$492,000
Jupiter Carlin ECS						\$200,000					\$200,000
Juno Beach	\$7,500	\$18,000	\$25,000	\$100,000	\$50,000						\$200,500
Singer Island	\$6,000	\$14,000		\$100,000	\$100,000				\$15,000,000		\$15,220,000
SLWI		\$14,000	\$25,000	\$12,000	\$50,000				\$1,300,000		\$1,401,000
Ocean Ridge	\$9,000	\$14,000	\$25,000	\$75,000	\$50,000						\$173,000
South Palm Beach	\$3,000	\$12,000			\$25,000			\$700,000			\$740,000
	\$28,500	\$86,000	\$100,000	\$362,000	\$300,000	\$200,000	\$0	\$1,050,000	\$16,300,000	\$0	\$18,426,500

LOCAL SHARE

PROJECT	TASK										
	aerials	surveys	performance report	turtle/scarp/ lighting mon.	reef mon.	feasibility	fill	design permitting	structures	mitigation	total (-monitoring)
Jupiter Carlin SPP	\$690	\$3,220	\$5,750	\$17,250	\$5,750	\$0		\$80,500	\$0		\$103,500
Jupiter Carlin ECS						\$100,000		\$0	\$0		\$100,000
Juno Beach	\$3,750	\$9,000	\$12,500	\$50,000	\$25,000			\$0			\$75,000
Singer Island	\$3,684	\$8,596		\$61,400	\$61,400		\$0	\$0	\$9,210,000		\$9,332,800
SLWI		\$7,000	\$12,500	\$6,000	\$25,000				\$650,000		\$681,000
Ocean Ridge	\$2,079	\$3,234	\$5,775	\$17,325	\$11,550				\$0	\$0	\$28,875
South Palm Beach	\$1,500	\$6,000			\$12,500			\$350,000	\$0		\$362,500
	\$11,703	\$37,050	\$36,525	\$151,975	\$141,200	\$100,000	\$0	\$430,500	\$9,860,000	\$0	\$10,683,675
	Total costs (local share) for Countywide monitoring:				\$85,278						

STATE SHARE

PROJECT	TASK										
	aerials	surveys	performance report	turtle/scarp/ lighting mon.	reef mon.	feasibility	fill	design permitting	structures	mitigation	total (-monitoring)
Jupiter Carlin SPP	\$690	\$3,220	\$5,750	\$17,250	\$5,750	\$0		\$80,500	\$0		\$103,500
Jupiter Carlin ECS						\$100,000		\$0	\$0		\$100,000
Juno Beach	\$3,750	\$9,000	\$12,500	\$50,000	\$25,000			\$0			\$75,000
Singer Island	\$2,316	\$5,404		\$38,600	\$38,600		\$0	\$0	\$5,790,000		\$5,867,200
SLWI		\$7,000	\$12,500	\$6,000	\$25,000				\$650,000		\$681,000
Ocean Ridge	\$2,079	\$3,234	\$5,775	\$17,325	\$11,550				\$0	\$0	\$28,875
South Palm Beach	\$1,500	\$6,000			\$12,500			\$350,000	\$0		\$362,500
	\$10,335	\$33,858	\$36,525	\$129,175	\$118,400	\$100,000	\$0	\$430,500	\$6,440,000	\$0	\$7,218,075
	Total costs (state share) for Countywide monitoring:				\$80,718						

FEDERAL SHARE

PROJECT	TASK										
	aerials	surveys	performance report	turtle/scarp/ lighting mon.	reef mon.	feasibility	fill	design permitting	structures	mitigation	total
Jupiter Carlin SPP*	\$1,620	\$7,560	\$13,500	\$40,500	\$13,500			\$189,000			\$265,680
Ocean Ridge	\$4,842	\$7,532	\$13,450	\$40,350	\$26,900						\$93,074
	\$6,462	\$15,092	\$26,950	\$80,850	\$40,400	\$0	\$0	\$189,000	\$0	\$0	\$358,754
	Total costs (federal share) for Countywide monitoring:				\$48,504						

FY 08-09 LONG RANGE BUDGET PLAN UPDATE																				
LEGISLATIVE BUDGET REQUEST FOR PALM BEACH COUNTY																				
PROJECT	FY 2008-9				FY 2009-10				FY 2010-2011				FY 2011-2012				FY 2012-2013			
	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local
Jupiter Carlin SPP*																				
feasibility	\$0		\$0	\$0																
design/permit	\$350,000	\$189,000	\$80,500	\$80,500			\$0	\$0												
construct		\$0	\$0	\$0	\$6,000,000	\$3,240,000	\$1,380,000	\$1,380,000												
monitor	\$100,000	\$54,000	\$23,000	\$23,000	\$92,000	\$49,680	\$21,160	\$21,160	\$120,000	\$64,800	\$27,600	\$27,600	\$120,000	\$64,800	\$27,600	\$27,600	\$120,000	\$64,800	\$27,600	\$27,600
Jupiter Carlin ECS*																				
feasibility	\$200,000		\$100,000	\$100,000																
design/permit																				
construct					\$2,000,000		\$1,000,000	\$1,000,000												
monitor																				
Juno Beach																				
design/permit	\$0		\$0	\$0																
construct	\$0		\$0	\$0																
monitor	\$150,000		\$75,000	\$75,000	\$100,000		\$50,000	\$50,000	\$120,000		\$60,000	\$60,000	\$120,000		\$60,000	\$60,000	\$120,000		\$60,000	\$60,000
Singer Island																				
design/permit	\$0		\$0	\$0																
construct	\$15,000,000		\$5,790,000	\$9,210,000																
monitor	\$200,000		\$77,200	\$122,800	\$200,000		\$77,200	\$122,800	\$150,000		\$57,900	\$92,100	\$120,000		\$46,320	\$73,680	\$120,000		\$46,320	\$73,680
SLWI																				
construct	\$1,300,000		\$650,000	\$650,000																
monitor	\$62,000		\$31,000	\$31,000	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500
Ocean Ridge																				
design/permit													\$150,000	\$87,450	\$34,650	\$34,650				
construct	\$0		\$0	\$0													\$6,000,000	\$3,498,000	\$1,386,000	\$1,386,000
monitor	\$125,000	\$72,875	\$28,875	\$28,875	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100
South Palm Beach																				
design/permit	\$700,000		\$350,000	\$350,000																
construct	\$0		\$0	\$0																
monitor	\$25,000		\$12,500	\$12,500	\$80,000		\$40,000	\$40,000	\$80,000		\$40,000	\$40,000	\$80,000		\$40,000	\$40,000	\$80,000		\$40,000	\$40,000
CountyWide Monitoring	\$214,500	\$48,504	\$80,718	\$85,278	\$572,000	\$107,980	\$211,460	\$257,060	\$570,000	\$123,100	\$208,600	\$242,800	\$540,000	\$123,100	\$197,020	\$224,380	\$540,000	\$123,100	\$197,020	\$224,380
PROJECT	FY 2013-14				FY 2014-15				FY 2015-16				FY 2016-2017				FY 2017-2018			
	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local	ttl	federal	state	local
Jupiter Carlin SPP																				
design/permit																				
construct																				
monitor	\$120,000	\$64,800	\$27,600	\$27,600	\$120,000	\$64,800	\$27,600	\$27,600	\$120,000	\$64,800	\$27,600	\$27,600	\$120,000	\$64,800	\$27,600	\$27,600	\$130,000	\$70,200	\$29,900	\$29,900
Jupiter Carlin ECS*																				
feasibility																				
design/permit																				
construct																				
monitor																				
Juno Beach																				
design/permit	\$400,000		\$200,000	\$200,000																
construct					\$13,000,000		\$6,500,000	\$6,500,000												
monitor	\$100,000		\$50,000	\$50,000	\$120,000		\$60,000	\$60,000	\$120,000		\$60,000	\$60,000	\$120,000		\$60,000	\$60,000	\$120,000		\$60,000	\$60,000
Singer Island																				
design/permit																				
construct																				
monitor	\$100,000		\$38,600	\$61,400	\$120,000		\$46,320	\$73,680	\$92,000		\$35,512	\$56,488	\$92,000		\$35,512	\$56,488	\$92,000		\$35,512	\$56,488
SLWI																				
monitor	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500	\$65,000		\$32,500	\$32,500
Ocean Ridge																				
design/permit																				
construct																				
monitor	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100	\$100,000	\$58,300	\$23,100	\$23,100
South Palm Beach																				
design/permit																				
construct																				
monitor	\$90,000		\$45,000	\$45,000	\$90,000		\$45,000	\$45,000	\$90,000		\$45,000	\$45,000	\$90,000		\$45,000	\$45,000	\$90,000		\$45,000	\$45,000
CountyWide Monitoring	\$575,000	\$123,100	\$216,800	\$239,800	\$615,000	\$123,100	\$234,520	\$261,880	\$587,000	\$123,100	\$223,712	\$244,688	\$587,000	\$123,100	\$223,712	\$244,688	\$597,000	\$128,500	\$226,012	\$246,988

JUPITER/CARLIN SHORE PROTECTION PROJECT

Project Description

Shoreline protection for 1.08 miles of beach adjacent to the Jupiter Inlet in Palm Beach County. The beach was first nourished in 1995 and renourished in 2002. A primary dune was reestablished along the project area. Permit-required monitoring is ongoing. A second renourishment is planned for winter 2009/2010. Erosion Control Structures are planned to address an erosive "hot spot" in the northern end of the project.

Location

Between DEP range monuments R13.5 and R19 in Palm Beach County (location map attached).

Project Evaluation

Severity of Erosion: Over 30% of the project area includes habitable structures, including one hotel and one condominium. Another 65% of the project area is developed public park area. There is currently no shoreline armoring present in the project area.

The historic erosion rate along the project shoreline was computed to be 1.9 ft/yr (Aug 1996 GDM). However, subsequent studies, which take into effect the periodic influx of sand from inlet bypassing and ICWW dredging projects calculated the actual background erosion rate to be much higher 7.4 cy/ft/yr (approximately 41,000 cy/yr in the project area) (Taylor Engineering, Jupiter Carlin Shore Protection 24-month monitoring report, August 2006)

Most recently, the northern end of the project (R13 - R17) has experienced severe erosion including the total loss of berm and dune in some areas. Wind driven waves associated with sub-tropical Storm Andrea (May, 2007) eroded the beach and destroyed a parks maintenance structure in Jupiter Beach Park. Emergency permits were issued (PB-899 E M1) and approximately 25,000 yd³ of beach-quality fill will be used to reconstruct the dune throughout the area after November 1, 2007. This emergency fill was included for funding under DEP agreement 07PB2.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Approximately 70% of the project area lies within two county parks. The Jupiter Beach Resort, with 159 guest rooms, fronts 8% of the project length. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections, and Indiantown Road running E-W and centrally located within the project area. Threatened and endangered marine turtles utilize the entire project area for nesting, however this beach is not a designated marine turtle refuge. The dune in Carlin Park provides habitat for one of the few remaining colonies of endangered Beach Jacquemontia (*Jacquemontia reclinata*) in Palm Beach County. The attached map identifies public beach access points with associated parking spaces, as well as the location of the Beach Jacquemontia colony; also attached is a table of historic sea turtle nesting throughout the project area.

Federal Funding: The project was authorized in 1962, WRDA 1986 & WRDA 1996. A PCA for nourishment was signed on March 15, 1995. The project currently has a Federal cost share of 54%. The sponsor is seeking approval for federal participation in design & construction of the next scheduled renourishment (currently winter 2009/2010). There is currently no Federal participation for the planned erosion control structures in this area.

State Commitment: Both phases of the project and the emergency dune restoration were funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding.

Local Commitment & Capability: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. The degree of local funding proposed is detailed in the attached financial schedule. Palm Beach County will use staff for project management of all phases of beach work, including emergency dune replenishment, the second beach renourishment, and the erosion control structures. The County has retained the services of a professional coastal engineering firm to assist in feasibility, design, permitting, and other project related activities. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others.

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Project Performance: The original project design was based on the GDM & EIS. The project provides for greater than 15 year return interval storm protection. The dune within the project limits is stabilized with vegetation and walkovers and provides enhanced shore protection consistent with the natural system. The extreme north end of the project (R-13 through R-15) experienced a near total loss of berm and dune in May 2007 due to wind and waves associated with Sub-Tropical Storm Andrea. Portions of this beach have not recovered fully from the hurricanes of 2004 and 2005 (Taylor Engineering, Jupiter Carlin Shore Protection 24-month monitoring report, August 2006), and additional solutions are being sought for this beach. The emergency dune project will provide immediate protection to upland structures and habitat and a feasibility study is underway to address the erosional hot spot in the north end of the project area.

Innovative Applications: The planned structures will provide options to extend the required nourishment intervals. Extending the nourishment interval will minimize the environmental impacts from maintaining the beach, especially in an area of high sea turtle nesting densities. The use of structures in this area will also reduce impact to nearshore reefs which exist within the vicinity of the project.

Use of Program Funds

The requested funding for FY 2008-9 for this area will be used for the pre-construction environmental monitoring, feasibility study, and construction of structures for this area. Funding is also sought for the design and permitting of the next scheduled renourishment (currently winter 2009/2010).

Funding for the design/permitting of structures was authorized in the 2006/2007 funding cycle. Additional study is necessary to account for the severe erosion this area is experiencing. Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the Countywide Monitoring Agreement (#06PB3).

Attachments: Project map, table of sea turtle nesting activity, MPP timeline

Jupiter/Carlin Beach Control



Legend

- DEP Monument
- Beach Access
- Project Fill Boundaries
- Public Access Boundaries



ion Project



Legend

- DEP Monument
- Beach Access
- Beach Jacquemontia
- July HWL
- Project Fill Boundaries
- Public Access Boundaries



Summary of sea turtle crawl activity at Jupiter Carlin, 1991 - 2006 nesting seasons

Nests

Species	pre-nourishment JC SP I				post-nourishment JC SP I			pre-nourishment JC SP II				post-nourishment JC SP II				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	968	1402	1208	1257	807	1252	832	1228	1173	1107	971	657	762	637	864	929
Green	2	44	1	63	1	33	0	74	2	61	0	89	13	41	57	54
Leatherback	6	0	2	10	6	6	5	5	12	12	26	27	26	20	25	11
Hawksbill	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Total	976	1446	1211	1330	814	1291	837	1307	1187	1180	997	773	801	699	946	994

Non-nesting Emergences

Species	pre-nourishment JC SP I				post-nourishment JC SP I			pre-nourishment JC SP II				post-nourishment JC SP II				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	1171	1603	1266	1226	2574	1478	959	1942	1595	1563	1480	1221	1515	1502	1429	1240
Green	6	33	7	43	9	44	3	159	3	153	0	186	26	97	247	92
Leatherback	0	0	1	0	1	4	2	1	1	4	5	13	3	3	8	1
Hawksbill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1177	1636	1274	1269	2584	1526	964	2102	1599	1720	1485	1420	1544	1602	1684	1333

Total Crawls

Species	pre-nourishment JC SP I				post-nourishment JC SP I			pre-nourishment JC SP II				post-nourishment JC SP II				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	2139	3005	2474	2483	3381	2730	1791	3170	2768	2670	2451	1878	2277	2139	2293	2169
Green	8	77	8	106	10	77	3	233	5	214	0	275	39	138	304	146
Leatherback	6	0	3	10	7	10	7	6	13	16	31	40	29	23	33	12
Hawksbill	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Total	2153	3082	2485	2599	3398	2817	1801	3409	2786	2900	2482	2193	2345	2301	2630	2327

Nesting Success

Species	pre-nourishment JC SP I				post-nourishment JC SP I			pre-nourishment JC SP II				post-nourishment JC SP II				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	0.45	0.47	0.49	0.51	0.24	0.46	0.46	0.39	0.42	0.41	0.40	0.35	0.33	0.30	0.38	0.43
Green	0.25	0.57	0.13	0.59	0.10	0.43	0.00	0.32	0.40	0.29	0.00	0.32	0.33	0.30	0.19	0.37
Leatherback	1.00	0.00	0.67	1.00	0.86	0.60	0.71	0.83	0.92	0.75	0.84	0.68	0.90	0.87	0.76	0.92
Hawksbill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Total	0.45	0.47	0.49	0.51	0.24	0.46	0.46	0.38	0.43	0.41	0.40	0.35	0.34	0.30	0.36	0.43

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ID		Task Name	Duration	Start	Finish	Predecessors
1		Jupiter/Carlin 2nd Beach Renourishment	662 days?	Mon 6/25/07	Tue 1/5/10	
2		Consultant Services	116 days?	Mon 6/25/07	Mon 12/3/07	
3		Request for Draft SOW	1 day?	Mon 6/25/07	Mon 6/25/07	
4		1st DRAFT SOW received	1 day?	Fri 8/17/07	Fri 8/17/07	3
5		ERM review	21 days?	Mon 8/20/07	Mon 9/17/07	4
6		2nd DRAFT SOW received	15 days?	Tue 9/18/07	Mon 10/8/07	5
7		ERM review	11 days?	Mon 10/8/07	Mon 10/22/07	
8		DRAFT sent FDEP for review & comment	1 day?	Tue 10/9/07	Tue 10/9/07	6
9		FDEP comments received	30 days	Wed 10/10/07	Tue 11/20/07	8
10		FINAL SOW received	1 day?	Mon 12/3/07	Mon 12/3/07	
11		FDEP FUNDING	11 days?	Mon 12/3/07	Mon 12/17/07	
12		Request Amendment to FDEP Funding Agreement 07PB4	11 days?	Mon 12/3/07	Mon 12/17/07	
13		Task Order Prep	27 days?	Tue 12/18/07	Wed 1/23/08	
14		Prepare Task Order & Board Item	15 days?	Tue 12/18/07	Mon 1/7/08	
15		BCC Approval	1 day?	Tue 1/22/08	Tue 1/22/08	
16		Verbal NTP	1 day?	Wed 1/23/08	Wed 1/23/08	15
17		SOW Deliverables	510 days?	Fri 1/18/08	Thu 12/31/09	
18		Preparation of LLR document	93 days?	Wed 1/23/08	Fri 5/30/08	
19		Task 1 Collect, Assemble, and Review Data; FDEP Meeting	30 days	Wed 1/23/08	Tue 3/4/08	
20		Task 2: Engineering Design of Beach Restoration	30 days	Wed 3/5/08	Tue 4/15/08	19
21		Task 3: Borrow Area Design	30 days	Tue 4/22/08	Mon 6/2/08	20
22		Task 4: Permit Drawings	30 days	Tue 6/3/08	Mon 7/14/08	21
23		Task 5 Natural Resources Narrative	30 days	Fri 1/18/08	Thu 2/28/08	
24		Task 6: FDEP Permit Request	165 days?	Tue 7/15/08	Mon 3/2/09	22
25		Task 7: Response to FDEP RAI	30 days	Mon 9/1/08	Fri 10/10/08	
26		Task 8: Department of Army Permit Application Revision	187 days?	Tue 7/15/08	Wed 4/1/09	22
27		Task 9: Project Coordination	507 days?	Wed 1/23/08	Thu 12/31/09	
28		Construction Contractor Selection	197 days?	Mon 4/6/09	Tue 1/5/10	
29		Prepare Plans & Specs	45 days	Mon 4/6/09	Fri 6/5/09	
30		Advertise for bids	14 days	Mon 6/8/09	Thu 6/25/09	29
31		Open bids	1 day?	Fri 6/26/09	Fri 6/26/09	30
32		Award Contract	1 day	Wed 7/1/09	Wed 7/1/09	31
33		Mobilization	5 days	Mon 11/2/09	Fri 11/6/09	
34		Renourishment	39 days	Mon 11/9/09	Thu 12/31/09	33
35		Demobilization	3 days	Fri 1/1/10	Tue 1/5/10	34
36		Pre & Post Construction Monitoring	1300 days?	Tue 1/15/08	Mon 1/7/13	
37		Sand Compaction/Tilling	2 days	Wed 1/6/10	Thu 1/7/10	35
38		Post Construction Engineering Report 12 mo	262 days?	Wed 1/6/10	Thu 1/6/11	35
39		Post Construction Engineering Report 24 mo	523 days?	Wed 1/6/10	Fri 1/6/12	
40		Post Construction Engineering Report 36 mo	784 days?	Wed 1/6/10	Mon 1/7/13	
41		Quarterly Reports	263 days?	Tue 1/15/08	Thu 1/15/09	
42		Q4 2007	1 day?	Tue 1/15/08	Tue 1/15/08	
43		Q1 2008	1 day?	Tue 4/15/08	Tue 4/15/08	
44		Q2 2008	1 day?	Tue 7/15/08	Tue 7/15/08	
45		Q3 2008	1 day?	Wed 10/15/08	Wed 10/15/08	
46		Q4 2008	1 day?	Thu 1/15/09	Thu 1/15/09	

Project: Jupiter_Carlin_sp2
Date: Wed 9/19/07

Task		Project Summary	
Split		External Tasks	
Progress		External Milestone	
Milestone		Deadline	
Summary			

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ID	Task Name	Duration	Start	Finish
1	Jupiter-Carlin Structures Project	1161 days?	Mon 5/1/06	Mon 10/11/10
2	1st Draft proposal submitted to ERM	38 days	Mon 5/1/06	Wed 6/21/06
3	ERM Review	8 days	Thu 6/22/06	Mon 7/3/06
4	2nd draft proposal submitted to ERM	39 days	Tue 7/4/06	Fri 8/25/06
5	ERM Review	2 days	Fri 8/25/06	Mon 8/28/06
6	3rd draft proposal submitted to ERM	69 days	Mon 8/28/06	Thu 11/30/06
7	ERM review	21 days	Fri 12/1/06	Fri 12/29/06
8	4th draft proposal submitted to ERM	18 days?	Mon 1/1/07	Wed 1/24/07
9	FDEP comments received	30 days?	Wed 12/20/06	Tue 1/30/07
10	ERM Review	54 days?	Thu 1/25/07	Tue 4/10/07
11	5th draft proposal submitted to ERM	79 days?	Tue 4/10/07	Fri 7/27/07
12	FDEP Approval Received	123 days?	Tue 3/6/07	Thu 8/23/07
13	Task Order	262 days?	Mon 10/16/06	Tue 10/16/07
14	Prepare Task Order & Board Item	19 days?	Mon 8/20/07	Thu 9/13/07
15	BCC Approval	1 day?	Mon 10/16/06	Mon 10/16/06
16	Verbal NTP	1 day?	Tue 10/16/07	Tue 10/16/07
17	State Funding	49 days	Mon 8/20/07	Thu 10/25/07
18	Grant agreement received from DEP	31 days	Mon 8/20/07	Mon 10/1/07
19	BCC approval	1 day	Tue 10/16/07	Tue 10/16/07
20	Signed agreement returned to DEP	8 days	Tue 10/16/07	Thu 10/25/07
21	Feasibility Study	446 days?	Wed 10/17/07	Wed 7/1/09
22	Task 1: Evaluate Historic Beach Performance	44 days?	Wed 10/17/07	Mon 12/17/07
23	Task 2: Evaluate Changes in beach Behavior	31 days?	Mon 12/3/07	Mon 1/14/08
24	Task 3: Determine Beach Performance Improvement Tragetes and Modeling Scenarios	24 days?	Mon 1/21/08	Thu 2/21/08
25	Task 4: Data Collection	128 days?	Mon 1/7/08	Wed 7/2/08
26	Deployment #1	24 days?	Mon 1/7/08	Thu 2/7/08
27	Deployment #2	23 days?	Mon 6/2/08	Wed 7/2/08
28	Task 5: Model Setup, Calibration & validation	173 days?	Tue 1/1/08	Thu 8/28/08
29	Task 6: Evaluate Design Alternatives	59 days?	Mon 9/1/08	Thu 11/20/08
30	Task 7: FDEP Reports	215 days?	Mon 2/4/08	Fri 11/28/08
31	First Report	21 days?	Fri 2/1/08	Fri 2/29/08
32	Second Report	21 days?	Fri 8/1/08	Fri 8/29/08
33	Third Report	20 days?	Mon 11/3/08	Fri 11/28/08
34	Task 8: Environmental Characterization & EA Preparation	296 days?	Wed 10/17/07	Wed 12/3/08
35	Feasibility study draft	296 days	Wed 10/17/07	Wed 12/3/08
36	ERM review	23 days	Thu 12/4/08	Mon 1/5/09
37	Feasibility study approved by DEP	30 days	Wed 12/3/08	Tue 1/13/09
38	Task 9: State & Federal Permitting	119 days?	Mon 11/17/08	Thu 4/30/09
39	Application Submitted	30 days	Thu 11/6/08	Wed 12/17/08
40	DEP/ACOE 1st RAI/Response	21 days	Mon 2/2/09	Mon 3/2/09
41	DEP/ACOE 2nd RAI/Response	22 days	Wed 4/1/09	Thu 4/30/09
42	DEP permit	163 days	Mon 11/17/08	Wed 7/1/09
43	USACE permit	163 days	Mon 11/17/08	Wed 7/1/09
44	Construction Contractor Selection	18 days	Mon 8/3/09	Wed 8/26/09
45	Advertise for bids	14 days	Mon 8/3/09	Thu 8/20/09
46	Open bids	1 day	Fri 8/21/09	Fri 8/21/09
47	Award contract	3 days	Mon 8/24/09	Wed 8/26/09
48	Construct Rock Structures	111 days	Mon 5/3/10	Mon 10/4/10
49	Mobilization	2 days	Mon 5/3/10	Tue 5/4/10
50	Construction	93 days	Tue 5/25/10	Thu 9/30/10
51	Demobilization	2 days	Fri 10/1/10	Mon 10/4/10
52	Post-construction Monitoring	5 days	Tue 10/5/10	Mon 10/11/10
53	Biological monitoring	5 days	Tue 10/5/10	Mon 10/11/10
54	Physical monitoring	5 days	Tue 10/5/10	Mon 10/11/10
55	Quarterly Reports	269 days?	Mon 1/7/08	Thu 1/15/09

Project: structures timeline
Date: Wed 9/19/07

Task		Project Summary	
Split		External Tasks	
Progress		External Milestone	
Milestone		Deadline	
Summary			

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JUNO BEACH SHORE PROTECTION PROJECT

Project Description

Renourishment of approximately 2.4 miles of critically eroding shoreline beginning 2.2 miles downdrift of Jupiter Inlet. The original project was completed in 2001 and impacted by the hurricanes of 2004 and 2005.

Location

Palm Beach County, R-26 - R-38 (fill area), map attached.

Project Evaluation

Severity of Erosion: The area is designated critically eroded by the Florida State Department of Environmental Protection. The hurricanes of 2004 caused the loss of 251,000 cubic yards of material from the beach profile. Between 1990 and 1996, the beach and dune system out to -18 ft NGVD eroded 860,000 yds³, which is equivalent to an average erosion rate of -9.3 yds³/ft/yr.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. A total of 100% of the shoreline is available for public recreational use. Approximately 60% of the project area (7,820 ft) is publicly owned land, parks, and public beach access ways (Diamondhead/Radnor, Ocean Cay, Juno Beach Park, Juno Dunes, and Loggerhead Park). Juno Beach is one of the highest nesting density beaches for threatened and endangered sea turtles in the United States. Shorebirds (including piping plovers) utilize this beach extensively for foraging purposes and a pair of nesting killdeer has fledged chicks on this beach each summer since 2005.

A total of 100% of the project area consists of either habitable dwellings or hurricane evacuation routes. Shoreline development within the area of fill (R-26 through R-38) is approximately 40 % (5,250 ft) multifamily/ commercial structures. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area and is less than 20' from the dune crest in some sections, and Donald Ross Road running E-W and centrally located within the project area.

The attached map identifies public beach access points with associated parking spaces; also attached is a table of historic sea turtle nesting throughout the project area.

Federal Funding: The Juno Beach project has not been federally authorized, however a one-time allotment of \$1.9 million has been awarded to repair damages to the beach as a result of the 2004 hurricanes. This money, authorized by FEMA, will be used towards design and construction costs of the renourishment currently scheduled to begin construction in the fall of 2008.

Local Commitment: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. The degree of local funding proposed is detailed in the attached financial schedule. Palm Beach County will use staff for project management of all phases of beach work and required monitoring. The County has retained the services of a professional coastal engineering firm to assist in feasibility, design, permitting, and other project related activities. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others.

State Commitment: The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding.

The original grant for this project (98PB2) expired on September 30, 2006. Additional funds for this project were awarded in the 2007/2008 funding cycle.

Performance of the Project: The project design was based on the GDM & EIS and provides for greater than 15 year return interval storm protection. The dune within the project limits is stabilized with vegetation and walkovers and provides enhanced shore protection consistent with the natural system. Hot spot erosion areas at R-26 through R-29 and R-30 through R-33 are included in the area of fill. The project area is 2.2 miles downdrift of Jupiter Inlet. Jupiter Inlet is estimated to have a volumetric impact on downdrift beaches of 1.65 million cy/yr (Bodge, 1994) and, based on beach profile surveys, this volume of cumulative total sediment loss affects the Juno Beach project area and well south of it as specified in the 1998 Feasibility Study. The fill is expected to provide 100% of the sand needed to maintain the downdrift beaches without impacting the local nearshore habitat.

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Use of Innovative Technology: The original project was constructed using conventional beach fill methods and design. It is anticipated that the upcoming renourishment will utilize similar technology; however, the County continues to work with the DEP to modify the fill profile design with the intent of reducing the impact of this renourishment event on sea turtle nesting. It is the County's opinion that size of the fill and comparison areas and the fact that detailed sea turtle nesting and reproductive data is available for the past 10 years make this fill project the ideal location for an experimental fill template design.

Use of Program Funds

Funds requested for FY2008-9 will be used to support project-specific monitoring required by permit (currently sea turtle, shorebird, and nearshore reef). Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the Countywide Monitoring Agreement (#06PB3).

Attachments: Project Map, Table of sea turtle nesting activity, MPP timeline

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ID	Task Name	Duration	Start	Finish	% Complete	28 '05							Sep 4 '07
						M	T	W	T	F	S	S	M
1	JUNO BEACH RENOURISHMENT	715.94 days	Tue 8/30/05	Tue 5/27/08	41%								
2	Renourishment SOW	416.41 days	Tue 8/30/05	Wed 4/4/07	40%								
3	✓ Preliminary Meeting	1 day	Tue 8/30/05	Tue 8/30/05	100%								
4	✓ 1st Draft SOW Received	1 day	Tue 12/27/05	Tue 12/27/05	100%								
5	✓ County Review	1 day	Wed 1/11/06	Wed 1/11/06	100%								
6	✓ 2nd Draft SOW Received	1 day	Mon 1/23/06	Mon 1/23/06	100%								
7	✓ Sent to DEP for Review	1 day	Wed 1/25/06	Wed 1/25/06	100%								
8	✓ DEP comments received	1 day	Thu 2/23/06	Thu 2/23/06	100%								
9	✓ 3rd Draft SOW Received	1 day	Fri 4/14/06	Fri 4/14/06	100%								
10	✓ Sent to DEP for Review	57 days	Tue 4/18/06	Wed 7/5/06	100%								
11	✓ 4th SOW Received/Reviewed	11.81 days	Fri 9/1/06	Mon 9/25/06	100%								
12	5th SOW Received/Reviewed	120 days	Mon 10/16/06	Fri 3/30/07	2%								
13	DEP Authorization	1 day	Mon 4/2/07	Mon 4/2/07	0%								
14	Task Order Preparation	1 day	Wed 11/22/06	Tue 4/3/07	40%								
15	BCC Approval	1 day	Tue 4/3/07	Wed 4/4/07	0%								
16	SOW of Deliverables	614.79 days	Tue 8/30/05	Mon 1/7/08	45%								
17	Engineering Report 2006 Post Construction	258.79 days	Wed 1/10/07	Mon 1/7/08	43%								
18	Draft Report	11 mons	Wed 1/10/07	Tue 11/13/07	50%								
19	County Review	7.13 days	Tue 11/13/07	Thu 11/22/07	0%								
20	DEP Review/Authorization	30 days	Thu 11/22/07	Thu 1/3/08	0%								
21	Final Report Received/Reviewed	1.34 days	Thu 1/3/08	Mon 1/7/08	0%								
22	Beach Fill Design	110.56 days	Wed 4/4/07	Wed 9/5/07	0%								
23	Draft letter report & construction drawings	2.9 mons	Wed 4/4/07	Mon 6/25/07	0%								
24	County Review of draft report & drawings	6.69 days	Mon 6/25/07	Tue 7/3/07	0%								
25	DEP Review/Authorization	45 days	Tue 7/3/07	Tue 9/4/07	0%								
26	Receive/Review Final report & construction drawings	1.56 days	Tue 9/4/07	Wed 9/5/07	0%								
27	Borrow Area Delineation & Geotech	181 days	Thu 2/1/07	Thu 10/11/07	64%								
28	✓ Perform Side Scan Sonar & Magnetometer Surveys	21 days	Thu 2/1/07	Thu 3/1/07	100%								
29	Establish Cut Configuration	2 mons	Wed 4/4/07	Wed 5/30/07	0%								
30	Coordination of Borrow Area w/SHPO	160 days	Fri 3/2/07	Thu 10/11/07	65%								
31	✓ Borrow Area Easement	44 days	Wed 5/30/07	Mon 7/30/07	100%								
32	Nearshore Hardbottom Assessment	182.56 days	Thu 2/1/07	Mon 10/15/07	54%								
33	Fieldwork & Plan Development	180 days	Thu 2/1/07	Wed 10/10/07	55%								
34	Receive/review report	3 days	Wed 10/10/07	Mon 10/15/07	0%								
35	Project Permitting	179 days	Mon 2/19/07	Thu 10/25/07	52%								
36	✓ JCP Permit Application Prep	51 days	Mon 2/19/07	Mon 4/30/07	100%								
37	✓ ERM review of JCP	1 wk	Tue 5/1/07	Mon 5/7/07	100%								
38	✓ DEP review of JCP	21 days	Tue 5/8/07	Tue 6/5/07	100%								
39	✓ Respond to RAI	2.04 wks	Tue 6/5/07	Tue 6/19/07	100%								
40	✓ DEP review response to RAI	21 days	Mon 7/16/07	Mon 8/13/07	100%								
41	Respond to additional RAI	6 wks	Tue 8/14/07	Mon 9/24/07	70%								
42	DEP review response to additional RAI	21 days	Tue 9/25/07	Tue 10/23/07	0%								
43	Federal Agency Review/ERM Response	87.88 days	Tue 5/1/07	Tue 8/28/07	0%								
44	DEP Notice of Permit Completeness	1 day	Wed 10/24/07	Wed 10/24/07	0%								
45	DEP Permit	1 day	Thu 10/25/07	Thu 10/25/07	0%								
46	COE Permit	1 day	Tue 8/28/07	Wed 8/29/07	0%								
47	Meetings	512.88 days	Tue 8/30/05	Thu 8/16/07	74%								
48	✓ County staff meets with ATM	1 day	Tue 8/30/05	Tue 8/30/05	100%								
49	✓ County staff meets with ATM	1 day	Wed 9/27/06	Wed 9/27/06	100%								
50	✓ County staff meets with ATM	0.88 days	Thu 8/16/07	Thu 8/16/07	100%								
51	County staff meets with ATM	1 day	Fri 6/22/07	Fri 6/22/07	0%								
52	Plans & Specs	50.72 days	Thu 10/25/07	Thu 1/3/08	0%								
53	Draft Plans & Specs	19.72 days	Thu 10/25/07	Wed 11/21/07	0%								
54	DEP Authorization	30 days	Wed 11/21/07	Wed 1/2/08	0%								
55	Final Plans & Specs	1 day	Wed 1/2/08	Thu 1/3/08	0%								
56	Construction Contract	102.94 days	Fri 1/4/08	Tue 5/27/08	0%								
57	ENG Prep IFB	10 days	Fri 1/4/08	Thu 1/17/08	0%								
58	ENG Clarify IFB with ERM	12 days	Fri 1/18/08	Mon 2/4/08	0%								
59	Advertise for Bids	29 days	Tue 2/5/08	Fri 3/14/08	0%								
60	Pre-bid Site Visit	1 day	Fri 2/22/08	Fri 2/22/08	0%								
61	Pre-bid Meeting	1 day	Fri 2/22/08	Fri 2/22/08	0%								
62	IFB Quality Assurance	2 days	Mon 2/25/08	Thu 2/28/08	0%								
63	Bid Opening	1 day	Fri 3/14/08	Fri 3/14/08	0%								
64	ENG Bid Evaluation	5 days	Mon 3/17/08	Fri 3/21/08	0%								
65	ERM Bid Evaluation	3 days	Mon 3/24/08	Wed 3/26/08	0%								
66	OSBA Bid Evaluation	15 days	Mon 3/24/08	Fri 4/11/08	0%								
67	ENG Intent Notice to Award & Send Contract	10 days	Thu 3/27/08	Wed 4/9/08	0%								
68	Bid Posting by ENG	5 days	Wed 4/9/08	Tue 4/15/08	0%								
69	Contractor Sign/Insurance/Bond	14 days	Wed 4/16/08	Mon 5/5/08	0%								
70	ENG Review Contract/Insurance/Bond	6 days	Tue 5/6/08	Tue 5/13/08	0%								
71	Sign Contract (ERM to BCC)	14 days	Mon 4/14/08	Mon 5/26/08	0%								
72	Pre-Construction Meeting	0.63 days	Mon 5/26/08	Tue 5/27/08	0%								
73	Notice To Proceed	1 day	Mon 5/26/08	Tue 5/27/08	0%								
74	PRE-CONSTRUCTION MONITORING	485.1 days?	Tue 11/21/06	Tue 9/30/08	30%								
75	Develop Plan	1.11 mons	Tue 11/21/06	Thu 12/21/06	0%								
76	Review and Edit Plan	2.17 wks	Wed 12/27/06	Wed 1/24/07	0%								
77	✓ Sand Analysis & Compaction Testing 2007	14 days	Mon 3/5/07	Thu 3/22/07	100%								
78	Sand Analysis & Compaction Testing 2008	2 wks	Mon 3/3/08	Fri 3/14/08	0%								
79	Sea Turtle Monitoring 2007	7.6 mons	Thu 3/1/07	Sun 9/30/07	65%								
80	Sea Turtle Monitoring 2008	152 days?	Mon 3/3/08	Tue 9/30/08	0%								
81	✓ Aerial Cartographic Photography-2006	1 wk	Fri 12/22/06	Thu 12/28/06	100%								
82	Beach Profiles and Wading Surveys 2007	1 mon	Fri 12/22/06	Thu 1/18/07	0%								

KZ[40%],DB[40%]

Project: jun0 SP2
Date: Mon 9/24/07

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

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ID	Task Name	Duration	Start	Finish	% Complete	28, '05							Sep 4, '07	
						M	T	W	T	F	S	S	M	
83	Reef/Hardbottom Monitoring 2007	5 days	Mon 4/23/07	Fri 4/27/07	0%									
84	CONSTRUCTION	65 days	Fri 12/19/08	Thu 3/19/09	0%									
85	Mobilization	1 wk	Fri 12/19/08	Thu 12/25/08	0%									
86	Construction	3 mons	Fri 12/26/08	Thu 3/19/09	0%									
87	POST-CONSTRUCTION MONITORING	1067 days?	Tue 8/30/05	Wed 9/30/09	16%									
88	Develop Plan	1 mon	Thu 10/25/07	Wed 11/21/07	0%									
89	Review and Edit Plan	1.17 wks	Tue 11/27/07	Wed 12/5/07	0%									
90	Sea Turtle Monitoring 2009 -2010?	152 days	Tue 3/3/09	Wed 9/30/09	0%									
91	Engineering Reports	73.27 days?	Tue 8/30/05	Fri 12/9/05	100%									
92	Engineering Report (4-Year Post Nourishment)	73.27 days?	Tue 8/30/05	Fri 12/9/05	100%									
93	Scope and Cost Estimate	0.71 mons	Tue 8/30/05	Mon 10/10/05	100%									
94	Task Order Authorization	1 day	Mon 10/10/05	Tue 10/11/05	100%									
95	Data Collection and Report	1 day	Tue 10/11/05	Wed 10/12/05	100%									
96	Draft Report Received by County & DEP	1 day?	Wed 10/12/05	Thu 10/13/05	100%									
97	County comments sent to Taylor	0.62 days?	Thu 10/13/05	Fri 10/14/05	100%									
98	DEP comments received & sent to Taylor	2 mons	Fri 10/14/05	Fri 12/9/05	100%									
99	Final Report Received & sent to DEP	0.06 days	Fri 12/9/05	Fri 12/9/05	100%									
100	STATE FUNDING	455 days	Fri 4/7/06	Fri 1/4/08	11%									
101	Prepare & Submit FY 07/08 Funding Application to FDEP	29 days	Thu 8/3/06	Tue 9/12/06	100%									
102	FDEP Review	25 days	Wed 9/13/06	Tue 10/17/06	0%									
103	Legislative Priority	46 days	Wed 10/18/06	Wed 12/20/06	0%									
104	Legislative Budget 07/08	40 days	Thu 12/21/06	Wed 2/14/07	0%									
105	Submit Request for Reimbursement Agreement	7 days	Thu 2/15/07	Fri 2/23/07	0%									
106	Funding/ Reimbursement Agreement	161 days	Mon 2/26/07	Mon 10/8/07	0%									
107	PBC Review/Sign Agreement	52 days	Tue 10/9/07	Wed 12/19/07	0%									
108	STATE GRANT REPORTS/INVOICES	455 days	Fri 4/7/06	Fri 1/4/08	56%									
109	q1 Report 2007	6.19 days	Fri 4/7/06	Fri 4/14/06	100%									
110	q2 Report 2007	6 days	Thu 7/13/06	Thu 7/20/06	100%									
111	q3 Report 2007	5.23 days	Mon 10/1/07	Fri 10/5/07	0%									
112	q4 Report 2007	4.28 days	Tue 1/1/08	Fri 1/4/08	0%									

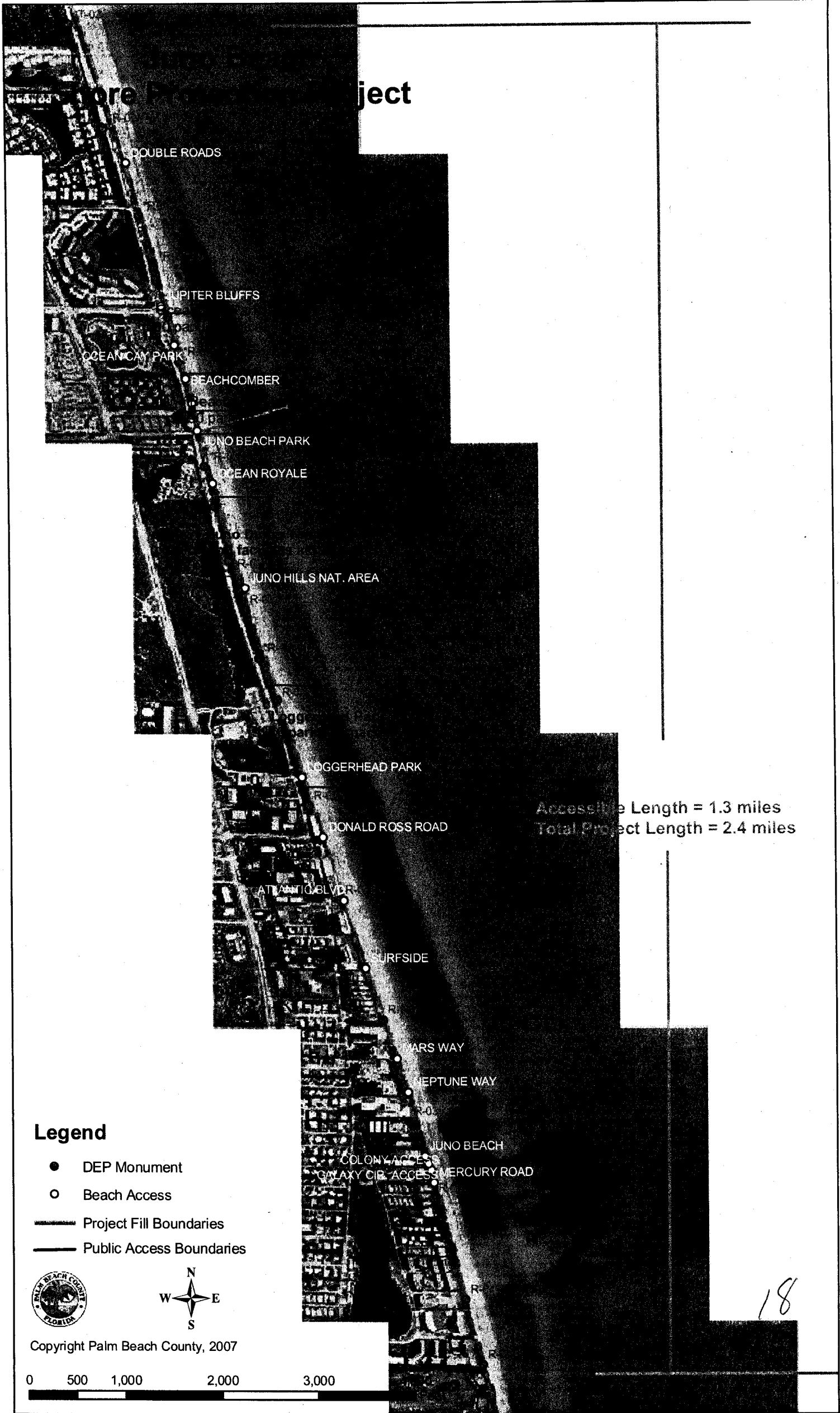


Project: juno SP2
Date: Mon 9/24/07

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

17

Project



DOUBLE ROADS

PITER BLUFFS

OCEAN CAY PARK

BEACHCOMBER

JUNO BEACH PARK

OCEAN ROYALE

JUNO HILLS NAT. AREA

LOGGERHEAD PARK

DONALD ROSS ROAD

ATLANTIC BLVD

SURFSIDE

MARS WAY

NEPTUNE WAY

JUNO BEACH

COLONY ACCESS

GALAXY CTR ACCESS MERCURY ROAD

Accessible Length = 1.3 miles
Total Project Length = 2.4 miles

Legend

- DEP Monument
- Beach Access
- Project Fill Boundaries
- Public Access Boundaries



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0 500 1,000 2,000 3,000

18

Summary of sea turtle nesting for all survey zones from 1990 to 2006 at Juno Beach, Florida

Nests

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	4634	5424	5301	3778	5377	6636	6104	5080	5114	8442	5173	4749	4172	3778	2516	2362	2851
Green	268	18	168	17	328	48	282	61	355	82	606	28	860	215	236	524	267
Leatherback	18	30	22	13	50	26	32	39	38	113	34	128	77	86	47	93	75
Total	4920	5472	5491	3808	5755	6710	6418	5180	5507	8637	5813	4905	5109	4079	2799	2979	3193

Non-Nesting Emergences

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	3742	4128	3977	2989	5131	5547	3786	3388	5401	8147	4910	4193	3699	4250	4674	3182	3092
Green	249	18	247	7	310	36	348	54	1271	57	916	17	1691	385	691	1276	536
Leatherback	2	2	1	1	5	2	9	1	4	8	3	13	7	3	9	17	5
Total	3993	4148	4225	2997	5446	5585	4143	3443	6676	8212	5829	4223	5397	4638	5374	4475	3633

Total Crawls

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	8376	9552	9278	6767	10508	12183	9890	8468	10515	16589	10083	8942	7871	8028	7190	5544	5943
Green	517	36	415	24	638	84	630	115	1626	139	1522	45	2551	600	927	1800	803
Leatherback	20	32	23	14	55	28	41	40	42	121	37	141	84	89	56	110	80
Total	8913	9620	9716	6805	11201	12295	10561	8623	12183	16849	11642	9128	10506	8717	8173	7454	6826

Nesting Success

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	55%	57%	57%	56%	51%	54%	62%	60%	49%	51%	51%	53%	53%	47%	35%	43%	48%
Green	52%	50%	40%	71%	51%	57%	45%	53%	22%	59%	40%	62%	34%	36%	25%	29%	33%
Leatherback	90%	94%	96%	93%	91%	93%	78%	98%	90%	93%	92%	91%	92%	97%	84%	85%	94%
Total	55%	57%	57%	56%	51%	55%	61%	60%	45%	51%	50%	54%	49%	47%	34%	40%	47%

Nesting Density

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Loggerhead	774	906	885	631	898	1108	1019	848	854	1409	864	793	696	631	420	394	476
Green	45	3	28	3	55	8	47	10	59	14	101	5	144	36	39	87	45
Leatherback	3	5	4	2	8	4	5	7	6	19	6	21	13	14	8	16	13
Total	821	914	917	636	961	1120	1071	865	919	1442	970	819	853	681	467	497	533

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SINGER ISLAND SHORE PROTECTION PROJECT

Project Description

This project consists of design, permitting, construction, and monitoring associated with the restoration of 1.8 miles of coastline on Singer Island. The restored dune will reduce the impact of storms, add a reservoir of sand and help dissipate wave energy. Structures will be used to stabilize the beach.

Location

Palm Beach County, R-60.5 to R-69 (See attached location map.)

Project Evaluation

Severity of Erosion: Rapid fluctuations in shoreline position threaten developed property along 76% of the project area. The project area is located within an area of critical erosion as designated by the Department; since 2001, erosion rates have been calculated up to -15 ft/yr. Recent hurricanes and storm activity have accelerated the beach erosion throughout the area. Dune restoration and plantings have been necessary each year to protect upland properties since 2004. The hurricanes of 2004 and 2005 destroyed the restored dunes and lowered the berm height. The beach has not recovered, and continues to be impacted by wind and waves due to winter storms and tropical activity, most recently Sub-Tropical Storm Andrea.

Benefits: Shoreline development within the project area consists of multifamily/hotel structures and public park land, 80% of which lies within ½ mile of the Riviera Beach Municipal Park, Ocean Reef Park or MacArthur State Park. Public beach access, as shown on the attached map, allows for public and tourism use throughout the project area. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area.

Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

State Commitment: The feasibility studies for the project were funded by the state (01PB1) and the project is included in the Strategic Beach Management Plan. The initial phase of dune restoration was funded by the state (01PB1), as were subsequent restorations (H5PB1) and design and initial permitting of erosion control structures (05PB2 and 06PB2). Most recently, this area was included under emergency funding grant 07PB2 for dune restoration.

Local Commitment & Capability: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. Funds for the local share of the project costs are budgeted through tourism bed tax and ad valorem funding. The degree of local funding proposed is detailed in the attached financial schedule. Palm Beach County will use staff for project management of all phases of beach work, including dune replenishment and the erosion control structures. The County has retained the services of a professional coastal engineering firm to assist in feasibility, design, permitting, and other project related activities. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others.

Project Performance: The project design is based on an updated feasibility study. The project is designed to enhance shore protection by the restoration of the native dunes and stabilization of the berm in an area where extensive near shore environmental resources would be impacted by beach nourishment. The structures will provide long term stabilization (>25 years) to the project area. The dune component of the project utilizes local sand resources to minimize cost. The proposed structures are based on the least-cost alternative suggested in the feasibility study and are designed to provide long-term stability.

Innovative Applications: The structural components are based on the use of innovative modeling technology to minimize the extent of construction necessary for shoreline stabilization. The combination of dune restoration and structural stabilization instead of conventional beach nourishment minimizes the

Use of Program Funds

The requested funding for FY 2008-9 for this area will be used for the pre-construction environmental monitoring and construction of structures for this area. The requested funding will be used supplement monies already appropriated for construction of the erosion control structures, as construction estimates have shown that actual costs will likely be much higher than anticipated. Project specific environmental monitoring to be funded includes sea turtle nesting and reproductive success, shorebird populations, and near shore reef monitoring. Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the Countywide Monitoring Agreement (#06PB3).

Attachments: Project map, MPP timeline

Beach and Shore Restoration Project

500

Accessible Beach Length: 1.13 miles
Total Project Length: 1.45 miles

Legend

- DEP Monument
- Beach Access
- Project Fill Boundaries
- Public Access Boundaries



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OCEAN REEF PARK

22

**SCHEDULE FOR SINGER ISLAND
 UPDATED: SEPTEMBER 12, 2007
 EROSION CONTROL PROJECT
 HUMISTON & MOORE ENGINEERS**

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors
1	Task 1 Data Collection & Baseline Establishment	287 days	Mon 5/2/05	Tue 6/6/06	100%	39
2	Review Existing Studies	30 days	Mon 5/2/05	Fri 6/10/05	100%	
3	Review Previous Studies	25 days	Mon 5/2/05	Fri 6/3/05	100%	
4	Review Hydrographic Data	25 days	Mon 5/2/05	Fri 6/3/05	100%	
5	Review Topographic Data	25 days	Mon 5/2/05	Fri 6/3/05	100%	
6	Compile Data	5 days	Mon 6/6/05	Fri 6/10/05	100%	3,4,5
7	Determine need for additional data	5 days	Mon 6/6/05	Fri 6/10/05	100%	3,4,5
8	Geotechnical Data	42 days	Mon 5/2/05	Tue 6/28/05	100%	
9	Existing Hardbottom and Bedrock Data	40 days	Mon 5/2/05	Fri 6/24/05	100%	
10	Review Existing Data	25 days	Mon 5/2/05	Fri 6/3/05	100%	
11	Prepare Base Maps	35 days	Mon 5/2/05	Fri 6/17/05	100%	
12	Determine Additional Data Needed	5 days	Mon 6/20/05	Fri 6/24/05	100%	10,11
13	Existing Borrow Area Data	20 days	Wed 6/1/05	Tue 6/28/05	100%	
14	Review Existing Offshore Data	10 days	Wed 6/1/05	Tue 6/14/05	100%	
15	Perform Analysis	10 days	Wed 6/15/05	Tue 6/28/05	100%	14
16	Review Existing Upland Data	10 days	Wed 6/1/05	Tue 6/14/05	100%	
17	Perform Analysis	10 days	Wed 6/15/05	Tue 6/28/05	100%	16
18	Project Development Meeting	1 day	Wed 6/29/05	Wed 6/29/05	100%	
19	Meeting	1 day	Wed 6/29/05	Wed 6/29/05	100%	15,17
20	Data Collection	244 days	Thu 6/30/05	Tue 6/6/06	100%	19
21	Hardbottom and Bedrock Phase 1	15 days	Wed 3/15/06	Tue 4/4/06	100%	12
22	Hardbottom and Bedrock Phase 2	15 days	Wed 4/5/06	Tue 4/25/06	100%	21
23	Hardbottom and Bedrock Phase 3	15 days	Wed 4/26/06	Tue 5/16/06	100%	22
24	Hardbottom and Bedrock Phase 4	20 days	Wed 5/10/06	Tue 6/6/06	100%	
25	Wave and Current	30 days	Thu 6/30/05	Wed 8/10/05	100%	
26	Wave and Current	35 days	Wed 3/15/06	Tue 5/2/06	100%	
27	Task 2 Project Design	170 days	Wed 3/30/05	Tue 11/22/05	100%	
28	Develop Design Criteria	170 days	Wed 3/30/05	Tue 11/22/05	100%	
29	Determine Erosional Stress	80 days	Wed 3/30/05	Tue 7/19/05	100%	
30	Perform Modeling	90 days	Wed 7/20/05	Tue 11/22/05	100%	29
31	Preliminary Design	100 days	Wed 3/30/05	Tue 8/16/05	100%	
32	Erosion Control Structures	100 days	Wed 3/30/05	Tue 8/16/05	100%	
33	Prepare Site Plan	90 days	Wed 3/30/05	Tue 8/2/05	100%	
34	Estimate Cost	10 days	Wed 8/3/05	Tue 8/16/05	100%	33
35	Nearshore Reef	95 days	Wed 3/30/05	Tue 8/9/05	100%	
36	Prepare Site Plan	90 days	Wed 3/30/05	Tue 8/2/05	100%	
37	Estimate Cost	5 days	Wed 8/3/05	Tue 8/9/05	100%	36
38	Beach Fill	90 days	Wed 3/30/05	Tue 8/2/05	100%	
39	Prepare Site Plan	90 days	Wed 3/30/05	Tue 8/2/05	100%	
40	Estimate Cost	5 days	Wed 3/30/05	Tue 4/5/05	100%	
41	Task 3 FDEP Permit	835 days	Wed 3/30/05	Tue 6/10/08	49%	
42	Pre-Application Meetings	229 days	Wed 3/30/05	Mon 2/13/06	100%	
43	Coordinate Meetings	30 days	Wed 3/30/05	Tue 5/10/05	100%	
44	COE Meeting	1 day	Mon 1/16/06	Mon 1/16/06	100%	43
45	DEP Meeting	1 day	Tue 2/7/06	Tue 2/7/06	100%	44
46	Prepare Summary of Meetings	4 days	Wed 2/8/06	Mon 2/13/06	100%	45
47	JCP Application	835 days	Wed 3/30/05	Tue 6/10/08	48%	
48	Prepare Final Design - Erosion Control	41 days	Wed 3/30/05	Wed 5/25/05	100%	
49	Prepare Final Design - Nearshore Reef	41 days	Wed 3/30/05	Wed 5/25/05	100%	
50	Prepare Final Design - Beach Fill	41 days	Wed 3/30/05	Wed 5/25/05	100%	
51	Prepare JCP Application	25 days	Thu 5/26/05	Wed 6/29/05	100%	48,49,50
52	County Review op application	240.13 days	Wed 6/29/05	Fri 6/30/06	100%	51
53	Responses to RAI's	18 mons	Wed 8/2/06	Tue 12/18/07	50%	52
54	DEP issues Permit	1 mon	Wed 12/19/07	Tue 1/15/08	0%	53
55	Develop EIS	20 mons	Wed 11/1/06	Tue 5/13/08	0%	50
56	COE issues Permit	1 mon	Wed 5/14/08	Tue 6/10/08	0%	55
57	Construction	556.84 days	Thu 10/16/08	Mon 12/6/10	0%	
58	Prepare Technical Specifications	2 wks	Thu 10/16/08	Tue 10/28/08	0%	55

Project: Singer
 Date: Wed 9/19/07











Task		Rolled Up Progress	
Progress		Split	
Milestone		External Tasks	
Summary		Project Summary	
Rolled Up Task		Group By Summary	
Rolled Up Milestone		Deadline	

23

**SCHEDULE FOR SINGER ISLAND
 UPDATED: SEPTEMBER 12, 2007
 EROSION CONTROL PROJECT
 HUMISTON & MOORE ENGINEERS**

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors
59	Construction Contract	363.44 days	Wed 10/29/08	Mon 3/22/10	0%	
60	ENG Prep IFB	10 days	Wed 10/29/08	Tue 11/11/08	0%	58
61	ERM Respond to ENG IFB ?s	3 days	Wed 11/12/08	Fri 11/14/08	0%	60
62	ENG Clarify IFB with ERM	2 days	Mon 11/17/08	Tue 11/18/08	0%	61
63	Advertise for Bids	29 days	Wed 11/19/08	Mon 12/29/08	0%	62
64	Pre-bid Site Visit	1 day	Mon 12/8/08	Mon 12/8/08	0%	63FS-16 days
65	Pre-bid Meeting	1 day	Mon 12/8/08	Mon 12/8/08	0%	63FS-16 days
66	ERM Respond to ENG Addenda ?s	2 days	Tue 12/9/08	Wed 12/10/08	0%	65
67	IFB Quality Assurance	2 days	Thu 12/11/08	Fri 12/12/08	0%	66
68	Bid Opening	1 day	Mon 12/29/08	Mon 12/29/08	0%	63FF
69	ENG Bid Evaluation	5 days	Tue 12/30/08	Mon 1/5/09	0%	68
70	ERM Bid Evaluation	10 days	Tue 1/6/09	Mon 1/19/09	0%	69
71	OSBA Bid Evaluation	15 days	Tue 1/6/09	Mon 1/26/09	0%	69
72	ENG Intent Notice to Award & Send Contract	10 days	Tue 1/20/09	Mon 2/2/09	0%	70
73	Bid Posting by ENG	5 days	Mon 2/2/09	Fri 2/6/09	0%	72FS-1 day
74	Contractor Sign/Insurance/Bond	14 days	Tue 2/3/09	Fri 2/20/09	0%	72
75	ENG Review Contract/Insurance/Bond	6 days	Mon 2/23/09	Mon 3/2/09	0%	74
76	ERM Submit Contract Board Item	14 days	Tue 12/29/09	Mon 1/18/10	0%	75
77	Sign Contract (ERM to BCC)	35 days	Mon 1/18/10	Mon 3/8/10	0%	76
78	Pre-Construction Meeting	1 day	Mon 3/8/10	Tue 3/9/10	0%	77
79	Notice To Proceed	10 days	Mon 3/8/10	Mon 3/22/10	0%	77
80	Construction	185 days	Mon 3/22/10	Mon 12/6/10	0%	
81	mobilize staging site	1 wk	Mon 3/22/10	Mon 3/29/10	0%	79
82	place rock	9 mons	Mon 3/29/10	Mon 12/6/10	0%	81

Project: Singer
 Date: Wed 9/19/07

Task		Rolled Up Progress	
Progress		Split	
Milestone		External Tasks	
Summary		Project Summary	
Rolled Up Task		Group By Summary	
Rolled Up Milestone	<input checked="" type="checkbox"/>	Deadline	<input checked="" type="checkbox"/>

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SOUTH PALM BEACH SHORE PROTECTION PROJECT

Project Description

Restoration of approximately 0.7 miles of critically eroding shoreline along the entire length of the municipality and the public beach in Lantana. A feasibility study for the project is complete and an Environmental Impact Statement for the project is underway. Persistent dunes within the project area are restored on an as-needed basis, most recently in response to near total loss of dune resulting from sub-tropical Storm Andrea (May 2007). Sand lost from the berm during the 2004 and 2005 hurricanes has not been restored however; staff works to maintain the current level of the beach with dune stabilizing plantings.

Location

Palm Beach County, R-134 - R-137.5 (fill area), map attached.

Project Evaluation

Severity of Erosion: The area is designated critically eroded by the Florida State Department of Environmental Protection. The hurricanes of 2004 and 2005 destroyed the restored dunes and lowered the berm height. The beach has not recovered, and continues to be impacted by wind and waves due to winter storms and tropical activity.

Benefits: The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. A total of 96% of the project area shoreline is available for public recreational use (within ½ mile of Lantana Public Beach). Approximately 22% of the project area is publicly owned parks and beach access ways. A total of 78% of the project area consists of a hotel and multifamily structures. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area.

Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

State Commitment: Grant funding was provided for the dune work and feasibility study. The project is included in the Florida DEP Beach Restoration Management Plan. Funding provided in the 2006/2007 fiscal year has been exhausted on the feasibility study and dune fill projects. Most recently, this area was included under emergency funding grant 07PB2 for dune restoration.

Local Commitment: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. The degree of local funding proposed is detailed in the attached financial schedule. Most recently, an interlocal agreement has been signed by the Town of South Palm Beach to provide a share of the local cost for the design, permitting, and construction of erosion control structures. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others. County staff will provide administrative, contract development, legal, permitting, environmental monitoring and construction management services.

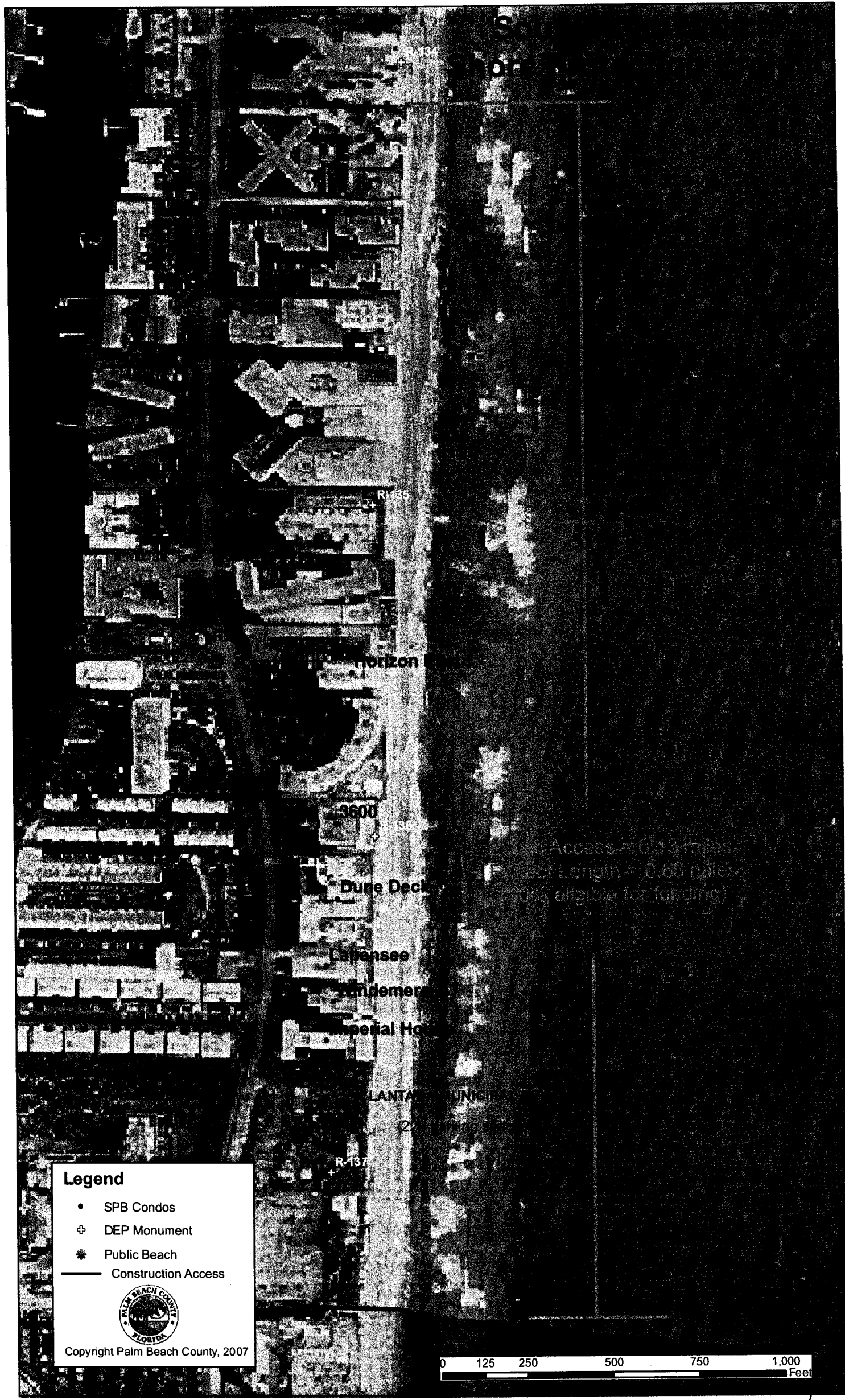
Innovative Applications: Innovative modeling technology is being used to minimize the extent of construction necessary for shoreline stabilization. Preliminary results show that a combination of dune restoration and structural stabilization instead of conventional beach nourishment will minimize the potential impacts to extensive nearshore hardbottom resources in the vicinity.

Use of Program Funds

Funds requested for FY 2008-9 will be used to support project design and permitting as well as pre-construction environmental and biological monitoring. Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the Countywide Monitoring Agreement (#06PB3).


Attachments: Project map, MPP timeline

25



Legend

- SPB Condos
- ⊕ DEP Monument
- * Public Beach
- Construction Access



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ID	Task Name	Duration	Start
1	South Palm Beach Erosion Control Engineering Alternative Development	1143 days?	Tue 4/18/06
2	Erosion Control Study DRAFT received	211 days?	Tue 4/18/06
3	After review of DRAFT, ERM staff supports development of an Environmental Impact Statement (EIS) for erosion control	12 days	Tue 2/6/07
4	Attend Town of South Palm Beach Town Council Meeting to present study results & request financial participation of 20% for an erosion control project	1 day	Wed 2/28/07
5	BCC approves Interlocal Agreement w/ South Palm Beach for financial participation of 20%	1 day	Tue 5/15/07
6	County feasibility study comments sent to CPE	1 day	Fri 5/18/07
7	Emergency dune restoration due to Subtropical Storm Andrea (7,000 CY placed)	10 days?	Tue 5/29/07
8	FINAL copies of the Feasibility Study Received	1 day	Thu 7/5/07
9	All consultant qualification packages received by the ACOE local office	40 days?	Fri 5/18/07
10	ERM staff attends meeting w/ ACOE to discuss project & EIS	1 day	Tue 9/4/07
11	ACOE informs ERM staff that an EA will be have to be completed for the SPB Project	1 day	Wed 9/12/07
12	ACOE selects consultant to perform EA	9 days?	Wed 9/12/07
13	Consultant delivers 1st draft SOW to ERM staff	11 days?	Mon 9/24/07
14	ERM staff reviews 1st draft SOW	0.81 days	Fri 10/12/07
15	ERM staff sends 1st draft for FDEP comment	16 days?	Mon 10/8/07
16	ERM staff requests 2nd draft of EA SOW	1 day?	Mon 10/15/07
17	ERM staff receives & reviews 2nd draft SOW	9.75 days?	Mon 10/15/07
18	ERM requests 3rd and final SOW	1 day?	Mon 10/29/07
19	FINAL SOW Received & Reviewed	1 day?	Mon 11/5/07
20	ERM receives FDEP approval	1 day?	Tue 11/13/07
21	FDEP FUNDING	46 days?	Mon 10/8/07
22	ERM requests FDEP cost sharing for EA	1 day?	Mon 10/8/07
23	ERM receives funding areement	1 day?	Mon 12/10/07
24	Task Order PREP	34 days?	Thu 11/1/07
25	Prepare Toask Order & Board Item	9 days?	Thu 11/1/07
26	Approval of BCC	1 day?	Tue 12/18/07
27	Verbal NTP	1 day?	Tue 12/18/07
28	SOW Deliverables	315 days?	Tue 12/18/07
29	FDEP & ACOE Coordination Meetings	263 days?	Tue 12/18/07
30	EA DRAFT REPORT	263 days?	Tue 12/18/07
31	Permit Application Submitted to Agencies	187 days?	Thu 5/1/08
32	EA FINAL REPORT	22 days?	Thu 12/18/08
33	PERMITS Received	218 days	Thu 5/1/08
34	CONSTRUCTION CONTRACTOR SELECTION	18 days?	Mon 6/1/09
35	Advertise for Bids	11 days?	Mon 6/1/09
36	Open Bids	6 days?	Mon 6/15/09
37	Award Contract	1 day?	Wed 6/24/09
38	Construct Engineering Alternative	307 days?	Wed 7/1/09
39	Mobilization	3 days	Wed 7/1/09
40	Construction	305 days?	Wed 7/1/09
41	Demobilization	2 days	Wed 9/1/10
42	Pre & Post Construction Monitoring	2 days	Wed 7/1/09
43	Biological moniring (TBD)	2 days	Wed 7/1/09
44	Physical Monitoring (TBD)	2 days	Wed 7/1/09
45	Quarterly Reports	394 days?	Mon 7/16/07
46	Q4 2007	1 day?	Tue 1/15/08
47	Q1 2008	1 day?	Mon 4/14/08
48	Q2 2008	1 day?	Mon 7/16/07
49	Q3 2008	1 day?	Wed 10/15/08
50	Q4 2008	1 day?	Thu 1/15/09

Project: spbd 2 Date: Wed 9/19/07	Task		Project Summary	
	Split		External Tasks	
	Progress		External Milestone	
	Milestone		Deadline	
	Summary			

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Finish	% Complete	Predecessors	Apr 16, '06							Apr 23, '06							Apr 30, '06							May 7, '06						
			S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T		
Thu 9/2/10	17%																													
Tue 2/6/07	100%																													
Wed 2/21/07	100%																													
Wed 2/28/07	100%																													
Tue 5/15/07	100%																													
Fri 5/18/07	100%																													
Mon 6/11/07	100%																													
Thu 7/5/07	100%																													
Thu 7/12/07	100%																													
Tue 9/4/07	100%																													
Wed 9/12/07	100%																													
Mon 9/24/07	0%																													
Mon 10/8/07	0%																													
Mon 10/15/07	0%																													
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Mon 3/2/09	0%																													
Thu 12/18/08	0%																													
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Fri 1/16/09	0%																													
Mon 3/2/09	0%																													
Wed 6/24/09	0%																													
Mon 6/15/09	0%																													
Mon 6/22/09	0%																													
Wed 6/24/09	0%																													
Thu 9/2/10	0%																													
Fri 7/3/09	0%																													
Tue 8/31/10	0%																													
Thu 9/2/10	0%	40																												
Thu 7/2/09	0%																													
Thu 7/2/09	0%																													
Thu 7/2/09	0%																													
Thu 1/15/09	0%																													
Tue 1/15/08	0%																													
Mon 4/14/08	0%																													
Mon 7/16/07	0%																													
Wed 10/15/08	0%																													
Thu 1/15/09	0%																													

Project: spbd 2 Date: Wed 9/19/07	Task		Project Summary	
	Split		External Tasks	
	Progress		External Milestone	
	Milestone		Deadline	
	Summary			

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SOUTH LAKE WORTH INLET MANAGEMENT

Project Description

The project consists of design, permitting, construction, and monitoring associated with the implementation of the South Lake Worth Inlet Management Plan. Activities occurring under this project include the periodic dredging of the sand trap and navigational channel located inside the inlet and the reconstruction of the sand transfer plant.

Location

Palm Beach County, R-152 (monitoring from R137-R164)

Project Evaluation

Severity of Erosion: Interruption of the natural sand transport threatens developed property along 77% of the project area. The historic erosion rate along the project shoreline was computed to be five cy/yr/lf (Aug 1996 GDM). Over the anticipated six year renourishment schedule, the erosion rate is anticipated to average 7.44 cy/yr/lf (including end losses).

This area is located within an area of critical erosion as designated by the Department.

Benefits:

Shoreline development within the project area consists of developed property and public park land, 100% of which lies within ½ mile of adequate public access facilities. Public beach access allows for public and tourism use throughout the project area. Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

Federal Commitment: This project has not been federally authorized, however a one-time allotment has been awarded to repair damages to the sand transfer plant and to the inlet jetty as a result of the 2004 hurricanes. This money, authorized by FEMA, will be used to offset construction costs.

State Commitment: The management plan for the project and annual monitoring was funded by the state and the project is included in the Strategic Beach Management Plan. The initial phase of sand trap development & restoration of the sand transfer plant was funded by the state. The funding appropriation for the SLWI jetty restoration was confirmed by the legislature on July 17, 2007. The original grant for this project (99PB1) has been extended several times and expires on February 28, 2008.

Local Commitment & Capability: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. The degree of local funding proposed is detailed in the attached financial schedule. The County has retained the services of a professional coastal engineering firm to assist in feasibility, design, permitting, and other project related activities. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others.

Project Performance: The project mitigates for adverse impacts associated with the inlet, providing 100% of the bypass quantity required by the approved management plan. The project area acts as a feeder beach to maintain down drift areas which contain nearshore hardbottom habitat. The transfer plant continues to provide a cost effective and environmentally sound method of bypassing sand over an extended time period. The latest data show the sand transfer plant bypasses approximately 60,000 CY annually to down drift beaches. Sand trap and navigational channel dredging maximize the use of sediment sources in maintaining the beach. The performance of sand bypass into the groin field is such that the area maintained its width throughout the project interval and did not require any fill during the most recent downdrift beach nourishment (Ocean Ridge shore protection project, completed Dec 2005), resulting in a cost savings through the reduction in the amount of fill necessary.

Innovative Applications: The plant is a component of an innovative approach to maintain the downdrift beaches using inlet sand bypass discharge into a groin field. The bypassed sand is native beach material, with color, fine fraction and compaction characteristics which has been shown to not impact sea turtle nesting success. The steady rate of transfer eliminates the need for advanced fill and the related impacts to nearshore hardbottom.

Use of Program Funds

The requested funding will be used for design, permitting, construction, and monitoring associated with the implementation of the South Lake Worth Inlet Management Plan. Additional funds for construction are needed to rebuild the existing sand transfer plant. Construction of the new plant has been combined with the Inlet jetty repair and the construction of the Bird Island Bulkhead, and will be bid out as one project. Construction is scheduled to begin in the spring of 2008.

Attachments: MPP timeline (see Ocean Ridge attachment for map of project area)

SLWI Jetty Restoration

ID	Task Name	Duration	Start	Finish	% Complet
1	Funding	380 days	Wed 2/1/06	Tue 7/17/07	100%
2	Capital project funding request	3 days	Wed 2/1/06	Fri 2/3/06	100%
3	ERM admin review	40 days	Fri 2/3/06	Fri 3/31/06	100%
4	Revised cp funding request to county admin	23 days	Fri 3/31/06	Wed 5/3/06	100%
5	Capital project funding request re-submitted	3 days	Thu 2/1/07	Mon 2/5/07	100%
6	ERM admin review	40 days	Tue 2/6/07	Mon 4/2/07	100%
7	Revised CP funding request resubmitted to CA	23 days	Tue 4/3/07	Thu 5/3/07	100%
8	BCC approval	53 days	Fri 5/4/07	Tue 7/17/07	100%
9	Design	475 days	Thu 12/1/05	Wed 9/26/07	86%
10	Engineering	475 days	Thu 12/1/05	Wed 9/26/07	86%
11	task order Bridge Design	1 wk	Thu 12/1/05	Wed 12/7/05	100%
12	30% plans	4 mons	Thu 12/1/05	Wed 3/22/06	100%
13	90% plans	70 days	Thu 3/23/06	Wed 6/28/06	100%
14	final design	325 days	Thu 6/29/06	Wed 9/26/07	80%
15	Permitting	615.56 days	Thu 12/1/05	Thu 4/10/08	5%
16	COE approval	9 mons	Thu 12/1/05	Wed 8/9/06	10%
17	Construction Contract	191.56 days	Wed 7/18/07	Thu 4/10/08	0%
18	ENG Prep IFB	10 days	Wed 7/18/07	Tue 7/31/07	0%
19	ENG Clarify IFB with ERM	7 days	Wed 8/1/07	Thu 8/9/07	0%
20	Advertise for Bids	29 days	Fri 8/10/07	Wed 9/19/07	0%
21	Pre-bid Site Visit	1 day	Wed 8/29/07	Wed 8/29/07	0%
22	Pre-bid Meeting	1 day	Wed 8/29/07	Wed 8/29/07	0%
23	IFB Quality Assurance	3 days	Thu 8/30/07	Mon 9/10/07	0%
24	Bid Opening	1 day	Wed 9/19/07	Wed 9/19/07	0%
25	ENG Bid Evaluation	5 days	Thu 9/20/07	Wed 9/26/07	0%
26	ERM Bid Evaluation	22.88 days	Thu 9/27/07	Mon 10/29/07	0%
27	OSBA Bid Evaluation	15 days	Thu 9/27/07	Wed 10/17/07	0%
28	ENG Intent Notice to Award & Send Contract	10 days	Mon 10/29/07	Mon 11/12/07	0%
29	Bid Posting by ENG	5 days	Fri 11/9/07	Fri 11/16/07	0%
30	Contractor Sign/Insurance/Bond	14 days	Mon 11/12/07	Fri 11/30/07	0%
31	ENG Review Contract/Insurance/Bond	6 days	Fri 11/30/07	Mon 12/10/07	0%
32	Sign Contract (ERM to BCC)	35 days	Mon 12/24/07	Wed 4/9/08	0%
33	Pre-Construction Meeting	1 day	Wed 4/9/08	Thu 4/10/08	0%
34	Notice To Proceed	1 day	Wed 4/9/08	Thu 4/10/08	0%
35	Construction	116.81 days	Mon 6/2/08	Wed 11/12/08	0%
36	mobilize	1 wk	Mon 6/2/08	Mon 6/9/08	0%
37	build jetty	5 mons	Mon 6/9/08	Mon 10/27/08	0%
38	demobilize	1 wk	Wed 11/5/08	Wed 11/12/08	0%
39	Contract Close-Out	6.81 days	Tue 11/4/08	Thu 11/13/08	0%
40	as-built review	2 days	Tue 11/4/08	Thu 11/6/08	0%
41	CRC approval	1 day	Wed 11/12/08	Thu 11/13/08	0%
42	FEMA reimbursement	62 days	Wed 11/19/08	Fri 2/13/09	0%
43	Prepare & submit invoice	2 days	Wed 11/19/08	Fri 11/21/08	0%
44	reimbursement	3 mons	Fri 11/21/08	Fri 2/13/09	0%

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South Lake Worth Inlet STP

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Design Parameter Development	66 days	Mon 2/14/00	Mon 5/15/00		
2	ERM/R&B Staff consulting	1 day	Mon 2/14/00	Mon 2/14/00		
3	Draft Parameter Plan (R&B)	30 days	Mon 2/14/00	Fri 3/24/00		2
4	Plan Review (ERM)	15 days	Mon 2/28/00	Fri 3/17/00		3
5	Final Plan	41 days	Mon 3/20/00	Mon 5/15/00		4
6	Consultant Services	1646 days	Tue 3/21/00	Tue 7/11/06		
7	Notice for Professional services	21 days	Tue 3/21/00	Tue 4/18/00		2
8	Advertise/Receive Submittals	18 days	Wed 5/10/00	Fri 6/2/00		7
9	Review Submittals/Pre-Selection	40 days	Tue 6/13/00	Mon 8/7/00		8
10	Consultants Prepare Presentations/Selection	39 days	Tue 8/8/00	Fri 9/29/00		9
11	Prepare/Negotiate Contract	140 days	Mon 10/2/00	Fri 4/13/01		10
12	Sign Contract	22 days	Mon 4/16/01	Tue 5/15/01		11
13	30% Design Plans	90 days	Mon 4/8/02	Fri 8/9/02		12
14	ERM/R&B Review	20 days	Mon 8/12/02	Fri 9/6/02		13
15	70% Design Plans + Draft Specifications	195 days	Mon 9/9/02	Fri 6/6/03		14
16	ERM/R&B Review	39 days	Mon 6/9/03	Thu 7/31/03		15
17	95% Design Plans & Specifications	401 days	Fri 8/1/03	Fri 2/11/05		16
18	PBC/Departmental Review	120 days	Mon 2/14/05	Fri 7/29/05		17
19	100% Design Plans & Specifications	247 days	Mon 8/1/05	Tue 7/11/06		18
20	PBC/Departmental Review	3 days	Tue 5/2/06	Thu 5/4/06		T[1%],MA[5%]
21	Technical Review Committee Meetings	426 days	Wed 11/5/03	Wed 6/22/05		
22	Meeting #1	1 day	Wed 11/5/03	Wed 11/5/03		
23	Meeting #2	1 day	Wed 11/5/03	Wed 11/5/03		22
24	Meeting #3	1 day	Wed 1/21/04	Wed 1/21/04		23
25	Meeting #4	1 day	Wed 6/22/05	Wed 6/22/05		24
26	Pipeline Easements	656 days	Thu 11/15/01	Thu 5/20/04		
27	Meetings with property owners	478 days	Thu 11/15/01	Mon 9/15/03		
28	Prepare Draft Easements	26 days	Tue 9/16/03	Tue 10/21/03		27
29	Legal Review	8 days	Wed 10/22/03	Fri 10/31/03		28
30	Property Owner Review	34 days	Mon 11/3/03	Thu 12/18/03		29
31	Revision	45 days	Fri 12/19/03	Thu 2/19/04		30
32	Property Owner Review & denial	62 days	Wed 2/25/04	Thu 5/20/04		31
33	DEP Permitting	293 days	Fri 9/12/03	Tue 10/26/04		
34	Prepare Permit Application	5 days	Fri 9/12/03	Thu 9/18/03		13
35	RAI/Response	82 days	Fri 10/24/03	Mon 2/16/04		34
36	RAI/Response	19 days	Fri 3/19/04	Wed 4/14/04		35
37	Process Permit	55 days	Wed 8/11/04	Tue 10/26/04		36
38	COE Permitting	513 days	Fri 9/12/03	Tue 8/30/05		
39	Prepare Permit Application	5 days	Fri 9/12/03	Thu 9/18/03		
40	Process Permit	509 days	Thu 9/18/03	Tue 8/30/05		
41	PZ&B Building Permit	523 days	Thu 4/21/05	Mon 4/23/07		
42	Plans/Specs Submitted to PZ&B and Reviewed	112 days	Thu 4/21/05	Fri 9/23/05		
43	Plans/Specs Resubmitted to PZB	20 days	Wed 10/25/06	Tue 11/21/06		
44	Comments Compiled	9 days	Wed 11/22/06	Mon 12/4/06		43
45	Comments to Botkin Parssi	3 days	Tue 12/5/06	Thu 12/7/06		44
46	Revisions Completed by Botkin Parssi	89 days	Fri 12/8/06	Wed 4/11/07		45
47	Resident Inspector Application Submitted/Approved	3 days	Thu 4/12/07	Mon 4/16/07		46
48	Preliminary Approval	5 days	Tue 4/17/07	Mon 4/23/07		47
49	Construction Contract	138 days	Mon 10/2/06	Wed 4/11/07		
50	P&S to Facilities & Review	26 days	Mon 10/2/06	Mon 11/6/06		19
51	P&S to FPL - Review and Return	21 days	Thu 11/2/06	Thu 11/30/06		50
52	P&S to ESF - Review and Return	18 days	Wed 11/15/06	Fri 12/8/06		50
53	P&S to ISS - Review and Return	18 days	Wed 11/15/06	Fri 12/8/06		50
54	P&S to Risk Mgmt - Review and Return	18 days	Wed 11/15/06	Fri 12/8/06		50
55	P&S to Botkin - Review and Return	36 days	Tue 12/12/06	Tue 1/30/07	54,51,52,53	
56	P&S to ERM - Review and Return to Facilities	1 day	Wed 1/31/07	Wed 1/31/07		55
57	Bid Package Assembled by Facilities	2 days	Thu 2/1/07	Fri 2/2/07		56
58	Advertise for Bids	7 edays	Sun 2/4/07	Sun 2/11/07		
59	Plans at CID for Pick-up	0 days	Mon 2/5/07	Mon 2/5/07		
60	Non-mandatory Pre-bid Meeting	0 days	Wed 2/28/07	Wed 2/28/07	58FS+13 days	[60%],TL[60%]
61	Bid Date	1 day	Tue 4/10/07	Tue 4/10/07	60FS+28 days	
62	Bid Opening	1 day	Wed 4/11/07	Wed 4/11/07		61
63	Construction Contract Re-Bid	300 days	Thu 4/12/07	Wed 6/4/08		TL[10%]
64	Bids Cancelled	11 days	Thu 4/12/07	Thu 4/26/07		62
65	Value Engineering	79 days	Fri 4/27/07	Wed 8/15/07		64
66	Meet with Consultant Design Team	1 day	Thu 8/16/07	Thu 8/16/07		65
67	SOW/Proposal Submitted to ERM	25 days	Fri 8/17/07	Thu 9/20/07		66
68	Negotiate Proposal	9 days	Fri 9/21/07	Wed 10/3/07		67
69	Submit Task Order to BCC	26 days	Thu 10/4/07	Thu 11/8/07		68
70	Consultant - Revise and Compile Plans & Specs	20 days	Fri 11/9/07	Thu 12/6/07		69
71	ERM - Review and Return P & S to Consultant	15 days	Fri 12/7/07	Thu 12/27/07		70
72	Facilities - Review and Return P & S	10 days	Fri 12/28/07	Thu 1/10/08		71
73	Bid Package Assembled by Facilities	14 days	Fri 1/11/08	Wed 1/30/08		72
74	Advertise for Bids	7 edays	Wed 1/30/08	Wed 2/6/08		73
75	Plans at CID for Pick-up	0 days	Wed 2/6/08	Wed 2/6/08		74
76	Non-mandatory Pre-bid Meeting	0 days	Mon 2/25/08	Mon 2/25/08	74FS+13 days	
77	Bid Date	1 day	Tue 2/26/08	Tue 2/26/08		76
78	Bid Opening	1 day	Wed 2/27/08	Wed 2/27/08		77
79	Eng. ERM, OSBA, DEP Bid Evaluation	10 days	Thu 2/28/08	Wed 3/12/08		78
80	Contractor Sign/Insurance/Bond	14 days	Thu 3/13/08	Tue 4/1/08		79
81	Sign Contract	38 days	Wed 4/2/08	Fri 5/23/08		80
82	Notice To Proceed	1 day	Tue 6/3/08	Tue 6/3/08	81FS+6 days	TL[50%]
83	Contractor Picks Up PZB Permit	1 day	Wed 6/4/08	Wed 6/4/08		82
84	Construction	350 days	Thu 6/5/08	Wed 10/7/09		
85	Mobilization	10 days	Thu 6/5/08	Wed 6/18/08		83
86	Construction	320 days	Thu 6/19/08	Wed 9/9/09		85
87	Site Restoration, Final Payment	20 days	Thu 9/10/09	Wed 10/7/09		86
88	State Funding	1143 days	Fri 1/1/99	Tue 5/20/03		
89	Draft State Funding Agreement	157 days	Fri 4/23/99	Mon 11/29/99		
90	County Review/Sign Agreement	31 days	Tue 11/30/99	Tue 1/11/00		89
91	DEP Agreement Approval	16 days	Fri 1/14/00	Fri 2/4/00		90
92	Submit Application to DEP	64 days	Fri 1/1/99	Wed 3/31/99		
93	DEP Review	94 days	Wed 3/31/99	Mon 8/9/99		92
94	Legislature Budget 2000/2001	160 days	Tue 9/21/99	Mon 5/1/00	93FS+30 days	
95	Draft State Funding Amendment	173 days	Tue 5/2/00	Thu 12/28/00		94
96	County Review/Sign Amendment	43 days	Fri 12/29/00	Tue 2/27/01		95
97	DEP Amendment Approvals (1-4)	580 days	Wed 2/28/01	Tue 5/20/03		96

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SLWI sand trap dredging

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors
1	Funding	173.5 days	Wed 2/1/06	Mon 10/2/06	1%	
2	CP funding request	2.5 days	Wed 2/1/06	Fri 2/3/06	100%	
3	Admin review	8 mons	Fri 2/3/06	Fri 9/15/06	0%	2
4	BCC approval	11 days	Fri 9/15/06	Mon 10/2/06	0%	3
5	Design	290.65 days	Fri 4/28/06	Fri 6/8/07	100%	
6	Survey	73 days	Fri 4/28/06	Tue 8/8/06	100%	
7	task order	10 days	Fri 4/28/06	Thu 5/11/06	100%	
8	survey and volume calculations	63 days	Fri 5/12/06	Tue 8/8/06	100%	7
9	survey review	1 day	Tue 8/1/06	Tue 8/1/06	100%	8
10	Engineering	201 days	Thu 8/31/06	Fri 6/8/07	100%	
11	revise dredge template	34 days	Thu 8/31/06	Wed 10/18/06	100%	9
12	tech specs	167 days	Wed 10/18/06	Fri 6/8/07	100%	9,11
13	Interlocal Agreement -City of Boynton	78 days	Mon 10/2/06	Wed 1/17/07	100%	
14	Write agreement	16 days	Mon 10/2/06	Mon 10/23/06	100%	
15	Asst co attorney approval	3 days	Tue 10/24/06	Thu 10/26/06	100%	14
16	Submit to City of Boynton for approval	18 days	Fri 10/27/06	Tue 11/21/06	100%	15
17	BCC Approval	30 days	Wed 11/29/06	Tue 1/9/07	100%	16FS+2 d
18	Executed original to City of Boynton	6 days	Wed 1/10/07	Wed 1/17/07	100%	17
19	Interlocal Agreement - FIND	73 days	Tue 9/4/07	Thu 12/13/07	11%	
20	Write agreement	16 days	Tue 9/4/07	Tue 9/25/07	50%	
21	Asst co attorney approval	3 days	Wed 9/26/07	Fri 9/28/07	0%	20
22	Submit to FIND for approval	18 days	Mon 10/1/07	Wed 10/24/07	0%	21
23	BCC Approval	30 days	Thu 10/25/07	Wed 12/5/07	0%	22
24	Executed original to FIND	6 days	Thu 12/6/07	Thu 12/13/07	0%	23
25	DEP Permit Mod/Notice to Proceed	112 days	Thu 5/3/07	Fri 10/5/07	81%	
26	Submittals to DEP/RAI #1 Received	24 days	Thu 5/3/07	Tue 6/5/07	100%	
27	RAI#1 ERM Response	67 days	Wed 6/6/07	Thu 9/6/07	100%	26
28	Notice to Proceed Issued by DEP	21 days	Fri 9/7/07	Fri 10/5/07	0%	27
29	Funding - FIND	178 days	Fri 3/2/07	Tue 11/6/07	25%	
30	Prepare and submit FIND application	21 days	Fri 3/2/07	Fri 3/30/07	100%	
31	Process resolution to BCC	24 days	Thu 3/29/07	Tue 5/1/07	100%	30
32	Grants awarded by FIND	105 days	Wed 5/2/07	Tue 9/25/07	0%	31
33	Process FIND grant contract thru BCC	30 days	Wed 9/26/07	Tue 11/6/07	0%	32
34	Construction Contract	79 days	Fri 10/5/07	Thu 1/24/08	0%	
35	ERM notify OSBA	0 days	Fri 10/5/07	Fri 10/5/07	0%	12,28
36	Prepare IFB	5 days	Mon 10/8/07	Fri 10/12/07	0%	12FS+2 d
37	Advertise for Bids	10 days	Mon 10/15/07	Fri 10/26/07	0%	36
38	Pre-bid Site Visit	0 days	Mon 10/8/07	Mon 10/8/07	0%	37FS-15 d
39	Mandatory Pre-bid Meeting	0 days	Mon 10/8/07	Mon 10/8/07	0%	37FS-15 d
40	IFB Quality Assurance	4 days	Mon 10/8/07	Thu 10/11/07	0%	39
41	Bid Opening	0 days	Fri 10/26/07	Fri 10/26/07	0%	37
42	ERM Bid Evaluation	5 days	Mon 10/29/07	Fri 11/2/07	0%	41
43	OSBA Bid Evaluation	14 days	Mon 11/5/07	Thu 11/22/07	0%	42
44	Intent Notice to Award & Send Contract	10 days	Mon 11/5/07	Fri 11/16/07	0%	42
45	Bid Posting	5 days	Mon 11/19/07	Fri 11/23/07	0%	44
46	Contractor Sign/Insurance/Bond	14 days	Mon 11/19/07	Thu 12/6/07	0%	44
47	Review Contract/Insurance/Bond	5 days	Fri 12/7/07	Thu 12/13/07	0%	46
48	Sign Contract (ERM to BCC)	30 days	Fri 12/14/07	Thu 1/24/08	0%	47
49	Pre-Construction Meeting	0 days	Thu 1/24/08	Thu 1/24/08	0%	48
50	Notice To Proceed	0 days	Thu 1/24/08	Thu 1/24/08	0%	48
51	Construction	87 days	Thu 1/24/08	Mon 5/26/08	0%	
52	mobilize	10 edays	Thu 1/24/08	Sun 2/3/08	0%	50
53	dredge	50 edays	Sun 2/3/08	Mon 3/24/08	0%	52
54	demobilize	60 edays	Thu 3/27/08	Mon 5/26/08	0%	53
55	Contract Close-Out	4 days	Tue 3/25/08	Mon 3/31/08	0%	
56	as-built review	3 days	Tue 3/25/08	Fri 3/28/08	0%	53
57	CRC approval	1 day	Fri 3/28/08	Mon 3/31/08	0%	56
58	Post-construction Monitoring	10 days	Tue 5/27/08	Mon 6/9/08	0%	51
59	Monitoring report to Corps - Jax	10 days	Tue 5/27/08	Mon 6/9/08	0%	
60	Monitoring report to NMFS	10 days	Tue 5/27/08	Mon 6/9/08	0%	
61	Monitoring report to Corps - WPB	10 days	Tue 5/27/08	Mon 6/9/08	0%	
62	6-Month Monitoring	10 days	Fri 11/21/08	Thu 12/4/08	0%	51FS+12d
63	Monitoring report to Corps - Jax	10 days	Fri 11/21/08	Thu 12/4/08	0%	
64	Monitoring report to NMFS	10 days	Fri 11/21/08	Thu 12/4/08	0%	
65	Monitoring report to Corps - WPB	10 days	Fri 11/21/08	Thu 12/4/08	0%	
66	12-Month Monitoring	10 days	Fri 5/22/09	Thu 6/4/09	0%	51FS+25d
67	Monitoring report to Corps - Jax	10 days	Fri 5/22/09	Thu 6/4/09	0%	
68	Monitoring report to NMFS	10 days	Fri 5/22/09	Thu 6/4/09	0%	
69	Monitoring report to Corps - WPB	10 days	Fri 5/22/09	Thu 6/4/09	0%	
70	Quarterly Reports to DEP	263 days	Tue 6/24/08	Thu 6/25/09	0%	
71	4th Qtr 2007	1 day	Tue 6/24/08	Tue 6/24/08	0%	54FS+20
72	1st Qtr 2008	1 day	Tue 9/23/08	Tue 9/23/08	0%	71FS+64
73	2nd Qtr 2008	1 day	Tue 12/23/08	Tue 12/23/08	0%	72FS+64
74	3rd Qtr 2008	1 day	Tue 3/24/09	Tue 3/24/09	0%	73FS+64
75	4th Qtr 2008	1 day	Thu 6/25/09	Thu 6/25/09	0%	74FS+66

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SLWI sand trap dredging

ID	Task Name	Duration	Start	Finish	% Complete	Predecessors
76	Quarterly Reports to FIND	1 day	Tue 6/24/08	Tue 6/24/08	0%	
77	1st Qtr 2008 & project completion report	1 day	Tue 6/24/08	Tue 6/24/08	0%	54FS+20

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OCEAN RIDGE SHORE PROTECTION PROJECT

Project Description

Shoreline protection and monitoring of 1.42 miles of beach adjacent to the South Lake Worth Inlet in Palm Beach County. The beach was first nourished in 1998. A series of eight T-head groins was also constructed and a primary dune was reestablished along a majority of the project area. In November of 2005, 1.1 miles of this beach was renourished.

Location

Between DEP reference monuments R-151 and R-159 in Palm Beach County (location map attached).

Project Evaluation

Severity of Erosion: The historic erosion rate along the project shoreline was computed to be five cy/yr/lf (Aug 1996 GDM). Over the anticipated six year renourishment schedule, the erosion rate is anticipated to average 7.44 cy/yr/lf (including end losses).

Benefits: The beach is publicly accessible in an area heavily utilized by both the local population and visitors. Approximately 40% of the project area lies within two county parks and one municipal park. Studies included in the GDM estimated beach usage in 2010 to be over 665,000 visits/year. The project is designed to provide long-term storm protection, retain sand within the coastal system, aesthetically enhance the area, and provide habitat for endangered plant and animal species. Hurricane evacuation routes in the project area include Route A1A which runs N-S along the entire project area.

Threatened and endangered marine turtles utilize the entire project area for nesting purposes and protected plant species are located in the dunes.

Federal Funding: The project was authorized on October 23, 1962 (87-874) & WRDA 1996. The original PCA was signed on March 15, 1999, and updated and signed on February 15, 2005. The 2005 renourishment was completed as part of the US Army Corps of Engineers regional hurricane remediation efforts. This project currently has a federal funding cost share of 53.8%.

State Commitment: The design & construction of both nourishment projects were funded by the state. The project is recommended in the Department's Strategic Beach Management Plan and is located in an area designated as critically eroded in this Plan. This project has been determined to be 100% eligible for State funding.

The original grant for this project (06PB1) expires on October 1, 2007. Additional funds for mitigation of this project were awarded in the 2007/2008 funding cycle.

Local Commitment & Capability: The project is consistent with the local government comprehensive plan and the local sponsor supports the Department's beach management activities as set forth under Part 1, Chapter 161, Florida Statutes. A long-range budget plan and dedicated funding sources are in place. The degree of local funding proposed is detailed in the attached financial schedule. The County has retained the services of a professional coastal engineering firm to assist in post construction project performance (profiles and hydrographic) and near shore reef monitoring. County staff will continue to perform permit-required sea turtle, shorebird and scarp monitoring. County staff time for this monitoring has been authorized as eligible for state cost share as per Feb 15, 2006 letter to Michael Barnett. The administrative capability of the local sponsor has been demonstrated by the successful completion of the initial phase of this project as well as many others.

Project Performance: The project design was based on the GDM (NED included) & EIS. It has performed as designed and is optimized with the addition of sand dredged from the ICW, the inlet sand trap, the boat club channel and the sand bypass plant. The project mitigates for adverse impacts of the inlet by providing 100% of the bypass quantity proposed in the inlet management plan. The fill provides 100% of the sand needed to maintain the downdrift beaches in Gulfstream without impacting the local nearshore habitat. The project is designed to improve cost effectiveness by using groins, a bypass plant, and spoil from periodic dredging of areas within Lake Worth.

Innovative Applications: The project demonstrates the combined successful use of periodic nourishment, groins and a sand transfer plant.

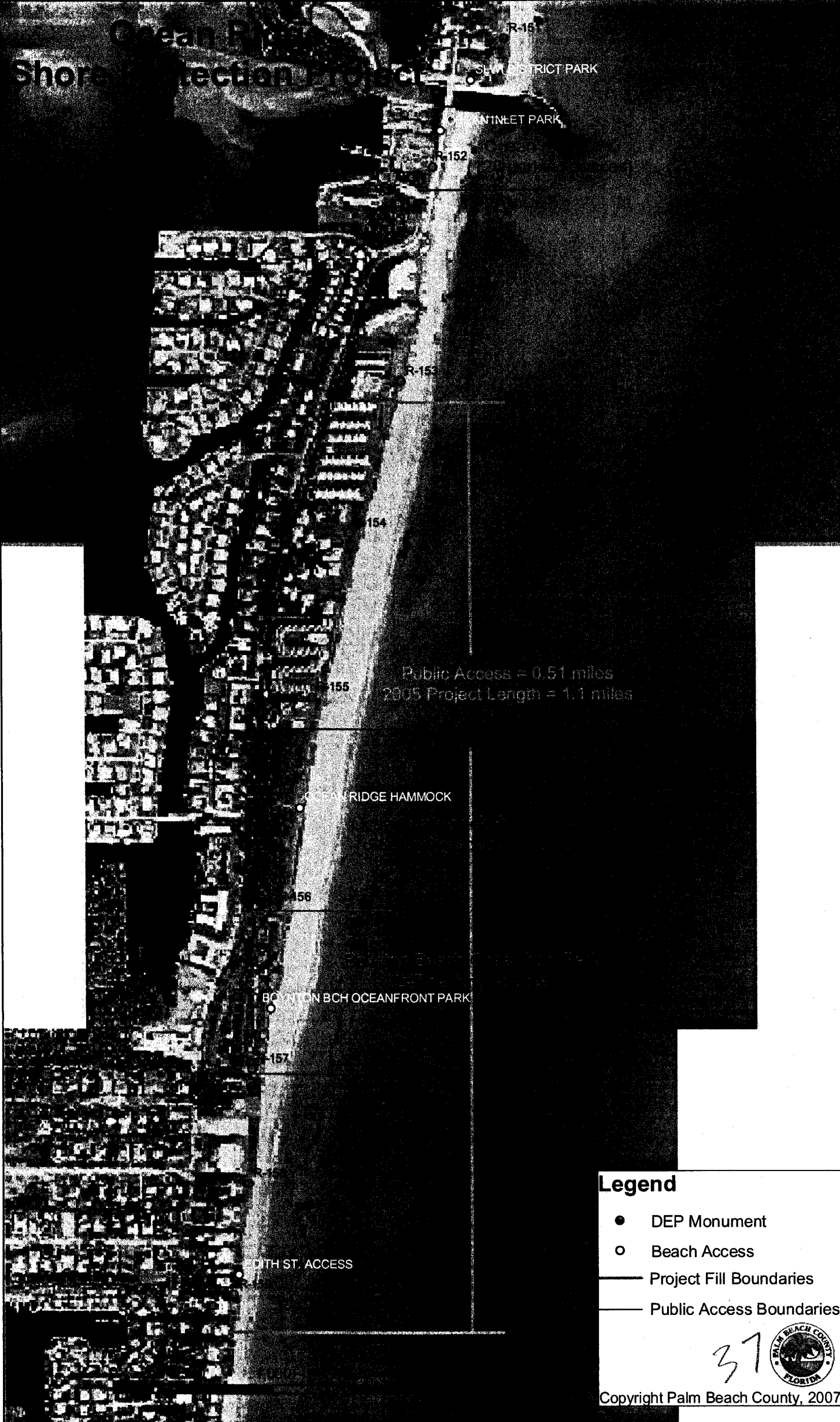
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Use of Program Funds

The requested funding will be used for project-specific monitoring required by DEP permit (currently sea turtle, shorebird, and near shore reef). Aerial surveys and regional (profiles and hydrographic) monitoring will be funded through the Countywide Monitoring Agreement (#06PB3).

Attachments: Project map, table of sea turtle nesting activity

Ocean Beach Shore Protection Project



Public Access = 0.51 miles
2005 Project Length = 1.1 miles

- Legend**
- DEP Monument
 - Beach Access
 - Project Fill Boundaries
 - Public Access Boundaries



Summary of sea turtle crawl activity at Ocean Ridge, 1997 - 2006 nesting seasons

Nests

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001 - 2004 Average
Loggerhead	216	293	269	312	265	248	254	230	233	250	249
Green	0	13	0	17	0	11	2	7	11	6	5
Leatherback	12	2	8	10	8	9	10	4	9	15	8
All Species	228	308	277	339	273	268	266	241	253	271	262

Non-Nesting Emergences

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001 - 2004 Average
Loggerhead	238	485	410	367	242	206	376	341	281	306	291
Green	0	22	1	30	1	15	4	18	20	2	10
Leatherback	0	0	2	0	0	0	0	1	0	2	0
All Species	238	507	413	397	243	221	380	360	301	310	301

Total Crawls

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001 - 2004 Average
Loggerhead	454	778	679	679	507	454	630	571	514	556	541
Green	0	35	1	47	1	26	6	25	31	8	15
Leatherback	12	2	10	10	8	9	10	5	9	17	8
All Species	466	815	690	736	516	489	646	601	554	581	563

Nesting Success (% of crawls resulting in a nest)

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001 - 2004 Average
Loggerhead	0.48	0.38	0.40	0.46	0.52	0.55	0.40	0.40	0.45	0.45	0.47
Green	0.00	0.37	0.00	0.36	0.00	0.42	0.33	0.28	0.35	0.75	0.26
Leatherback	1.00	1.00	0.80	1.00	1.00	1.00	1.00	0.80	1.00	0.88	0.95
All Species	0.49	0.38	0.40	0.46	0.53	0.55	0.41	0.40	0.46	0.47	0.47

Nesting Density (nests/mile)

Species	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2001 - 2004 Average
Loggerhead	95	129	118	137	116	109	111	101	102	110	109
Green	0	6	0	7	0	5	1	3	5	3	2
Leatherback	5	1	4	4	4	4	4	2	4	7	3
All Species	100	135	121	149	120	118	117	106	111	119	115

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PALM BEACH COUNTYWIDE MONITORING

Project Description

This project consists of regional monitoring activities associated with eligible beach projects.

Location

Palm Beach County, R-001 to R-204 (Excluding all of the Town of Palm Beach). See attached project maps for detailed location information.

Eligible Projects to be Funded

- Ocean Ridge Shore Protection
 - The first renourishment of this project was completed in December of 2005.
 - Permit required post-construction monitoring is ongoing and will continue through 2009.
- Juno Beach Shore Protection Project
 - Design and permitting of this project is ongoing and will be complete by November of 2007.
 - Required pre-construction monitoring will be completed prior to the issuance of a Notice to Proceed for this project.
 - Construction on this project is scheduled to begin in November of 2008 and will be complete before March 1, 2009.
 - Post-construction monitoring will begin upon project completion.
- South Palm Beach Shore Protection Project
 - The feasibility study for this project was completed in December of 2006. The final report is currently under review.
 - Design and permitting of this project is scheduled to begin in November 2007.
- Singer Island Shore Protection Project
 - Permitting is ongoing and construction of the breakwaters for this project is expected to occur in the 2008/2009 fiscal year
- Jupiter Carlin Shore Protection Project
 - The feasibility study for the proposed structures associated with this project will begin in September 2007.
 - The design and permitting of the second renourishment will begin in 2008.
- South Lake Worth Inlet Management
 - Monitoring associated with the implementation of the South Lake Worth Inlet Management Plan is ongoing.

Use of Program Funds

Activities to be funded under this include monitoring required by permit. Physical monitoring which will be funded under this grant includes, but is not limited to: topographic/bathymetric surveys, and aerial photography. Biological monitoring which includes, but is not limited to: nearshore reefs, shorebird populations, and sea turtle nesting and reproductive success, is project specific and will not be funded under this grant in the 2008-2009 cycle, but under individual project grants.