Introduction

In 1986, pursuant to Sections 161.101 and 161.161, Florida Statutes, the Department of Natural Resources, Division of Beaches and Shores (now the Department of Environmental Protection, Bureau of Beaches and Coastal Systems) was charged with the responsibility to identify those beaches of the state which are critically eroding and to develop and maintain a comprehensive long-term management plan for their restoration. In 1989, a first list of erosion areas was developed based upon an abbreviated definition of critical erosion. That list included 217.6 miles of critical erosion and another 114.8 miles of noncritical erosion statewide.

The erosion areas list was revised in 1990 to include minor changes in the erosion problem areas for Nassau, Martin, and Gulf Counties plus major changes for Monroe County as a result of a more detailed study of the Florida Keys beaches conducted during 1989. A 1991 revision included minor changes in Nassau, Brevard, Sarasota, Charlotte, Lee, and Collier Counties and major changes in Pinellas County as a result of new studies conducted during 1990 and 1991. Notably, Anclote Key was divided between Pinellas and Pasco Counties and the recent barrier islands of Three Rooker Bar, North Bunces Key and South Bunces Key were included. In addition, due to action taken by the 1991 Florida Legislature, an eastern portion of Escambia County was transferred to Santa Rosa County. The 1991 list included 227.5 miles of critical erosion and 122.1 miles of noncritical erosion statewide.

The erosion areas list was revised in 1992 to include beaches that had been authorized for restoration. This change had the effect of adding some peripheral segments and gaps between identified problem areas which, although they were stable or slightly erosional, require nourishment for the design integrity of an authorized beach restoration project. The major changes at the time included the Manatee County projects on Anna Maria Island and Longboat Key. Also added to the 1992 revision are a peripheral erosion area in Martin County and an erosion gap segment in St. Lucie County. The 1993 revision included minor changes in Wakulla, Taylor, Hernando, Levy, and Sarasota Counties as a result of new studies in 1993. The 1993 list included 232.9 miles of critical erosion and 122.6 miles of noncritical erosion statewide.

Major storms in 1994, 1995, and 1998 caused significant changes in Florida's shoreline. Three tropical storms and a tropical depression impacted Florida in 1994 and three hurricanes and a tropical storm caused more impact in 1995. Following Hurricane Opal on October 4, 1995, an updated listing was compiled for northwest Florida that specifically identified areas that not only had critical erosion but where there remained a high degree of poststorm vulnerability.

An updated critical erosion list was finalized in October 1998, as a result of new investigations conducted in 1997 and 1998. Subsequently, a post-Hurricane Earl and Georges Recovery Plan was prepared in January 1999. The March, 1999, critical erosion list included changes resulting from the impacts of Hurricanes Opal, Earl and Georges, and other less impactive storms. The 2000 critical erosion list was the result of continued investigations in 1999 including the significant effects from Hurricanes Floyd and Irene, and Tropical Storm Harvey. Only a couple additions were made in Palm Beach County in 2001, however, Tropical Storm Gabrielle caused

erosion in the fall of 2001 prompting the addition of critical areas in Flagler and Charlotte Counties in 2002. Due to recovery in the Panhandle since the hurricanes of 1995 and 1998, a few areas in Okaloosa, Bay, and Gulf Counties were removed from the critical list in 2002. Continued recovery resulted in further removals in St. Lucie, Okaloosa, Walton, and Franklin Counties in 2003. An updated investigation of St. George Island State Park during 2002 and 2003 resulted in significant changes in that portion of Franklin County. A contracted study of south St. Lucie County resulted in the addition of a critical area along Hutchinson Island. Following Tropical Storm Isidore in 2002, additional small segments of critical erosion were added in Walton, Gulf and Sarasota Counties in 2003.

The 2004 hurricane season was the most active storm season in Florida since weather records began in 1851. Hurricanes Charley, Frances, Ivan, and Jeanne, along with Tropical Storm Bonnie, damaged the beach and dune system, upland structures and properties, and infrastructure in the majority of Florida's coastal counties. The cumulative impact of these storms exacerbated erosion conditions throughout the state. The 2005 updated listing added 42.6 miles (roughly a 13.2% increase) to the statewide total of critically eroded beaches. In southwest Florida, 1.1 mile of critically eroded beach was added to Lee County due to the impact of Hurricane Charley. On the Atlantic coast with the combined impact of Hurricanes Frances and Jeanne, significant increases in critically eroded areas were evident in Flagler (2.3 miles), Volusia (5.4 miles), Brevard (11.5 miles), Indian River (6.6 miles), St. Lucie (3.7 miles), and Martin (1.6 miles) Counties, along with minor increases in St. Johns (0.2 mile) and Palm Beach (0.3 mile) Counties. On the northern Gulf of Mexico coast with the impact of Hurricane Ivan, critically eroded segments were added in Escambia (1.2 miles), Santa Rosa (0.7 mile), Okaloosa (2.8 miles), Walton (5.1 miles), and Gulf (0.5 mile) Counties. A public beach in Citrus County was also added (0.2 mile).

The 2005 hurricane season was a record breaking season with 27 named storms. Florida was impacted by Hurricanes Dennis, Katrina, Ophelia, Rita, and Wilma, and Tropical Storms Arlene and Tammy. The cumulative impact of these storms exacerbated erosion conditions in south and northwest Florida. The 2006 updated listing added 20.2 miles (roughly a 5.5% increase) to the statewide total of critically eroded beaches, and 0.2 mile (2.4% increase) to the total of critically eroded inlet shorelines. In south Florida, 2.5 miles were added in Monroe County and 3.1 miles were added in Collier County due to the impacts of Hurricanes Rita and Wilma. In northwest Florida, following the impact of Hurricane Dennis along with additional fringe impacts of Hurricanes Katrina and Rita, critically eroded segments were added in Okaloosa (1.6 miles), Walton (2.4 miles), Gulf (2.4 miles), and Franklin (7.4 miles) Counties. Continued investigations in southwest Florida resulted in the addition of 0.8 mile of critically eroded beach in Pinellas County and 0.2 mile of critically eroded inlet shoreline in Manatee County.

Some discretion was applied when identifying the open water coastal beaches of Florida. Only those beaches that are exposed to the open water of the Gulf of Mexico, Atlantic Ocean, or Straits of Florida, and are not sheltered by a coastal barrier or island shoal were considered for inclusion in this report. The gulf fronting beaches of Monroe County, including the Cape Sable region and the distal sand keys west of Key West (e.g., Marquesas Keys, Tortugas Keys), have insufficient data to identify the erosion problem areas at this time. The 2006 list includes 385.3 miles of critically eroded beach, 8.6 miles of critically eroded inlet shoreline, 96.8 miles of noncritically eroded beach, and 3.2 miles of noncritically eroded inlet shoreline statewide.

Definition of Critical Erosion

The earlier statewide inventories of critically eroded areas included only those erosion problem areas where the threat existed to development or recreational interests. The current inventory of critically eroded areas was formulated based upon an updated and modified definition of critical erosion. The following definition has been adopted by the Bureau to identify critically eroded areas:

Critically eroded area is a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost. Critically eroded areas may also include peripheral segments or gaps between identified critically eroded areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects.

It is important to note, that for an erosion problem area to be critical, there must exist a threat to or loss of one of four specific interests – upland development, recreation, wildlife habitat, or important cultural resources. Many areas have significant historic or contemporary erosion conditions, yet the erosion processes do not currently threaten public or private interests. These areas are therefore designated as noncritically eroded areas and require close monitoring in case conditions become critical.

In contrast, in some areas the erosion processes are not particularly significant except to the extent that adjacent public or private interests may be threatened. Whether erosion is critical results from the existence of a threat to interests in need of protection. Lacking any threat an erosion condition is not a critical problem.

Discussion

The listing of critically and noncritically eroded areas in this report are identified by the Bureau's reference monument system (R numbers) or by virtual stations (V numbers). A few areas are not identified by either the R or V numbers because they are not included in the coastal construction control line program nor have virtual stations been designated. These areas without R or V numbers are usually inlet shoreline areas, Florida Keys erosion areas, and Big Bend erosion areas.

Tables are provided with listings of the erosion areas for each coastal county fronting on the Atlantic Ocean, Gulf of Mexico, and Straits of Florida, with all values provided in miles of shoreline. Following the tables, which list all the erosion areas, maps are provided for twenty-eight coastal counties. Maps are not provided for the following six counties which have less than two miles of erosion: Taylor County (0.2 mile), Dixie County (0.6 mile), Citrus County (0.2 mile), Hernando County (0.5 mile), Pasco County (1.3 miles), and Hillsborough County (1.6 miles). These maps are intended to provide general location guidance to the user.

Atlantic Coast Erosion Areas

NASSAU COUNTY		BEACH		INLET	
		critical	noncritical	critical	noncritical
St.Marys R.	Critical Inlet Shoreline	0	0	2.5	0
R9 – R33	Critical	4.4	0	0	0
R61 – R80	Critical	3.1	0	0	0
		7.5	0	2.5	0
DUVAL COUNTY					
Big Talbot Is., Nassau Sound					
	Noncritical Inlet Shoreline	0	0	0	2
R21 – R23	Critical	0.3	0	0	0
R23 – A1A	Critical Inlet Shoreline	0	0	0.7	0
V501 – R80	Critical	10.1	0	0	0
		10.4	0	0.7	2
ST. JOHNS COUNTY					
R109 – R117	Critical	1.6	0	0	0
R132 – R152	Critical	3.8	0	0	0
R193.5 – R196	Noncritical	0	0.5	0	0
R197 – R209	Critical	2.4	0	0	0
		7.8	0.5	0	0
FLAGLER COUNTY					
R1 – R4	Critical	0.6	0	0	0
R52.3–R53.4	Critical	0.1	0	0	0
R65.2 - R70	Critical	0.9	0	0	0
R76 – R94.8	Critical	3.3	0	0	0
R98 – R101	Critical	0.5	0	0	0
		5.4	0	0	0
VOLUSIA COUNTY					
R1 – R8	Critical	1.3	0	0	0
R24 – R32	Critical	1.4	0	0	0
R57 – R118	Critical	11.0	0	0	0
N.Shore, Ponce Inlet	Critical Inlet Shoreline	0	0	0.6	0
R160.8 – R207.8	Critical	8.4	0	0	0
R207.8 – R214	Noncritical	0	1.1	0	0
		22.1	1.1	0.6	0
BREVARD COUNTY					
V020 – V066	Noncritical	0	8.7	0	0
V117 – V136	Noncritical	0	3.6	0	0
R1 – R202	Critical	36.5	0	0	0
		36.5	12.3	0	0
INDIAN RIVER COUNTY					
R1 – R51.3	Critical	9.5	0	0	0
R70 – R86	Critical	3.1	0	0	0
R99 – R115.7	Critical	3.1	0	0	0
		15.7	0	0	0

ST. LUCIE COUNTY		BEACH		INLET	
		Critical	Noncritical	Critical	Noncritical
R1 – R10	Critical	1.8	0	0	0
R34 – R46	Critical	2.3	0	0	0
R46 – R80	Noncritical	0	6.4	0	0
R80 – R90.3	Critical	1.9	0	0	0
R90.3 – R98	Noncritical	0	1.5	0	0
R98 – R115+1000	Critical	3.4	0	0	0
		9.4	7.9	0	0
MARTIN COUNTY					
R1 – R37.6	Critical	6.3	0	0	0
R45 – R111	Critical	11.5	0	0	0
R126 – R127.4	Critical	0.2	0	0	0
		18.0	0	0	0
PALM BEACH COUNTY					
R1 – R10	Critical	1.5	0	0	0
N&S Shore,Jupiter Inlet	Critical Inlet Shore	0	0	0.8	0
R12 – R38	Critical	5.0	0	0	0
R38 – R40	Noncritical	0	0.4	0	0
R58 – R60.5	Noncritical	0	0.5	0	0
R60.5 – R69	Critical	1.7	0	0	0
R76 – R128	Critical	10.9	0	0	0
R133.5 – R136.7	Critical	0.7	0	0	0
R152 – R168	Critical	3.3	0	0	0
R176 – R190	Critical	2.9	0	0	0
R204 – R227.9	Critical	5.0	0	0	0
		31.0	0.9	0.8	0
BROWARD COUNTY					
R6 – R23	Critical	3.2	0	0	0
R25 – R77	Critical	10	0	0	0
R86 – R128	Critical	8.1	0	0	0
		21.3	0	0	0
DADE COUNTY					
R1 – R26.7	Critical	5.1	0	0	0
R27 – R74.4	Critical	9.4	0	0	0
S.Shore, Norris Cut	Noncritical Inlet Shore	0	0	0	0.3
R84 – R88	Noncritical	0	0.8	0	0
R89 – R92	Noncritical	0	0.6	0	0
R101 – R113	Critical	2.5	0	0	0
		17	1.4	0	0.3
TOTAL ATLANTIC COAST		**202.1**	**24.1**	**4.6**	**2.3**

Florida Keys Erosion Areas

MONROE COUNTY		BEACH	
		critical	noncritical
Sea Oats Beach, Lower Matecumbe Key	Critical	0.7	0
Long Key	Critical	1.0	0
Curry Hammocks, Little Crawl Key	Critical	0.1	0
Coco Plum Beach, east	Noncritical	0	0.6
Coco Plum Beach, west	Critical	0.3	0
Key Colony Beach	Critical	0.9	0
Key Colony Beach, west shoreline	Critical	0.2	0
Sombrero Beach, Vaca Key	Critical	0.3	0
Little Duck Key	Critical	0.2	0
Bahia Honda Key	Critical	2.0	0
Long Beach, Big Pine Key	Noncritical	0	1.0
Boca Chica Key	Critical	1.3	0
Key West	Critical	2.8	0
Simonton Beach	Critical	0.1	0
Ft. Zachary Taylor	Critical	0.3	0
		10.2	1.6

Gulf Coast Erosion Areas

ESCAMBIA COUNTY		BEACH		INLET	
		critical	noncritical	critical	noncritical
R26 – R34	Critical	1.6	0	0	0
R34 – R65	Noncritical	0	5.9	0	0
R79 – R107	Noncritical	0	5.3	0	0
R107 – R151	Critical	8.2	0	0	0
		9.8	11.2	0	0
SANTA ROSA COUNTY					
R192.5 – R213.5	Critical	4.1	0	0	0
OKALOOSA COUNTY					
R1 – R15	Critical	2.8	0	0	0
V612 – V621	Noncritical	0	1.7	0	0
Norriego Pt.	Critical Inlet Shoreline	0	0	0.8	0
R17 – R25.5	Critical	1.6	0	0	0
R39 – R50	Critical	2.1	0	0	0
		6.5	1.7	0.8	0
WALTON COUNTY					
R1 – R22.8	Critical	5.0	0	0	0
R41 – R54.5	Critical	2.7	0	0	0
R58 – R63	Critical	1.0	0	0	0
R67.3 – R68.3	Critical	0.2	0	0	0
R70.95 – R71.4	Critical	0.1	0	0	0
R82 – R98	Critical	3.1	0	0	0
R105.5 – R114.7	Critical	1.8	0	0	0
R122 – R124	Critical	0.4	0	0	0
		14.3	0	0	0
BAY COUNTY					
R1 – R97	Critical	18.6	0	0	0
Gator Lake	Critical Inlet Shoreline	0	0	0.2	0
R98 – V009	Noncritical	0	6.1	0	0
V016 – V030+2000	Noncritical	0	2.8	0	0
V036 – V041	Noncritical	0	1.2	0	0
R127.8 – R137.8	Critical	2.0	0	0	0
		20.6	10.1	0.2	0

GULF COUNTY	BEACH		INLET	
	critical	noncritical	critical	noncritical
R41 – R69 Noncritical	0	5.5	0	0
R69 – R85.5 Critical	3.3	0	0	0
R85.5 – R90.1 Noncritical	0	0.9	0	0
R90.1 – R91.3 Critical	0.2	0	0	0
R91.3 – R95.5 Noncritical	0	0.8	0	0
R95.5 – R111.5 Critical	3.1	0	0	0
R111.5 – R114 Noncritical	0	0.5	0	0
R150 – R162 Noncritical	0	2.6	0	0
	6.6	10.3	0	0
FRANKLIN COUNTY				
V17 – V34 Noncritical	0	3.2	0	0
V34 – V39 Critical	0.9	0	0	0
R15 – R19 Noncritical	0	0.8	0	0
R19 – R23 Critical	0.7	0	0	0
R23 – R24 Noncritical	0	0.2	0	0
R34 – R51 Noncritical	0	3.3	0	0
Sike's Cut, E&W Shores Noncritical Inlet Shores		0	0	0.5
R53 – R69 Noncritical	0	3.3	0	0
R106 – R128.5 Critical	4.5	0	0	0
R128.5 – R147 Noncritical	0	3.8	0	0
R154 – R168 Noncritical	0	2.6	0	0
R168 – R187.2 Critical	3.6	0	0	0
R194 – R196 Noncritical	0	0.4	0	0
R210 – R216 Critical	1.1	0	0	0
R220 – R225 Critical	1.0	0	0	0
R225 – R232 Noncritical	0	1.6	0	0
	11.8	19.2	0	0.5
WAKULLA COUNTY				
Mashes Sands, South Critical	0.3	0	0	0
Mashes Sands, North Noncritical	0	0.4	0	0
Shell Point Critical	1	0	0	0
	1.3	0.4	0	0
JEFFERSON COUNTY				
no erosion areas	0	0	0	0
TAYLOR COUNTY				
Dekle Beach Critical	0.2	0	0	0
DIXIE COUNTY				
Shired Island Critical	0.2	0	0	0
Bird Island Critical	0.2	0	0	0
Cotton Island Critical	0.2	0	0	0
	0.6	0	0	0

LEVY COUNTY		BEACH		INLET	
		critical	noncritical	critical	noncritical
Cedar Key	Critical	0.5	0	0	0
Atsena Otie Key	Critical	0.2	0	0	0
Seahorse Key	Noncritical	0	1.2	0	0
		0.7	1.2	0	0
CITRUS COUNTY					
Fort Island Beach		0.2	0	0	0
HERNANDO COUNTY					
Pine Island	Noncritical	0	0.5	0	0
PASCO COUNTY					
Hudson Beach	Critical	0.2	0	0	0
Anclote Key	Noncritical	0	1.1	0	0
		0.2	1.1	0	0
PINELLAS COUNTY					
S. Anclote Key	Noncritical	0	0.3	0	0
R6 - R12	Critical	1.4	0	0	0
R17 - R20	Noncritical	0	0.5	0	0
R47 - R49	Critical Inlet Shoreline	0	0	0.5	0
R56 - R115.4	Critical	11.3	0	0	0
R126 - R143	Critical	3.5	0	0	0
R144 - R166	Critical	4.1	0	0	0
N. Bounces Key	Noncritical	0	1.4	0	0
S. Bounces Key	Noncritical	0	2.2	0	0
R176 - R182	Critical	1.1	0	0	0
		21.4	4.4	0.5	0
HILLSBOROUGH COUNTY					
Egmont Key	Critical	1.6	0	0	0
MANATEE COUNTY					
R1 – R2	Critical Inlet Shoreline	0	0	0.2	0
R2 - R41	Critical	7.3	0	0	0
R42 - R67	Critical	4.8	0	0	0
		12.1	0	0.2	0
SARASOTA COUNTY					
R1 - R29	Critical	5.4	0	0	0
R31, east 1500’	Critical Inlet Shoreline	0	0	0.3	0
R31 - R44.5	Critical	2.4	0	0	0
R44A - R45	Critical Inlet Shoreline	0	0	0.8	0
R46 - R48.4	Critical	0.4	0	0	0
R64 - R77	Critical	2.4	0	0	0
R81 - R96	Critical	2.9	0	0	0
R116 - R143	Critical	5.1	0	0	0
R143 – R145	Noncritical	0	0.4	0	0
R168 - R183	Critical	2.9	0	0	0
		21.5	0.4	1.1	0

CHARLOTTE COUNTY	BEACH		INLET	
	critical	noncritical	critical	noncritical
R1 - R17 Critical	3.0	0	0	0
R17 - R19 Noncritical	0	0.4	0	0
R28 - R39 Critical	1.8	0	0	0
R47.5 - R49.5 Critical	0.4	0	0	0
	5.2	0.4	0	0
LEE COUNTY				
R7 - R26 Critical	4.1	0	0	0
R27 - R33 Noncritical	0	1.1	0	0
R46 - R52 Noncritical	0	1.2	0	0
R60 - R65 Noncritical	0	1.0	0	0
R66, east 1000' Critical Inlet Shoreline	0	0	0.2	0
R66 - R71 Critical	1.0	0	0	0
R75 – R78 Noncritical	0	1.0	0	0
R79 - R82.3 Critical	0.8	0	0	0
R83 - R84 Critical Inlet Shoreline	0	0	0.2	0
R84 - R109 Critical	5.0	0	0	0
R109 - R118 Critical	1.7	0	0	0
R129 - R133 Critical	0.9	0	0	0
R175(-.4) - R200 Critical	5.0	0	0	0
R211 - R213 Noncritical Inlet Shoreline	0	0	0	0.3
R214 - R222 Critical	1.5	0	0	0
R222 Noncritical Inlet Shoreline	0	0	0	0.1
R223 - R226 Noncritical	0	0.7	0	0
R226 - R230.4 Critical	0.9	0	0	0
	20.9	5.0	0.4	0.4
COLLIER COUNTY				
R22.3 - R30.5 Critical	1.6	0	0	0
R50.65 - R57.5 Critical	1.3	0	0	0
R57.8 - R89 Critical	5.6	0	0	0
R90 - R111 Noncritical	0	3.9	0	0
Sea Oat Island Noncritical	0	0.9	0	0
Coconut Island Noncritical	0	0.1	0	0
H3 - H11 Critical Inlet Shoreline	0	0	0.8	0
R134.5 - R139 Critical	0.8	0	0	0
R143 - R148 Critical	0.9	0	0	0
V23 – V31.4 Critical	1.6	0	0	0
V33.8 – V41.8 Critical	1.5	0	0	0
V41.8 – V43.5 Noncritical	0	0.3	0	0
	13.3	5.2	0.8	0
TOTAL GULF COAST	**172.9**	**71.1**	**4.0**	**0.9**
TOTAL ATLANTIC COAST	**202.1**	**24.1**	**4.6**	**2.3**
TOTAL FLORIDA KEYS	**10.2**	**1.6**	**---**	**---**
STATEWIDE	**385.2**	**96.8**	**8.6**	**3.2**

County Index

Nassau County

There are two critically eroded beach areas (7.5 miles) and one critically eroded inlet shoreline area (2.5 miles) in Nassau County.

The inlet shoreline erosion area (2500 ft. west of R1-R9) extends 2.5 miles along the south shoreline of the St. Mary's River entrance on Amelia Island. Threatened are the historic Ft. Clinch and recreational beaches of the Ft. Clinch State Park.

The northern 4.4 miles of Atlantic Ocean fronting beaches of Amelia Island (R9-R33) are critically eroded. This area has an ongoing beach management project involving the transfer of sand dredged from the St. Mary's River Entrance to the eroded beaches. Threatened are development and recreational interests along Fernandina Beach and Ft. Clinch State Park.

The southern 3.1 miles of Atlantic Ocean fronting beaches of Amelia Island (R61-R80) are critically eroded threatening development and recreational interests. A beach restoration project has been constructed along much of this area. A terminal groin has been constructed at R80 and a nearshore breakwater has been constructed south of R75.

Duval County

There are two critically eroded beach areas (10.4 miles), one critically eroded inlet shoreline area (0.7 mile), and one noncritically eroded inlet shoreline area (2 miles) in Duval County.

The noncritically eroded inlet shoreline area extends two miles along the Big Talbot Island shoreline of Nassau Sound. Although significantly eroding a portion of Big Talbot Island State Park, this area is still considered noncritical.

The southern 0.3 mile of Atlantic Ocean fronting beach on Little Talbot Island (R21-R23) is critically eroded, as is the 0.7 mile along Ft. George Inlet (R23-AIA Bridge). These critically eroded beach and inlet shoreline areas, resulting from the northward migration of Ft. George Inlet, are experiencing a threat to recreational interests at Little Talbot Island State Park and State Road AIA.

The southern 10.1 miles of Atlantic Ocean fronting beaches in Duval County (V501-R80) are designated as critically eroded due to past threats to development and recreational interests. This area is part of a beach restoration project, which is continually maintained.

St. Johns County

There are three critically eroded areas (7.8 miles) and one noncritically eroded area (0.5 mile) in St. Johns County.

Near the center of the county north of St. Augustine Inlet at Vilano Beach (R109-R117) are 1.6 miles of critical erosion threatening private development as well as State Road AIA.

South of St. Augustine Inlet, 3.8 miles of beach (R132-R152) along Conch Island and Anastasia Island through St. Augustine Beach are critically eroded threatening development and recreational interests. Some wildlife habitat in the Anastasia Island State Recreation Area is also threatened. Much of this area has a rock revetment, and inlet channel maintenance dredging disposal is being conducted. Beach restoration has been conducted in this area.

The southern tip of Anastasia Island (R193.5-R196) has 0.5 mile of noncritical erosion north of Matanzas Inlet within the Fort Matanzas National Monument.

The southern 2.4 miles of St. Johns County beaches (R197-R209) are critically eroded between Matanzas Inlet and the Flagler County line. The northern portion threatens State Road AIA and private development. Although the State Road AIA roadbed has been abandoned along the southern segment, wildlife habitat within the Matanzas River lagoon is being threatened. This area has been nourished from Atlantic Intracoastal Waterway dredge disposal.

Flagler County

There are five critically eroded areas (5.4 miles) in Flagler County.

Erosion at the northern 0.6 mile of beach (R1-R4) is threatening development and recreational interests at Marineland. This area has a rock revetment and coquina rock groins. Following storm damage by Hurricane Floyd in 1999, the revetment was restored and a new revetment constructed to the south at a more landward alignment with dune restoration.

A small segment of erosion (0.1 mile) in Painter's Hill (R52.3-R53.4) threatens development. Following severe erosion caused by Tropical Storm Gabrielle in 2001, vertical seawalls were constructed.

A 0.9-mile segment of erosion at the north Flagler Beach city limits (R65.2-R70) and 3.3 miles of erosion along southern Flagler Beach (R76-R94.8) threatens State Road AIA. Much of this southern area has a rock revetment.

A 0.5-mile segment of erosion at the south end of the county (R98-R101) threatens State Road A1A.

Volusia County

There are four critically eroded beach areas (22.1 miles), one noncritically eroded beach area (1.1 miles), and one critically eroded inlet shoreline area (0.6 mile) in Volusia County.

Two segments (1.3 and 1.4 miles) of critical erosion in northern Volusia County (R1-R8, R24-R32) threaten State Road A1A.

An 11-mile segment of beach (R57-R118) along Ormond Beach, Daytona Beach, and Daytona Beach Shores is critically eroded threatening development and recreational interests, as the beach has become very narrow.

The north shoreline (0.6-mile) of Ponce de Leon Inlet is critically eroded and threatens recreational interests at the county park.

The 8.4 miles of beaches (R160.8-R207.8) south of Ponce de Leon Inlet within New Smyrna Beach and Bethune Beach are critically eroded. Threatened are private development and recreational interests. Much of Bethune Beach is protected by a rock revetment and the New Smyrna Beach area is to receive inlet sand transfer material from dredging within Ponce de Leon Inlet and additional material from the Atlantic Intracoastal Waterway dredging.

A 1.1-mile segment of the Canaveral National Seashore (R207.8-R214) south of Bethune Beach is also eroded without any threatened interests at this time.

Brevard County

There is one critically eroded area (36.5 miles) and two noncritically eroded areas (12.3 miles) in Brevard County.

Two areas along the Canaveral National Seashore (V020-V066 and V117-V136) are noncritically eroded. Both areas are located north of Cape Canaveral and are not monitored.

From Canaveral Inlet extending 36.5 miles to the south is a long coastal segment (R1-R202) designated as critically eroded. Threatened are development, recreational interests, and wildlife habitat. Beach restoration projects have been conducted in Canaveral, Cocoa Beach, Patrick Air Force Base, Indiatlantic, and Melbourne Beach.

Indian River County

There are three critically eroded areas (15.7 miles) in Indian River County.

The northern 9.5 miles (R1-R51.3) south of Sebastian Inlet is critically eroded threatening State Road AIA, Sebastian Inlet State Park facilities, the McLarty Treasure Museum, and private development along Ambersand Beach, Sanderling, Summerplace, and Wabasso Beach. The museum has a rock revetment, and inlet sand transfer is conducted south of the inlet. A beach restoration project has been constructed at Ambersand Beach.

The northern 3.1 miles of Vero Beach (R70-R86) is critically eroded with development and recreational interests being threatened. Much of this area has seawalls, dune restoration, and small dune nourishment projects, although a major beach restoration has not yet been designed.

In southern Indian River County a 3.1-mile segment (R99-R115.7) is critically eroded threatening development interests. A beach restoration project is planned in this area.

St. Lucie County

There are four critically eroded areas (9.4 miles) and two noncritically eroded areas (7.9 miles) in St. Lucie County.

The northern 1.8 miles of the county (R1-R10) is critically eroded threatening State Road A1A, limited development, and recreation interests and wildlife habitat at Avalon State Park.

The 2.3 miles of Ft. Pierce Beach (R34-R46) extending south from Ft. Pierce Inlet is critically eroded threatening recreation and development interests. Most of this area is a beach restoration project.

Along central Hutchinson Island is a 6.4-mile segment of noncritically eroded shoreline (R46-R80), which lacks any current threat. Immediately to the south is a 1.9-mile eroded segment (R80-R90.3) that threatens the St. Lucie Nuclear Power Plant facilities, limited development, and recreation interests at the Walton Rocks Park. Continuing to the south from this location is another 1.5-mile eroded segment (R90.3-R98) with no current threat.

The southern 3.4 miles of the county shoreline (R98-R115+1000) is critically eroded with development interests threatened.

Martin County

There are three critically eroded areas in Martin County (18 miles.)

The northern 6.4 miles of Martin County on Hutchinson Island (R1-R37.6) is critically eroded threatening development and recreation interests. The northern 4.5 miles of this segment is a beach restoration project. Near the House of Refuge, MacArthur Boulevard continues to be threatened.

Most of Jupiter Island (R45-R111) south of the St. Lucie Inlet is considered critically eroded for 11.5 miles. The northern half of this eroded area extends along St. Lucie Inlet State Preserve and Hobe Sound National Wildlife Refuge. The erosion along this shoreline segment threatens wildlife habitat, including the potential to break through Jupiter Island at Pecks Lake. Also threatened and already half destroyed is the Joseph Reed Mound archeological site which appears to have been constructed during the late Archaic period (2250 B.C.-1000 B.C.) The entire Town of Jupiter Island is also within this long critically eroded area where development and recreational interests are threatened. Inlet sand transfer is being conducted along northern Jupiter Island and a beach restoration project exists at the Town of Jupiter Island.

South of Blowing Rocks Preserve is another critically eroded area (R126-R127.4) extending 0.2 mile to the Palm Beach County line and threatening private development.

Palm Beach County

There are eight critically eroded areas (31 miles), two noncritically eroded areas (0.9 mile), and one critically eroded inlet shoreline area (0.8 mile) in Palm Beach County.

At the north end of Palm Beach County, a 1.5-mile segment of Tequesta and Jupiter Inlet Colony (R1-R10) is critically eroded, threatening private development in those communities as well as recreational interests at Coral Cove Park. A dune restoration project exists at Coral Cove Park and seawalls have been constructed along private development in Tequesta.

The north and south shorelines inside Jupiter Inlet have experienced critical erosion threatening development to the north and recreational interests to the south.

The five miles south of Jupiter Inlet is a critically eroded area (R12-R38) that threatens Jupiter Beach County Park, Carlin Park, State Road AIA, and development in the communities of Jupiter and Juno Beach. Inlet sand transfer has been conducted immediately south of Jupiter Inlet and beach restoration has been conducted at Carlin Park and Juno Beach.

At the south end of Juno Beach (R38-R40) the erosion area continues south for 0.4 mile with no current threat. Another noncritically eroded segment (R58-R60.5) extends 0.5 mile along John D. MacArthur State Park.

Along northern Riviera Beach on Singer Island (R60.5-R69) south of MacArthur State Park is 1.7 miles of critical erosion that is threatening private development and recreational interests at a county park.

Extending south of Lake Worth Inlet along the town of Palm Beach (R76-R128) are 10.9 miles of critical erosion threatening private development, local parks, and State Road AIA. Most of this segment of coast has seawalls, bulkheads, and revetments. There are also numerous groins, a 2.5-mile beach restoration project referred to as the Mid-Town project, and an inlet sand transfer project south of Lake Worth Inlet.

The Town of South Palm Beach (R133.5-R136.7) has 0.7 mile of critical erosion threatening private development. This critically eroded area has nearly continuous seawalls.

Extending south of South Lake Worth Inlet for 3.3 miles is a critically eroded area (R152-R168) that threatens development along the communities of Ocean Ridge, Briny Breezes, Boynton Beach, and Gulf Stream. Inlet sand transfer is being conducted immediately south of South Lake Worth Inlet and beach restoration has been conducted at Ocean Ridge.

Along the City of Delray Beach (R176-R190) is a 2.9-mile critically eroded area that threatened development and recreational interests as well as State Road AIA. This area is a beach restoration project.

The City of Boca Raton at the south end of Palm Beach County has critical erosion (R204-R227.9) extending 5.0 miles to the Broward County line, which threatens recreation interests at Spanish River Park, Red Reef Park, and South Inlet Park as well as State Road AIA and private development. Beach restoration has been constructed throughout Boca Raton, and inlet sand transfer and seawalls exist south of Boca Raton Inlet.

Broward County

Nearly all of Broward County is critically eroded. Three critical erosion areas (21.3 miles) are specifically identified.

The south end of Deerfield Beach and the entire City of Hillsboro Beach along northern Broward County is a 3.2-mile long critically eroded area (R6-R23). Private development is threatened throughout this area. Some seawalls exist in Hillsboro Beach and a boulder mound and groin project exists in Deerfield Beach. A beach restoration project extends from R6 in Deerfield Beach to R12 in Hillsboro Beach.

South of Hillsboro Inlet and extending for 10 miles along Pompano Beach, Sea Ranch Lakes, Lauderdale-by-the-Sea, and Ft. Lauderdale is a continuous critically eroded area (R25-R77) that threatens development and recreational interests including State Road AIA. A beach restoration project has been constructed at Pompano Beach and inlet sand transfer is ongoing immediately south of Hillsboro Inlet. Numerous bulkheads and retaining walls also exist along this stretch of coast. Beach restoration is being conducted throughout this area.

Along the southern 8.1 miles of Broward County south of Port Everglades Entrance is a critically eroded area (R86-R128) that threatens recreational interests at John U. Lloyd State Park and development and recreational interests along the communities of Dania, Hollywood, and Hallandale. Beach restoration projects are ongoing at J.U. Lloyd State Park and at Hollywood and Hallandale. Seawalls also exist along the private development.

Dade County

Most of Dade County's barrier island coast north of Cape Florida is critically eroded. The erosion is identified by three critically eroded areas (17 miles), two noncritically eroded areas (1.4 miles), and one noncritically eroded inlet shoreline area (0.3 mile).

The northern 5.1 miles of Dade County (R1-R26.7) has critical erosion threatening development along Golden Beach and Sunny Isles and recreational interests at Haulover Beach Park. This stretch of coast has a beach restoration project along Sunny Isles and Haulover Beach Park.

Between Bakers Haulover Inlet and Government Cut (R27-R74.4) are 9.4 miles of critical erosion, which threatened development and recreational interests along Bal Harbour, Surfside, and Miami Beach. This reach is a beach restoration project.

The northern end of Virginia Key along the south shoreline of Norris Cut (0.3 mile) has noncritical inlet shoreline erosion. The southern 0.8-mile of beach on Virginia Key (R84-R88) is also noncritically eroded.

The northern end of Key Biscayne (R89-R92) has 0.6 mile of noncritical erosion, and the southern half of Key Biscayne (R101-R113) has 2.5 miles of critical erosion. The critically eroded area threatens development in the Village of Key Biscayne and recreational interests at Bill Baggs Cape Florida State Park. This segment is a beach restoration project.

Monroe County

There are 13 critically eroded beach areas (10.2 miles) and two noncritically eroded beach areas (1.6 miles) along the Florida Keys fronting on the Straits of Florida and Gulf of Mexico between Key Largo and Key West. The distal sand keys west of Key West including Woman Key, Boca Grande Key, the Marquesas Keys, and the Tortugas Keys, also have beach erosion conditions that have not been adequately studied for inclusion in this report. Also not included at this time are the mainland beaches of Key McLaughlin and Cape Sable that front on the Gulf of Mexico.

There are no identified erosion problem areas in the upper keys but there are eight in the middle keys. A 0.7-mile segment of Lower Matecumbe Key (Islamorada) is critically eroded threatening recreational interests and U.S. Highway 1 along Sea Oats Beach. A 1.0-mile segment of Long Key is critically eroded threatening recreational interests at the Long Key State Park. Another 0.1-mile segment on Little Crawl Key is critically eroded threatening recreation interests at Curry Hammocks State Park.

The eastern 0.6-mile of Coco Plum Beach near Key Colony is noncritically eroded. This segment is a City of Marathon public beach park. The western 0.3-mile of Coco Plum Beach is critically eroded threatening private development. The 0.9-mile segment along the south shoreline of Key Colony Beach is critically eroded threatening private development, and the 0.2-mile segment along the west shoreline of Key Colony Beach is critically eroded threatening public recreational interests at Sunset Beach. At Sombrero Beach on Vaca Key, a 0.3-mile segment of beach at the City of Marathon's public park is critically eroded.

The lower keys have significantly more erosion than the upper or middle keys as calcium carbonate sand beaches become more frequent although still limited. Little Duck Key (0.2 mile) is a critically eroded Monroe County park. The sandy island of Bahia Honda Key has three erosion areas. Within Bahia Honda State Park, Calusa Beach (between the bridges), Loggerhead Beach (a western segment) fronting on the Straits of Florida, and a stretch of Sandspur Beach at the east end of Bahia Honda Key have 2.0 miles of critically eroded shoreline, threatening recreational interests as well as the park road and park development. A terminal groin and nourishment have been constructed at Calusa Beach, and a revetment has been constructed along much of the threatened section of park road.

Long Beach on Big Pine Key is a 1.0-mile segment of noncritically eroded beach. Further west is a 1.3-mile segment of critically eroded public beach on Boca Chica Key. Boca Chica Beach is a Monroe County park where recreational beach and the park road were lost during Hurricanes Rita and Wilma (2005).

Nearly the entire south coast of the island of Key West is critically eroded extending for 2.8 miles. Erosion along the eastern portion of Key West completely eliminated the recreational beach. A beach restoration project has been constructed at Smathers Beach and minor nourishment projects have been constructed at other public and private beaches to the west including Rest Beach, Higgs Beach, and South Beach. A seawall has been constructed along most of South Roosevelt Boulevard and several walls and revetments are constructed adjacent several private properties.

At the west end of Key West, the 0.3-mile beach along Fort Zachary Taylor State Historic Park is critically eroded threatening recreational interests. A terminal groin and breakwater project has been constructed and minor nourishment has been conducted at this site. On the south shoreline of Key West fronting the Gulf of Mexico, the 0.1-mile segment of Simonton Beach, a city park, was critically eroded by Hurricane Wilma (2005), threatening recreational interests.

The distal sand keys west of Key West are known to have erosion areas; however, insufficient data is currently available. Particularly susceptible to erosion conditions are Woman Key, Boca Grand Key, the Marquesas Keys, and the Tortugas Keys. Cape Sable and Key McLaughlin on the mainland coast of Monroe County fronting the Gulf of Mexico were severely impacted by Hurricane Wilma (2005). These areas are now being monitored by aerial videography.

Escambia County

There are two critically eroded areas (9.8 miles) and two noncritically eroded areas (11.2 miles) in Escambia County.

The eastern 7.5 miles of Perdido Key is eroded, of which 1.6 miles are critically eroded (R26-R34) threatening development and recreational interests, and 5.9 miles (R34-R65) are noncritically eroded along the Gulf Islands National Seashore. Inlet sand transfer is being conducted in this area using Pensacola Bay Entrance dredge material.

Along western Santa Rosa Island (R79-R107) between Ft. Pickens and Pensacola Beach 5.3 miles of the Gulf Islands National Seashore are eroded but not a current threat.

The entire 8.2-mile length of Pensacola Beach (R107-R151) is critically eroded threatening development and recreational interests. Dune restoration was conducted after the storms of 1995, 1998, 2002, and 2004. Beach restoration was completed in 2003.

Santa Rosa County

There is one critically eroded area in Santa Rosa County (4.1 miles). The critically eroded area along Navarre Beach (R192.5-R213.5) threatens development and recreational interests. Following hurricanes in 1995 and 1998, dune restoration projects were constructed. A beach restoration project is being constructed in late spring, 2006.

Okaloosa County

There are three critically eroded beach areas (6.5 miles), one noncritically eroded beach area (1.7 miles) and one critically eroded inlet shoreline area (0.8 mile) in Okaloosa County.

The 2.8 miles of developed Santa Rosa Island (R1-R15) near Ft. Walton Beach is critically eroded. Dune restoration projects were constructed after the hurricanes of 1995, 1998, and 2004.

The east end of Santa Rosa Island (V612-V621) within the Eglin Air Force Base extending 1.7 miles west of Choctawhatchee Bay Entrance (East Pass) is noncritically eroded.

The east shoreline of East Pass along Norriego Point is experiencing critical inlet shoreline erosion threatening development and recreational interests. This area has bulkheads and retaining walls in front of private development, and a seawall and boulder mound T-groins along the undeveloped segment to the north.

The western 1.6 miles of Destin (R17-R25.5) is designated critically eroded following the severe impact of the 2005 hurricane season. The eastern 2.1 miles of Destin (R39-R50) is designated critically eroded threatening development and the coastal road. This area is part of a beach restoration project constructed in the spring of 2006.

Walton County

There are eight critically eroded areas designated in Walton County (14.3 miles).

The western 5.0 miles (R1-R22.8) threaten development, recreational interests, and the coastal road. This area has a beach restoration project constructed in the spring of 2006.

A 2.7-mile critically eroded segment at Dune Allen (R41-R54.5) threatens development, Fort Panic Road, and County Road 30A.

A 1.0-mile segment of Blue Mountain Beach (R58-R63) is critically eroded where development is threatened by erosion of the bluff. To the east, erosion of a 0.2-mile segment of Gulf Trace (R67.3-R68.3) and a 0.1-mile segment of Grayton Beach (R70.95-R71.4) also threaten development.

A 3.1-mile segment of critical erosion threatens development along Seagrove Beach (R82-R98). To the east along Seacrest Beach, is another 1.8-mile segment (R105.5-R114.7) where development is threatened by erosion of the bluff.

A 0.4-mile segment at Inlet Beach (R122-R124) is designated critically eroded due to its poststorm vulnerability threatening development interests.

Bay County

There are two critically eroded beach areas (20.6 miles), three noncritically eroded beach areas (10.1 miles), and one critically eroded inlet shoreline (0.2 mile) in Bay County.

The entire western half of Bay County extending 18.6 miles between Phillips Inlet and St. Andrews Inlet (R1-R97) is critically eroded, threatening development and recreational interests. Inlet sand transfer has been initiated at St. Andrews State Park and a beach restoration project has been constructed for nearly the entire critically eroded area. Numerous concrete and wood bulkheads and retaining walls also exist throughout the area of private development.

The western shoreline of St. Andrews Inlet adjacent to Gator Lake is critically eroded requiring periodic fill placement to protect wildlife habitat in St. Andrews State Park. A shoreline stabilization project to construct nearshore detached breakwaters is to be constructed.

Along the western 6.1 miles of Shell Island (R98-V9) east of St. Andrew's Inlet, the beach is noncritically eroded without any threatened interests.

On Crooked Island there are two noncritically eroded areas split by Eloise Inlet. The western segment (V16-V30+2000) extends 2.8 miles to the west and the eastern segment (V36-V41) extends 1.2 miles to the east.

The eastern 2.0 miles of Bay County (R127.8-R137.8) along the Town of Mexico Beach is critically eroded. Inlet sand transfer is periodically conducted at Mexico Beach Inlet and dune restoration has been conducted following Hurricanes Opal (1995) and Dennis (2005).

Gulf County

There are three critically eroded areas (6.6 miles) and five noncritically eroded areas (10.3 miles) in Gulf County.

Most of St. Joseph Peninsula is eroded between R41 and R114 at Cape San Blas. Three areas are considered critical due to threatened development and recreational interests or lost wildlife habitat. A segment of St. Joseph Peninsula State Park (R41-R69) is noncritically eroded for 5.5 miles and two middle peninsula segments (R85.5-R90.1 and R91.3-R95.5) are noncritically eroded for 1.7 miles.

Two segments (R69-R85.5 and R90.1-R91.3) of critical erosion on St. Joseph Peninsula extend for 3.3 mile and 0.2 mile respectively and threaten private development and recreational interests. A southern segment (R95.5-R111.5) extends for 3.1 miles and threatens private development as well as County Road C31 at Stump Hole. South of Stump Hole to the threatened and damaged U.S. Air Force facilities, the erosion has destroyed nesting sea turtle habitat on Cape San Blas. After Hurricane Opal (1995), a rock mound structure was constructed to protect the county road at Stump Hole. Likewise, the U.S. Air Force constructed a rock mound structure in front of their road to the rocket launch site after Hurricane Kate (1985), but both the road and the rock mound structure were destroyed by Hurricane Opal (1995). The rock mound at Stump Hole was extended and subsequently damaged by Hurricanes Ivan (2004) and Dennis (2005).

South of the U.S. Air Force facilities, Cape San Blas (111.5-R114) has sustained severe but noncritical erosion for 0.5 mile.

Indian Peninsula (R150-R162) at the east end of the county is also eroded for 2.6 miles with no threatened interests at this time.

Franklin County

There are six critically eroded beach areas (11.8 miles), nine noncritically eroded beach areas (19.2 miles), and one noncritically eroded inlet shoreline area (0.5 mile) in Franklin County.

St. Vincent Island has a 3.2-mile long noncritically eroded area along its most gulfward protruding midsection (V17-V34). Resources on the St. Vincent National Wildlife Refuge do not currently appear threatened by this ongoing erosion condition. To the east, a 0.9-mile segment of St. Vincent Island (V34-V39) is critically eroded into the maritime forest resulting in the loss of beach wildlife habitat.

Severe erosion exists at Cape St. George on Little St. George Island resulting in the loss of the historic pre-Civil War lighthouse. Also, sea turtle nesting habitat to the west of the lighthouse has been lost as the shoreline has eroded into the maritime forest and the beach has virtually disappeared. This critically eroded area (R19-R23) extends along a 0.7-mile length of shoreline and is adjoined at both ends by a 0.8-mile noncritically eroded segment to the west (R15-R19) and a 0.2-mile noncritically eroded segment to the east (R23-R24).

The west end of the historical length of St. George Island west of Sike's Cut (R34-R51) is noncritically eroded for 3.3 miles. Both interior shorelines of Sike's Cut also have noncritical erosion for 0.5 mile. East of Sikes Cut, the St. George Island Plantation (R53-R69) also is noncritically eroded for 3.3 miles. Some inlet sand transfer of Sike's Cut dredge material has taken place west of the inlet and some material has been placed along the inlet shorelines.

Hurricane Dennis (2005) severely impacted St. George Island State Park. The entire developed stretch of the park (R106-R128.5) is now designated critically eroded for 4.5 miles due to the impact to recreational interests and park infrastructure. The undeveloped eastern 3.8 miles (R128.5-R147) is considered noncritically eroded.

Most of Dog Island is eroded, including the western 2.6 miles (R154-R168) which is noncritically eroded. To the east, a 3.6-mile segment (R168-R187.2) is critically eroded where private development has been destroyed and continues to be threatened following Hurricane Dennis (2005).

The historic west end of Alligator Point (R194-R196) is severely eroded for 0.4-mile; however, this erosion into Phipps Preserve is not considered a threat to any interests at this time.

The east end of Alligator Point (R210-R216) between the Southwest Cape and Lighthouse Point is critically eroded for 1.1 miles. Erosion at the Southwest Cape has destroyed and continues to threaten private development and a Franklin County road.

The southeast end of St. James Island is critically eroded extending north from Lighthouse Point (R220-R225) for 1.0 mile threatening development and damaging the Franklin County road. A portion of the road was abandoned and relocated inland. Further north from Lighthouse Point (R225-R232) a noncritically eroded area extends for 1.6 miles.

Wakulla County

There are two critically eroded beach areas (1.3 miles) and one noncritically eroded beach area (0.4 mile) in Wakulla County.

Mashes Sands extending north from Ochlockonee Bay Entrance is critically eroded along its southern end for 0.3 mile threatening recreational interests at the county park. Noncritical erosion extends another 0.4 mile to the north.

Shell Point has 1.0 mile of critical erosion threatening development. Most of the private properties have bulkheads, retaining walls, and one rock revetment.

Jefferson, Taylor, and Dixie Counties

There are no identified erosion areas in Jefferson County.

Taylor County has a 0.2-mile segment of critical erosion threatening private development at Dekle Beach.

There are three critically eroded areas in Dixie County (0.6 mile) identified at this time. Each area extends for 0.2 mile on the three separate islands of Shired Island, Bird Island, and Cotton Island. The erosion of these islands threatens ancient pre-Columbian shell middens and burial sites dating as far back as the late archaic period (BC2250-BC1500).

Levy County

There are two critically eroded beach areas (0.7 mile) and one noncritically eroded beach area (1.2 miles) in Levy County.

Critical erosion extends for 0.5 mile along the Town of Cedar Key threatening development interests and the public roads.

Erosion along 1.2 miles of Seahorse Key in the Cedar Keys National Wildlife Refuge is considered noncritical at this time.

On the state-owned Atsena Otie Key, 0.2 mile of the east shoreline is critically eroded threatening the Seminole holding area and its grave sites of the Second Seminole War as well as other pre-Columbian graves from ancient occupation of the island.

Citrus, Hernando, and Pasco Counties

Citrus County has 0.2 mile of Fort Island Beach that is critically eroded threatening recreation interests at the county park. Beach nourishment is planned to mitigate erosion losses sustained during 2004.

Hernando County has 0.5 mile of noncritically eroded shoreline along Pine Island.

There is one critically eroded beach area (0.2 mile) and one noncritically eroded beach area (1.1 miles) in Pasco County. A small segment of public beach at Hudson Beach is critically eroded threatening recreational interests. Anclote Key has 1.1 miles of noncritically eroded beach.

Pinellas County

There are five critically eroded beach areas (21.4 miles), two noncritically eroded beach areas (4.4 miles), and one critically eroded inlet shoreline area (0.5 mile) in Pinellas County.

The southern end of Anclote Key (most of which is in Pasco County to the north) is noncritically eroded extending for 0.3 mile.

Honeymoon Island has 1.4 miles of beach that is critically eroded along its south end (R6-R12) threatening recreational interests at Honeymoon Island State Park. A beach restoration project was constructed in this area and another project is expected to be constructed in late 2006.

The north end of Caladesi Island (R17-R20) south of Hurricane Pass has a 0.5-mile segment of noncritical erosion.

The south end of Clearwater Beach Island is critically eroded extending 0.5 mile along the north shore of Clearwater Pass (R47-R49). Private development is threatened in this area which is mostly armored with concrete bulkheads.

Most all of Sand Key with the exception of the north and south ends of the island has been critically eroded. This critically eroded area (R56-R115.4) extends 11.3 miles and has threatened development and recreational interests in the communities of Belleair Beach, Belleair Shore, Indian Rocks Beach, Indian Shores, Redington Shores, North Redington Beach, Redington Beach, and the north end of Madeira Beach. Beach restoration projects as well as concrete and wooden bulkheads extend throughout this erosion area.

All of Treasure Island (R126-R143) is designated critically eroded. Development and recreational interests were threatened along this 3.5-mile barrier island, which is a beach restoration project.

All of Long Key (R144-R166) is designated critically eroded. Development and recreational interests were threatened along this 4.1-mile barrier island, which is a beach restoration project. At the north end of the island at Upham Beach, material from Blind Pass is used for nourishment and a sand fill container groin field was constructed.

Between Pass-a-Grille and Bunces Pass, North Bunces Key (also called Shell Key) has 1.4 miles of noncritical erosion. South of Bunces Pass and seaward of Mullet Key, South Bunces Key has 2.2 miles of noncritical erosion. A 1.1-mile southern portion of Mullet Key (R176-R182) is critically eroded threatening recreational interests and important cultural resources. Beach fill has been placed in the past using Egmont Channel maintenance dredge material.

Hillsborough County

Hillsborough County has one coastal island, Egmont Key, at the entrance to Tampa Bay. Most of the length of Egmont Key (1.6 miles) is critically eroded threatening recreational interests and important cultural resources. A St. Petersburg harbor maintenance dredging project in December, 2000, provided the material for nourishment of the north end of Egmont Key for the protection of three Spanish-American War era batteries. Another nourishment project using Egmont Channel maintenance dredging material is being planned.

Manatee County

Nearly all of Manatee County is critically eroded (12.3 miles). The north end of Anna Maria Island (R1-R2) has 0.2 mile of critical inlet shoreline erosion threatening development interests. Anna Maria Island (R2-R41) has 7.3 miles of critically eroded beach that has threatened development and recreational interests. This barrier island is a beach restoration project and numerous bulkheads and revetments exist along the road and in front of private development.

Between Longboat Pass and Sarasota County, the northern half of Longboat Key (R42-R67) has 4.8 miles of critically eroded beach that has threatened development and recreational interests. This barrier island has a beach restoration project, and numerous concrete bulkheads exist along the north end fronting the private development.

Sarasota County

There are seven designated critically eroded beach areas (21.4 miles), one noncritically eroded beach area (0.4 mile), and two critically eroded inlet shoreline areas (1.1 miles) in Sarasota County.

The southern half of Longboat Key (R1-R29) between Manatee County and New Pass has 5.4 miles of critically eroded beach that has threatened development interests in the Town of Longboat Key. This area has a beach restoration project, and terminal groins exist at New Pass.

The north end of Lido Key fronting on New Pass is a critically eroded inlet shoreline area (R31, east 1500 feet) for 0.3 mile. Nearly all of Lido Key (R31-R44.5) has critically eroded beach that has threatened private development and recreational interests along 2.4 miles. Beach restoration has been conducted along the island and maintenance dredging material has been obtained from the federal navigation channel at New Pass.

The south shoreline of Big Sarasota Pass (R44A-R45) is critically eroded along 0.8 mile of Siesta Key. The threatened private properties along this inlet shoreline have bulkheads and rock revetments.

At the north end of Siesta Key south of Sarasota Point (R46-R48.4) is a critically eroded beach area that threatens private development and Beach Road. This 0.4-mile erosion area has rock revetments.

Along the southern half of Siesta Key south of the Point of Rocks headland is a 2.4-mile long critically eroded beach area (R64-R77) that threatens private development. Some rock revetments exist in this area and a beach restoration project has been planned.

Along the northern half of Casey Key (R81-R96) is a 2.9-mile long critically eroded beach area that threatens private development and the Casey Key Road. Almost all of this erosion area has rock revetments.

Extending 5.1 miles south of Venice Inlet is a critically eroded beach segment (R116-R143) that has threatened development and recreational interests along the City of Venice, and to the south along a sewage treatment plant, Harbor Drive, and Caspersen Beach. This area has a beach restoration project, and numerous concrete bulkheads exist at the north end of the City of Venice. To the south is a 0.4-mile segment of noncritical erosion (R143-R145).

The south end of Sarasota County (R168-R183) is critically eroded for 2.9 miles along Manasota Key threatening private development as well as Manasota Key Road. Some rock revetments have been constructed in this area.

Charlotte County

There are three critically eroded areas (5.2 miles) and one noncritically eroded area (0.4 mile) in Charlotte County.

The northern 3.0 miles of Charlotte County (R1-R17) along southern Manasota Key including Englewood Beach and Stump Pass State Park are critically eroded threatening private development and public recreational interests. A few retaining walls and bulkheads exist north of Stump Pass State Park. Between R17 and R19 within the state park is 0.4 mile of noncritical erosion. The park has been nourished with Stump Pass maintenance dredge material. Additional material was placed along Englewood Beach and the state park during the Stump Pass relocation project.

Along Knight Island and Bocilla Island (R28-R39) are 1.8 miles of critically eroded beach threatening private development. Beach restoration of this area has been conducted with Stump Pass dredge material.

South of Little Gasparilla Pass, which is closed, is a 0.4-mile segment of critically eroded beach on Little Gasparilla Island. This erosion threatens private development.

Lee County

There are nine critically eroded beach areas (20.9 miles), five noncritically eroded beach areas (5.0 miles), two critically eroded inlet shoreline areas (0.4 mile), and two noncritically eroded inlet shoreline areas (0.4 mile) in Lee County.

The southern 4.1 miles of Gasparilla Island (R7-R26) is critically eroded threatening development and recreational interests in the town of Boca Grande and the Gasparilla Island State Park. Much of this area has bulkheads, and inlet sand transfer has been conducted using Boca Grande Pass dredge material.

Three areas on Cayo Costa Island are noncritically eroded. The northern segment (R27-R33) extends for 1.1 miles, the central segment (R46-R52) extends for 1.2 miles, and the southern segment (R60-R65) extends for 1.0 mile.

Much of North Captiva Island is eroded. The north shore fronting on Captiva Pass (R66, east 1000 feet) has critical inlet shoreline erosion threatening development interests. The northern 1.0-mile of gulf beach (R66-R71) also is critically eroded threatening development interests. With the exception of a stable segment of beach between R71 and R75 the remaining shoreline of North Captiva Island is eroded. From R75 through R78 is 1.7 miles of noncritical erosion. The island was breached between R78 and R79 during Hurricane Charley (2004). The truncated southern 0.8 mile of North Captiva Island extending into Redfish Pass (R79-R82.3) is critically eroded threatening development and losing wildlife habitat.

All of Captiva Island is critically eroded. The south shore of Redfish Pass (R83-R84) has 0.2 mile of critically eroded inlet shoreline. This shoreline has a rock revetment with a terminal groin. The gulf beach from R84 through R109 has five miles that is critically eroded. This entire island segment is a beach restoration project.

Northern Sanibel Island is eroded. From R109 to R118 the beach is critically eroded, extending 1.7 miles south of Blind Pass where the road, development, recreation, and wildlife habitat are threatened. Part of this segment received nourishment from the Captiva Island beach restoration project. Another segment (R129-R133) on northern Sanibel Island has 0.9 mile that is critically eroded threatening development interests. This segment in the neighborhoods of Gulf Shores and Gulf Pines has a beach restoration project.

Most of Estero Island is eroded. From R175(-.4) to R200, Ft. Myers Beach has 5.0 miles that is critically eroded threatening development and recreational interests. This entire segment is a beach restoration project. Matanzas Pass channel dredge material has been previously placed at the north end on Bowditch Point.

Most of Lover's Key is eroded. The north shore of Lover's Key (R211-R213) fronting on Big Carlos Pass has 0.3 mile that is noncritically eroded. Most of the gulf beach extending from R214 to R222 has 1.5 miles that is critically eroded threatening recreational interests and wildlife habitat in Lover's Key State Park. A beach restoration project was constructed in 2004. The south shore of Lover's Key (R222) fronting on New Pass also has 0.1 mile of noncritically eroded inlet shoreline.

Between New Pass and Big Hickory Pass, Big Hickory Island (R223-R226) has 0.7 mile that is noncritically eroded. South of Big Hickory Pass, Little Hickory Island (R226-R230) has 0.9 mile of critically eroded beach threatening development interests in Bonita Beach. This area has a beach restoration project with bulkheads and two terminal groins at the north end.

Collier County

There are seven critically eroded beach areas (13.3 miles), four noncritically eroded beach areas (5.2 miles), and one critically eroded inlet shoreline area (0.8 mile) in Collier County.

In northern Collier County, a 1.6-mile beach segment (R22.3-R30.5) is critically eroded threatening development interests in Vanderbilt Beach. This area has a beach restoration project and numerous bulkheads.

The City of Naples has two segments that are critically eroded threatening development interests north and south of Doctors Pass. North of Doctors Pass (R50.65-R57.5) is a 1.3-mile critically eroded segment, and between Doctors Pass and Gordon Pass (R57.8-R89) is a 5.6-mile critically eroded segment. These areas of Naples have a continuous beach restoration project. Numerous bulkheads and revetments also exist throughout Naples. Groins exist north of Gordon Pass.

South of Gordon Pass (R90-R111) is a 3.9-mile stretch that is noncritically eroded along the northern half of Keewaydin Island. Between Little Marco Pass and Capri Pass, Sea Oat Island has 0.9 mile of beach that is noncritically eroded. Also, Coconut Island (M1-M2) has 0.1 mile that is noncritically eroded off the north shore of Marco Island; however, little remains of this island that was severely impacted by Hurricane Wilma (2005).

Marco Island has three areas that are critically eroded threatening development interests. Along Hideaway Beach, the north shore of Marco Island (H3-H11) fronting on Big Marco Pass has 0.8 mile of inlet shoreline that is critically eroded. The central gulf beach of Marco Island (R134.5-R139) has 0.8 mile that is critically eroded and the southern stretch of beach (R143-R148) has 0.9 mile that is critically eroded. All three critically eroded areas on Marco Island have beach restoration projects, and the northern segment also has a rock groin field along Hideaway Beach.

Erosion on the two southern barrier islands in Collier County has progressed into the backshore mangrove forest resulting in the loss of beach wildlife habitat. Following Hurricane Wilma (2005), a 1.6-mile segment of Kice Island (V23-V31.4) is critically eroded. South of Morgan Pass, Morgan Island has a 1.5-mile segment (V33.8-V41.8) that is critically eroded and a 0.3-mile segment (V41.8-V43.5) that is noncritically eroded.