Critically Eroded Beaches in Florida

Division of Water Resource Management

Florida Department of Environmental Protection

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Introduction

In 1986, pursuant to Sections 161.101 and 161.161, Florida Statutes (F.S.), the Florida Department of Environmental Protection (Department) 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. The long-term management plan has several components that the Department implements including the *Critically Eroded Beaches Report* and the *Strategic Beach Management Plan*.

The Department, pursuant to rule 62B-36.002(5), Florida Administrative Code (F.A.C.), defines "critically eroded shoreline" as, "*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 shorelines 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.*"

This critical erosion report provides an inventory of Florida's erosion areas on the 825 miles of sandy beaches fronting the Atlantic Ocean, Straits of Florida, Gulf of Mexico and the roughly 66 coastal barrier tidal inlets. This report is periodically updated to include additions and deletions. When planning for future initiatives beyond the date of this report's publication, readers may wish to visit the Department's webpage to ensure use of the most up-to-date information.

Many of the designated critically eroded beaches have been restored through the placement of beach and dune fill material. The shorelines where these beach restoration projects have taken place are improved compared to their pre-project condition when they were designated as being critically eroded. Although these beach management projects and their subsequent maintenance have mitigated the original critical erosion conditions, these shorelines retain their critical erosion designation in order to retain their State of Florida funding eligibility, for long term management and beach project maintenance and monitoring. Roughly half of the designated critically eroded beaches are currently managed. 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 non-critically eroded beaches and require close monitoring in case the conditions become critical.

Historical Critical Erosion Designations

In 1989, the 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 non-critical erosion statewide. The erosion areas list was revised in 1990 to include minor changes for Nassau, Martin and Gulf counties, plus more significant 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 more significant 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, 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 non-critical 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, required nourishment for the design integrity of an authorized beach restoration project. The major changes included the Manatee County projects on Anna Maria Island and Longboat Key. A peripheral erosion area in Martin County and an erosion gap segment in St. Lucie County were also added to the 1992 revision. 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 non-critical 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 impacts in 1995. Following Hurricane Opal on October 4, 1995, an updated list was compiled for northwest Florida that specifically identified areas that not only had critical erosion but also a high degree of post-storm 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 storms with less impact in Florida. 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. Two small 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 following 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 Dr. Julian G. Bruce St. George Island State Park during 2002 and 2003 resulted in significant changes in that portion of Franklin County. A study of south St. Lucie County resulted in the addition of a critical erosion area along Hutchinson Island. Following Tropical Storm Isidore in 2002, 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 list added 42.6 miles (roughly a 13.2 percent increase) to the statewide total of critically eroded beaches. In southwest Florida, 1.1 miles of critically eroded beach were added to Lee County due to the impact of Hurricane Charley. On the Atlantic coast, the combined impact of Hurricanes Frances and Jeanne resulted in significant increases in the amount of critically eroded beach 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, Hurricane Ivan resulted in the addition of critically eroded beach segments 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 list added 20.2 miles (roughly a 5.5 percent increase) to the statewide total of critically eroded beaches, and 0.2 mile (2.4 percent 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 impacts of Hurricanes

Dennis, 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.

A mild tropical storm season in 2006 led to few additions for the 2007 updated listing. An eroded segment of South Ponte Vedra (2.0 miles) was added in St. Johns County, as well as small beach and inlet segments in Lee County at Boca Grande. Another segment was added to Escambia County on Perdido Key (0.9 mile).

Although there was another relatively mild tropical storm season in 2007, with only Tropical Storms Andrea, Barry and Noel affecting Florida beaches, persistent northeasters cumulatively exacerbated erosion conditions at a few hotspots along the Atlantic coast. Due to these storm effects, small shoreline segments at Painters Hill in Flagler County (0.3 mile) and Lantana Municipal Beach in Palm Beach County (0.1 mile) were added to the 2008 updated listing. At the north end of Manatee County, the shoreline of Passage Key (0.3 mile) was also added to the 2008 updated listing. Segments on Perdido Key in Escambia County (4.0 miles), St. Joseph Peninsula in Gulf County (1.7 miles) and Alligator Point in Franklin County (0.8 mile) were added for the design integrity of adjacent beach management projects. An updated study of Manasota Key resulted in the addition of a 1.5-mile segment in Sarasota County. Another updated study in Lee County included a non-critically eroded segment on North Captiva Island and a 0.8-mile critically eroded segment on Big Hickory Island.

In 2008, Tropical Storm Fay affected predominantly the Atlantic shoreline, and the Gulf coast received the fringe impacts of Hurricanes Gustav and Ike. Small critical erosion areas were added for Nassau and Palm Beach counties. Small segments of Walton County were designated as critical for the design integrity of adjacent beach management projects. Because the Alligator Point to Lighthouse Point beach restoration project did not go forward in Franklin County, small segments were removed from the critically eroded list. The designation for the critically eroded north end of Anna Maria Island changed from an inlet shoreline to a gulf beach. Studies in 2010 identified minor segments of critically eroded areas in Sarasota County (0.8 mile) and Collier County (0.4 mile). Due to another quiet tropical storm season for Florida’s beaches in 2010, no changes were made in the 2011 report.

Updated east coast surveys in 2011 permitted the investigation of long term beach recovery over the seven years since Hurricanes Frances and Jeanne inflicted severe erosion along the east coast. A shoreline can be removed from the critical erosion list if there is total recovery or partial recovery such

that the upland interests are no longer threatened by high frequency storm conditions. The 2012 report delisted beach segments in Flagler County (0.9 mile), Volusia County (2.7 miles) and St. Lucie County (1.8 miles). A small non-critical segment was removed with the disappearance of Coconut Island in Collier County (0.1 mile). A 4.7-mile segment of Kennedy Space Center was listed as critical after a new study conducted on Cape Canaveral, and a 0.6-mile segment at the north end of Conch Island in St. Johns County was added as non-critical.

Effects of Hurricane Sandy (2012) resulted in the addition of beaches in Manalapan (1.4 miles) in Palm Beach County to the critically eroded list. Also added were a southern segment in the Town of Palm Beach (0.9 mile), an extended segment of South Ponte Vedra in St. Johns County (0.7 mile), a segment of southern Estero Island in Lee County (0.8 mile), an extended segment in Collier County (1.1 miles), and the northern 2,000 feet of Deer Island in Levy County (0.4 mile). Another 3.1 miles of non-threatened shoreline was added for continuity of management of the coastal system following federal project authorization in Walton County. A non-critical segment of eastern Santa Rosa Island was delisted (1.1 miles).

The 2015 update designated the beach between the critical segments of South Ponte Vedra and Vilano Beach in St. Johns County (2.2 miles) as critically eroded, and added a minor extension to Hutchinson Island in Martin County (0.4 mile) for design integrity of a beach restoration project. The 2016 update designated beach segments on Manasota Key and Knight Island for the design integrity of beach restoration projects in Charlotte County (1.3 miles).

In 2016, Hurricanes Hermine and Matthew impacted Florida's Gulf and Atlantic beaches resulting in additional areas being designated as critically eroded, including a northward extension of South Ponte Vedra in St. Johns County (1.6 miles), Painters Hill and southern Flagler Beach in Flagler County (1.7 miles), a northern segment of Volusia County fronting State Road A1A (1.6 miles), and a segment of Manasota Key in Sarasota County (0.3 mile). In 2017, Hurricane Irma caused statewide erosion impacts resulting in additional critical erosion areas being designated for Ponte Vedra in St. Johns County (0.9 mile), Delnor-Wiggins Pass State Park in Collier County (0.1 mile), and segments of Sea Oats Beach, Long Key, Little Crawl Key, Coco Plum Beach and Big Pine Key in Monroe County (3.5 miles). The 2017 list includes 420.9 miles of critically eroded beach, 8.7 miles of critically eroded inlet shoreline, 92.2 miles of non-critically eroded beach and 3.2 miles of non-critically eroded inlet shoreline statewide, as shown in *Figure 1.*

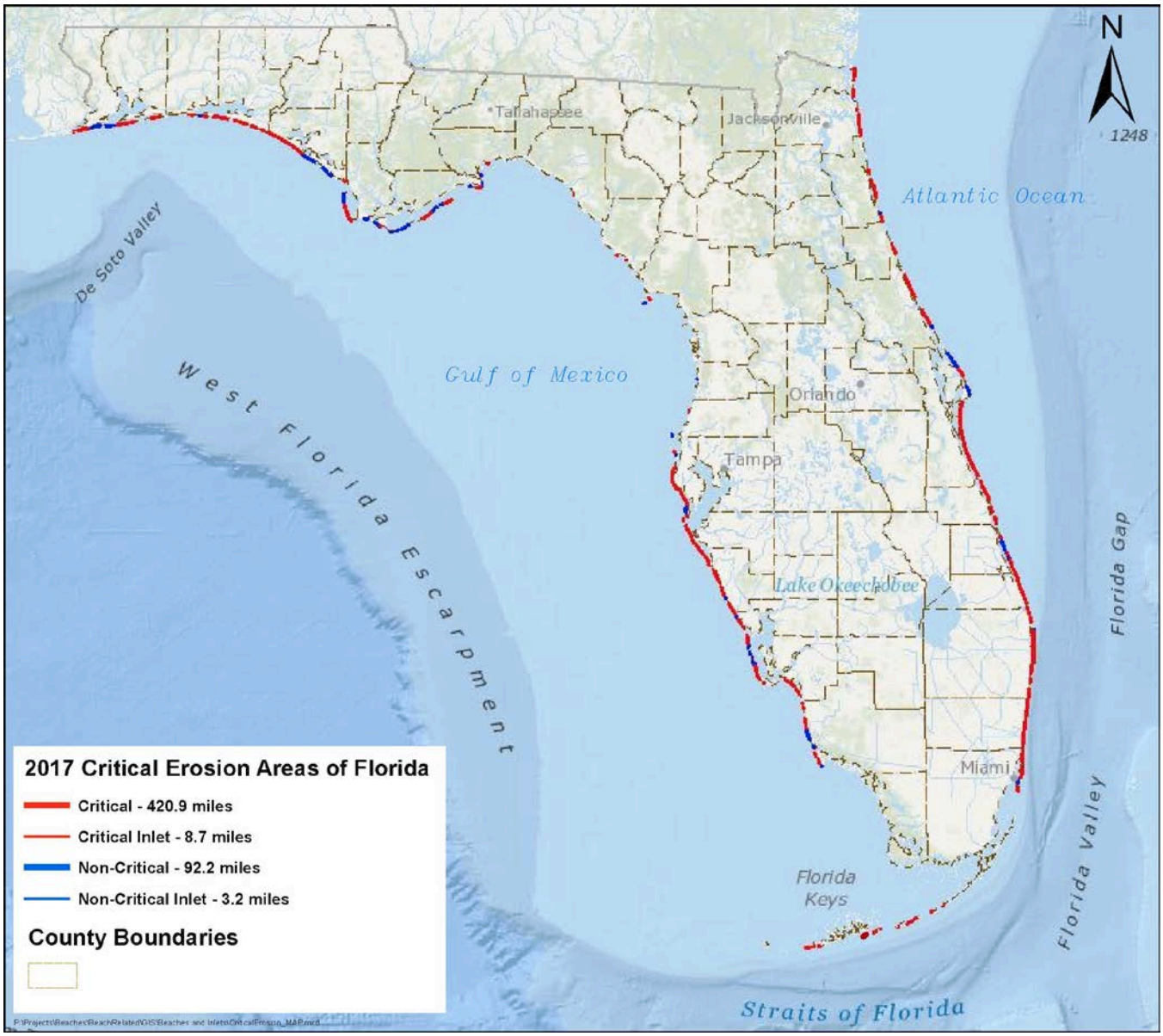


Figure 1. *Statewide areas of critically and non-critically eroded shoreline [Graphic from ROSSI database]. View an interactive map with aerial imagery showing R monuments and the critical erosion areas.*

Discussion

To determine whether a segment of shoreline is critically eroded, the Department's coastal engineering staff investigates an area of concern and employs both qualitative assessments and quantitative data and analyses. When data are limited at the time of an investigation, staff utilizes professional engineering judgment based upon reasonably accepted standards and practices in evaluating the erosion condition of a shoreline. Subsequently, when pertinent new data is obtained, the Department updates the analysis. The type of quantitative data and analyses considered includes, but is not limited to, beach and offshore profiles, upland topography, nearshore and offshore bathymetry, historical shoreline position changes, storm tide frequency, beach and dune erosion, recent storm damage, design adequacy of upland development, and proximity of development, infrastructure, wildlife habitat, and important cultural resources to the effects of a 25-year frequency storm event.

Only 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 erosion problems areas at this time; however, the Department has documented substantial erosion in these areas due to hurricanes in 2005.

The listings of critically and non-critically eroded areas in this report are identified by the Department'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 on the east coast (Table *1*), west coast (Table *2*) and Florida Keys (Table ***3***), with all values provided in miles of shoreline to the nearest one-tenth mile.

Table ***4*** summarizes all the erosion areas in the state. The following chapters discuss the erosion areas in each coastal county and maps are provided for 29 coastal counties. Maps are not provided for the following five counties which have less than 1.5 miles of erosion: Taylor County (0.2 mile), Dixie County (0.6 mile), Citrus County (0.2 mile), Hernando County (0.5 mile) and Pasco County (1.3 miles). These maps are intended to provide general location guidance to the user.

Table 1. *Locations of critically eroded beach and inlet shoreline, and non-critically eroded beach and inlet shoreline, in Florida east coast counties, as of December 2017.*

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Nassau	St. Marys River	Critical Inlet Shoreline	0	0	2.5	0
Nassau	R9 – R33	Critical	4.4	0	0	0
Nassau	R60 – R80	Critical	3.3	0	0	0
Nassau	***Total Eroding Shoreline***		***7.7***	***0***	***2.5***	***0***
Duval	Big Talbot Island, Nassau Sound	Non-Critical Inlet Shoreline	0	0	0	2.0
Duval	R21 – R23	Critical	0.3	0	0	0
Duval	R23 – A1A	Critical Inlet Shoreline	0	0	0.7	0
Duval	V501 – R80	Critical	10.1	0	0	0
Duval	***Total Eroding Shoreline***		***10.4***	***0***	***0.7***	***2.0***
St. Johns	R26 – R31	Critical	0.9	0	0	0
St. Johns	R76 – R117	Critical	8.1	0	0	0
St. Johns	R123 – R128	Critical	1.0	0	0	0
St. Johns	R132 – R152	Critical	3.8	0	0	0
St. Johns	R193.5 – R196	Non-Critical	0	0.5	0	0
St. Johns	R197 – R209	Critical	2.4	0	0	0
St. Johns	***Total Eroding Shoreline***		***16.2***	***0.5***	***0***	***0***
Flagler	R1 – R4	Critical	0.6	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Flagler	R50 – R57	Critical	1.1	0	0	0
Flagler	R65.2 – R70	Critical	0.9	0	0	0
Flagler	R76 – R94.8	Critical	3.3	0	0	0
Flagler	R98 – South County Line	Critical	0.6	0	0	0
Flagler	***Total Eroding Shoreline***		***6.5***	***0***	***0***	***0***
Volusia	R24 – R33	Critical	1.6	0	0	0
Volusia	R57 – R118	Critical	11.0	0	0	0
Volusia	North Shore, Ponce Inlet	Critical Inlet Shoreline	0	0	0.6	0
Volusia	R160.8 – R207.8	Critical	8.4	0	0	0
Volusia	R207.8 – R214	Non-Critical	0	1.1	0	0
Volusia	***Total Eroding Shoreline***		***21.0***	***1.1***	***0.6***	***0***
Brevard	V020 – V065	Non-Critical	0	8.5	0	0
Brevard	V065 – V090	Critical	4.7	0	0	0
Brevard	V117 – V136	Non-Critical	0	3.6	0	0
Brevard	R1 – R202	Critical	36.5	0	0	0
Brevard	***Total Eroding Shoreline***		***41.2***	***12.1***	***0***	***0***
Indian River	R1 – R51.3	Critical	9.5	0	0	0
Indian River	R70 – R86	Critical	3.1	0	0	0
Indian River	R99 – R115.7	Critical	3.1	0	0	0
Indian River	***Total Eroding Shoreline***		***15.7***	***0***	***0***	***0***

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
St. Lucie	R34 – R46	Critical	2.3	0	0	0
St. Lucie	R46 – R80	Non-Critical	0	6.4	0	0
St. Lucie	R80 – R90.3	Critical	1.9	0	0	0
St. Lucie	R90.3 – R98	Non-Critical	0	1.5	0	0
St. Lucie	R98 – R115+1000	Critical	3.4	0	0	0
St. Lucie	***Total Eroding Shoreline***		***7.6***	***7.9***	***0***	***0***
Martin	R1 – R40	Critical	6.7	0	0	0
Martin	R45 – R111	Critical	11.5	0	0	0
Martin	R126 – R127.4	Critical	0.2	0	0	0
Martin	***Total Eroding Shoreline***		***18.4***	***0***	***0***	***0***
Palm Beach	R1 – R10	Critical	1.5	0	0	0
Palm Beach	North and South Shore, Jupiter Inlet	Critical Inlet Shoreline	0	0	0.8	0
Palm Beach	R12 – R38	Critical	5.0	0	0	0
Palm Beach	R38 – R40	Non-Critical	0	0.4	0	0
Palm Beach	R58 – R60.5	Non-Critical	0	0.5	0	0
Palm Beach	R60.5 – R69	Critical	1.7	0	0	0
Palm Beach	R76 – R128	Critical	10.9	0	0	0
Palm Beach	R128.8 – R145.8	Critical	3.3	0	0	0
Palm Beach	R152 – R168	Critical	3.3	0	0	0
Palm Beach	R176 – R190	Critical	2.9	0	0	0
Palm Beach	R204 – R227.9	Critical	5.0	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Palm Beach	***Total Eroding Shoreline***		***33.6***	***0.9***	***0.8***	***0***
Broward	R6 – R23	Critical	3.2	0	0	0
Broward	R25 – R77	Critical	10.0	0	0	0
Broward	R86 – R128	Critical	8.1	0	0	0
Broward	***Total Eroding Shoreline***		***21.3***	***0***	***0***	***0***
Dade	R1 – R26.7	Critical	5.1	0	0	0
Dade	R27 – R74.4	Critical	9.4	0	0	0
Dade	South Shore, Norris Cut	Non-Critical Inlet Shoreline	0	0	0	0.3
Dade	R84 – R88	Non-Critical	0	0.8	0	0
Dade	R89 – R92	Non-Critical	0	0.6	0	0
Dade	R101 – R113	Critical	2.5	0	0	0
Dade	***Total Eroding Shoreline***		***17.0***	***1.4***	***0***	***0.3***
Total	***Total East Coast Eroding Shoreline***		***216.6***	***23.9***	***4.6***	***2.3***

Table 2. *Locations of critically eroded beach and inlet shoreline, and non-critically eroded beach and inlet shoreline, in Florida counties on the west coast, as of December 2017.*

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Escambia	R1 – R34	Critical	6.5	0	0	0
Escambia	R34 – R65	Non-Critical	0	5.9	0	0
Escambia	R79 – R107	Non-Critical	0	5.3	0	0
Escambia	R107 – R151	Critical	8.2	0	0	0
Escambia	***Total Eroding Shoreline***		***14.7***	***11.2***	***0***	***0***
Santa Rosa	R192.5 – R213.5	Critical	4.1	0	0	0
Santa Rosa	***Total Eroding Shoreline***		***4.1***	***0***	***0***	***0***
Okaloosa	R1 – R15	Critical	2.8	0	0	0
Okaloosa	Norriego Point	Critical Inlet Shoreline	0	0	0.8	0
Okaloosa	R17 – R25.5	Critical	1.6	0	0	0
Okaloosa	R39 – R50	Critical	2.1	0	0	0
Okaloosa	***Total Eroding Shoreline***		***6.5***	***0***	***0.8***	***0***
Walton	R1 – R23.6	Critical	5.2	0	0	0
Walton	R41 – R64	Critical	4.5	0	0	0
Walton	R67 – R72	Critical	1.0	0	0	0
Walton	R78 – R98	Critical	3.9	0	0	0
Walton	R105.5 – R127.4	Critical	4.2	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Walton	***Total Eroding Shoreline***		***18.8***	***0***	***0***	***0***
Bay	R1 – R97	Critical	18.6	0	0	0
Bay	Gator Lake	Critical Inlet Shoreline	0	0	0.2	0
Bay	R98 – V009	Non-Critical	0	6.1	0	0
Bay	V016 – V030+2000	Non-Critical	0	2.8	0	0
Bay	V036 – V041	Non-Critical	0	1.2	0	0
Bay	R132 – R137.8	Critical	0.9	0	0	0
Bay	***Total Eroding Shoreline***		***19.5***	***10.1***	***0.2***	***0***
Gulf	R41 – R69	Non-Critical	0	5.5	0	0
Gulf	R69 – R106	Critical	7.2	0	0	0
Gulf	R106 – R111.5	Critical	1.1	0	0	0
Gulf	R111.5 – R114	Non-Critical	0	0.5	0	0
Gulf	R150 – R162	Non-Critical	0	2.6	0	0
Gulf	***Total Eroding Shoreline***		***8.3***	***8.6***	***0***	***0***
Franklin	V17 – V34	Non-Critical	0	3.2	0	0
Franklin	V34 – V39	Critical	0.9	0	0	0
Franklin	R15 – R18.5	Non-Critical	0	0.7	0	0
Franklin	R18.5 – R22.5	Critical	0.6	0	0	0
Franklin	R22.5 – R24	Non-Critical	0	0.3	0	0
Franklin	R34 – R51	Non-Critical	0	3.3	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Franklin	Sikes Cut, East and West Shores	Non-Critical Inlet Shoreline	0	0	0	0.5
Franklin	R53 – R69	Non-Critical	0	3.3	0	0
Franklin	R106 – R128.5	Critical	4.5	0	0	0
Franklin	R128.5 – R147	Non-Critical	0	3.8	0	0
Franklin	R154 – R168	Non-Critical	0	2.6	0	0
Franklin	R168 – R187.2	Critical	3.6	0	0	0
Franklin	R194 – R196	Non-Critical	0	0.4	0	0
Franklin	R210 – R216	Critical	1.1	0	0	0
Franklin	R220 – R222	Critical	0.4	0	0	0
Franklin	R222 – R232	Non-Critical	0	2.1	0	0
Franklin	***Total Eroding Shoreline***		***11.1***	***19.7***	***0***	***0.5***
Wakulla	Mashes Sands, South	Critical	0.3	0	0	0
Wakulla	Mashes Sands, North	Non-Critical	0	0.4	0	0
Wakulla	Shell Point	Critical	1.0	0	0	0
Wakulla	***Total Eroding Shoreline***		***1.3***	***0.4***	***0***	***0***
Taylor	Dekle Beach	Critical	0.2	0	0	0
Taylor	***Total Eroding Shoreline***		***0.2***	***0***	***0***	***0***
Dixie	Shired Island	Critical	0.2	0	0	0
Dixie	Bird Island	Critical	0.2	0	0	0
Dixie	Cotton Island	Critical	0.2	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Dixie	***Total Eroding Shoreline***		***0.6***	***0***	***0***	***0***
Levy	Deer Island	Critical	0.4	0	0	0
Levy	Cedar Key	Critical	0.5	0	0	0
Levy	Atsena Otie Key	Critical	0.2	0	0	0
Levy	Seahorse Key	Non-Critical	0	1.2	0	0
Levy	***Total Eroding Shoreline***		***1.1***	***1.2***	***0***	***0***
Citrus	Fort Island Beach	Critical	0.2	0	0	0
Citrus	***Total Eroding Shoreline***		***0.2***	***0***	***0***	***0***
Hernando	Pine Island	Non-Critical	0	0.5	0	0
Hernando	***Total Eroding Shoreline***		***0***	***0.5***	***0***	***0***
Pasco	Hudson Beach	Critical	0.2	0	0	0
Pasco	Anclote Key	Non-Critical	0	1.1	0	0
Pasco	***Total Eroding Shoreline***		***0.2***	***1.1***	***0***	***0***
Pinellas	South Anclote Key	Non-Critical	0	0.3	0	0
Pinellas	R6 – R12	Critical	1.4	0	0	0
Pinellas	R17 – R20	Non-Critical	0	0.5	0	0
Pinellas	R47 – R49	Critical Inlet Shoreline	0	0	0.5	0
Pinellas	R56 – R115.4	Critical	11.3	0	0	0
Pinellas	R126 – R143	Critical	3.5	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Pinellas	R144 – R166	Critical	4.1	0	0	0
Pinellas	North Bounces Key	Non-Critical	0	1.4	0	0
Pinellas	South Bounces Key	Non-Critical	0	2.2	0	0
Pinellas	R176 – R182	Critical	1.1	4.4	0.5	0
Pinellas	***Total Eroding Shoreline***		***21.4***	***8.8***	***0.5***	***0***
Hillsborough	Egmont Key	Critical	1.6	0	0	0
Hillsborough	***Total Eroding Shoreline***		***1.6***	***0***	***0***	***0***
Manatee	V1 – V2	Critical	0.3	0	0	0
Manatee	Pier – R41.3	Critical	7.9	0	0	0
Manatee	R42 – R67.3	Critical	4.8	0	0	0
Manatee	***Total Eroding Shoreline***		***13.0***	***0***	***0***	***0***
Sarasota	R1 – R29	Critical	5.4	0	0	0
Sarasota	R31, east 1500’	Critical	0	0	0.3	0
Sarasota	R31 – R44.5	Critical	2.4	0	0	0
Sarasota	R44A – R45	Critical	0	0	0.8	0
Sarasota	R46 – R48.4	Critical	0.4	0	0	0
Sarasota	R64 - R77	Critical	2.4	0	0	0
Sarasota	R81 – R100.3	Critical	3.7	0	0	0
Sarasota	R116 – R143	Critical	5.1	0	0	0
Sarasota	R143 – R146.5	Non-Critical	0	0.7	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Sarasota	R146.5 – R148.3	Critical	0.3	0	0	0
Sarasota	R160 – R183.7	Critical	4.5	0	0	0
Sarasota	***Total Eroding Shoreline***		***24.2***	***0.7***	***1.1***	***0***
Charlotte	R1 – R21.2	Critical	3.8	0	0	0
Charlotte	Stump Pass South Shore	Critical Inlet Shoreline	0	0	0.1	0
Charlotte	R28 – R40.5	Critical	2.3	0	0	0
Charlotte	R47.5 – R49.5	Critical	0.4	0	0	0
Charlotte	***Total Eroding Shoreline***		***6.5***	***0.0***	***0.1***	***0***
Lee	R7 – R26.7	Critical	4.0	0	0	0
Lee	Boca Grande North Shore	Critical Inlet Shoreline	0	0	0.2	0
Lee	R27 – R33	Non-Critical	0	1.1	0	0
Lee	R46 – R52	Non-Critical	0	1.2	0	0
Lee	R60 - R65	Non-Critical	0	1.0	0	0
Lee	R66, east 1000’	Critical Inlet Shoreline	0	0	0.2	0
Lee	R66 - R71	Critical	1.0	0	0	0
Lee	R71 – R78	Non-Critical	0	2.0	0	0
Lee	R79 – R82.3	Critical	0.8	0	0	0
Lee	R83 – R84	Critical Inlet Shoreline	0	0	0.2	0
Lee	R84 – R109	Critical	5.0	0	0	0
Lee	R109 – R118	Critical	1.7	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Lee	R129 – R133	Critical	0.9	0	0	0
Lee	R175(-.4) – R200	Critical	5.0	0	0	0
Lee	R203 – R207	Critical	0.8	0	0	0
Lee	R211 – R213	Non-Critical Inlet Shoreline	0	0	0	0.3
Lee	R214 – R222	Critical	1.5	0	0	0
Lee	R222	Non-Critical Inlet Shoreline	0	0	0	0.1
Lee	R222.7 – R225.9	Critical	0.8	0	0	0
Lee	R226 – R230.4	Critical	0.9	0	0	0
Lee	***Total Eroding Shoreline***		***22.4***	***5.3***	***0.6***	***0.4***
Collier	R14 – R16.3	Critical	0.4	0	0	0
Collier	R16.8 – R17.3	Critical	0.1	0	0	0
Collier	R22.3 – R30.5	Critical	1.6	0	0	0
Collier	R45 – R57.5	Critical	2.4	0	0	0
Collier	R57.8 – R89	Critical	5.6	0	0	0
Collier	R90 – R111	Non-Critical	0	3.9	0	0
Collier	Sea Oat Island	Non-Critical	0	0.9	0	0
Collier	H3 – H11	Critical Inlet Shoreline	0	0	0.8	0
Collier	R134.5 – R139	Critical	0.8	0	0	0
Collier	R143 – R148	Critical	0.9	0	0	0
Collier	V323 – V331.4	Critical	1.6	0	0	0

County	Eroding Shoreline Location (by R monument or inlet name)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
Collier	V333.8 – V341.8	Critical	1.5	0	0	0
Collier	V341.8 – V343.5	Non-Critical	0	0.3	0	0
Collier	***Total Eroding Shoreline***		***14.9***	***5.1***	***0.8***	***0***
Total	***Total West Coast Eroding Shoreline***		***190.6***	***68.3***	***4.1***	***0.9***

Table 3. *Locations of critically eroded beach and non-critically eroded beach in the Florida Keys, as of December 2017.*

County	Eroding Shoreline Location (by R monument)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)
Monroe	Sea Oats Beach, Lower Matecumbe Key	Critical	1.3	0
Monroe	Long Key	Critical	1.6	0
Monroe	Curry Hammock, Little Crawl Key	Critical	0.3	0
Monroe	Coco Plum Beach	Critical	1.4	0
Monroe	Key Colony Beach	Critical	0.9	0
Monroe	Sunset Beach	Critical	0.2	0
Monroe	Sombrero Beach, Vaca Key	Critical	0.3	0
Monroe	Little Duck Key	Critical	0.2	0
Monroe	Bahia Honda Key	Critical	2.0	0
Monroe	Long Beach, Big Pine Key	Critical	1.0	0
Monroe	Boca Chica Key	Critical	1.3	0
Monroe	Key West	Critical	2.8	0

County	Eroding Shoreline Location (by R monument)	Erosion Condition	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)
Monroe	Simonton Beach	Critical	0.1	0
Monroe	Fort Zachary Taylor	Critical	0.3	0
Monroe	***Total Florida Keys Eroding Shoreline***		***13.7***	***0***

Table 4. *Summary of Statewide critically eroded beach and inlet shoreline, and non-critically eroded beach and inlet shoreline, in Florida counties on the east coast, west coast and Florida Keys, as of December 2017.*

Coastal Erosion Location (by R monument)	Critically Eroded Beach (miles)	Non-Critically Eroded Beach (miles)	Critically Eroded Inlet (miles)	Non-Critically Eroded Inlet (miles)
East Coast	216.6	23.9	4.6	2.3
West Coast	190.6	68.3	4.1	0.9
Florida Keys	13.7	0	N/A	N/A
Total Coastal Erosion	***420.9***	***92.2***	***8.7***	***3.2***

Nassau County

There are two critically eroded beach areas (7.7 miles) and one critically eroded inlet shoreline area (2.5 miles) in Nassau County (*Figure **2***).

The inlet shoreline erosion area (2,500 feet west of R1 – R9) extends 2.5 miles along the south shoreline of the St. Marys River entrance on Amelia Island. Threatened are the historic Fort Clinch and recreational beaches of Fort 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. Marys River Entrance to the eroded beaches. Threatened are development and recreational interests along Fernandina Beach and Fort Clinch State Park.

The southern 3.3 miles of Atlantic Ocean fronting beaches of Amelia Island (R60 – 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.

Last updated June 2009.

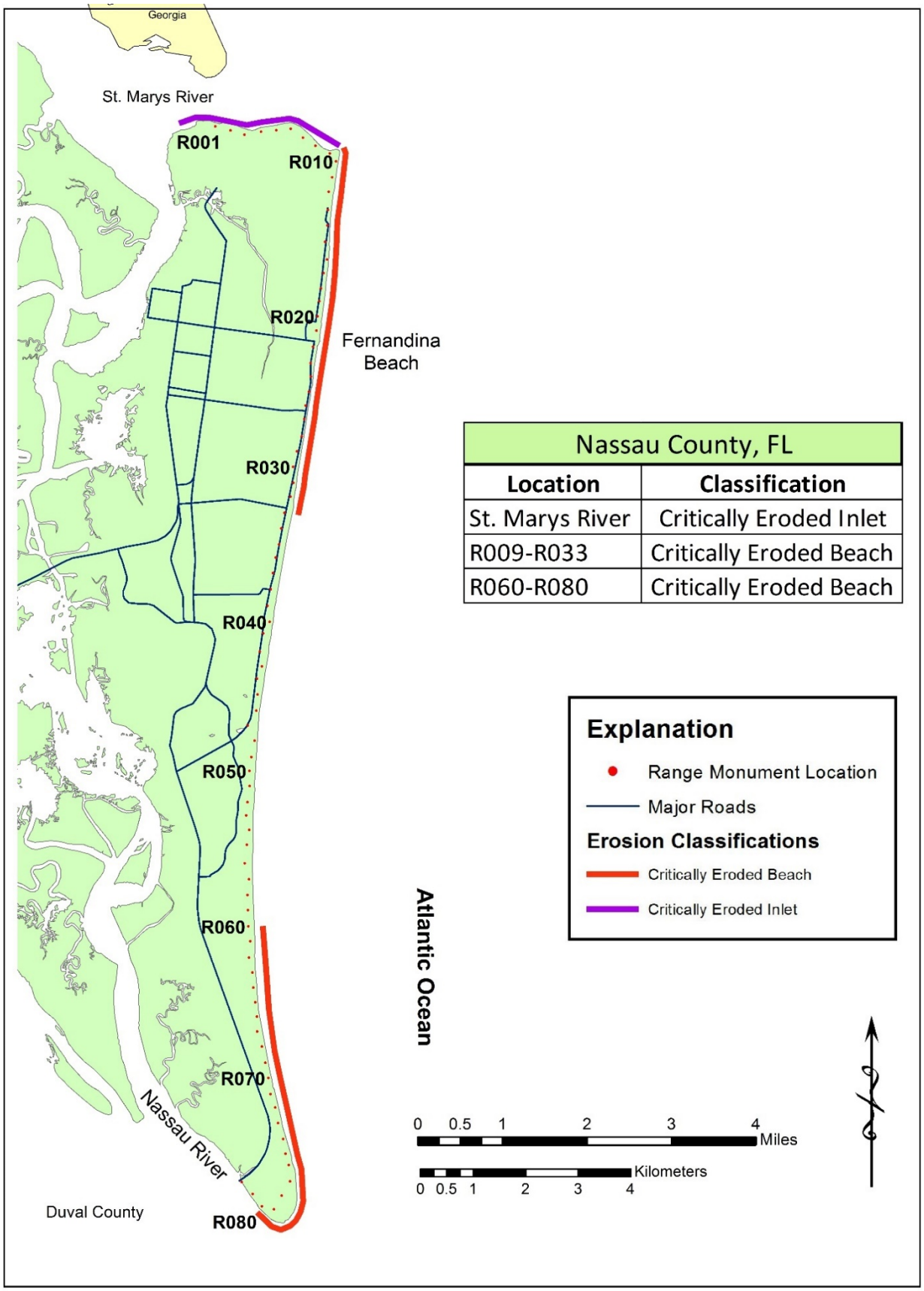


Figure 2. *Critically eroded shoreline within Nassau County.*

Duval County

There are two critically eroded beach areas (10.4 miles), one critically eroded inlet shoreline area (0.7 mile) and one non-critically eroded inlet shoreline area (2.0 miles) in Duval County (*Figure **3***).

The non-critically eroded inlet shoreline area extends 2.0 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 non-critical.

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 Fort 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.

Last updated January 2000.

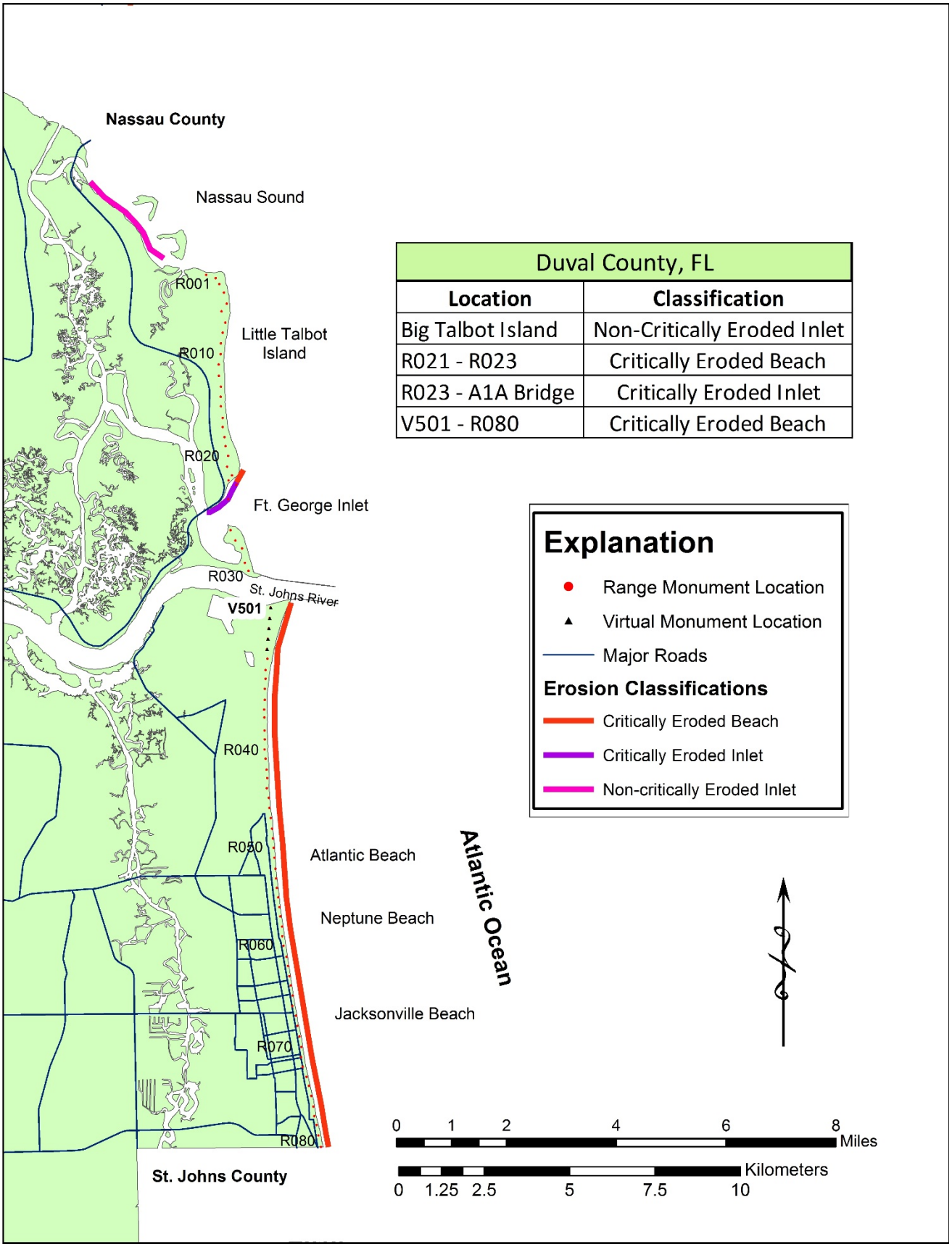


Figure 3. *Critically eroded shoreline within Duval County.*

St. Johns County

There are five critically eroded areas (16.2 miles) and one non-critically eroded area (0.5 mile) in St. Johns County (*Figure 4*).

Following the impacts of Hurricanes Matthew (2016) and Irma (2017), a 0.9-mile segment of Ponte Vedra (R26 – R31) in northern St. Johns County is critically eroded, threatening private development. Near the center of the county north of St. Augustine Inlet is a critically eroded beach segment along South Ponte Vedra Beach and Vilano Beach (R76 – R117; 8.1 miles) that is threatening private development as well as State Road AIA.

South of St. Augustine Inlet, the northern 1.0 mile of Conch Island (R123 – R128) is critically eroded, threatening beach mouse and shorebird nesting habitat. To the south, 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 State Park is also threatened. Much of this area has a rock revetment, and inlet channel maintenance dredging disposal is completed periodically. Beach restoration has been conducted in this area.

The southern tip of Anastasia Island (R193.5 – R196) has 0.5 mile of non-critical 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 and the river restoration at Summer Haven.

Last updated December 2017.

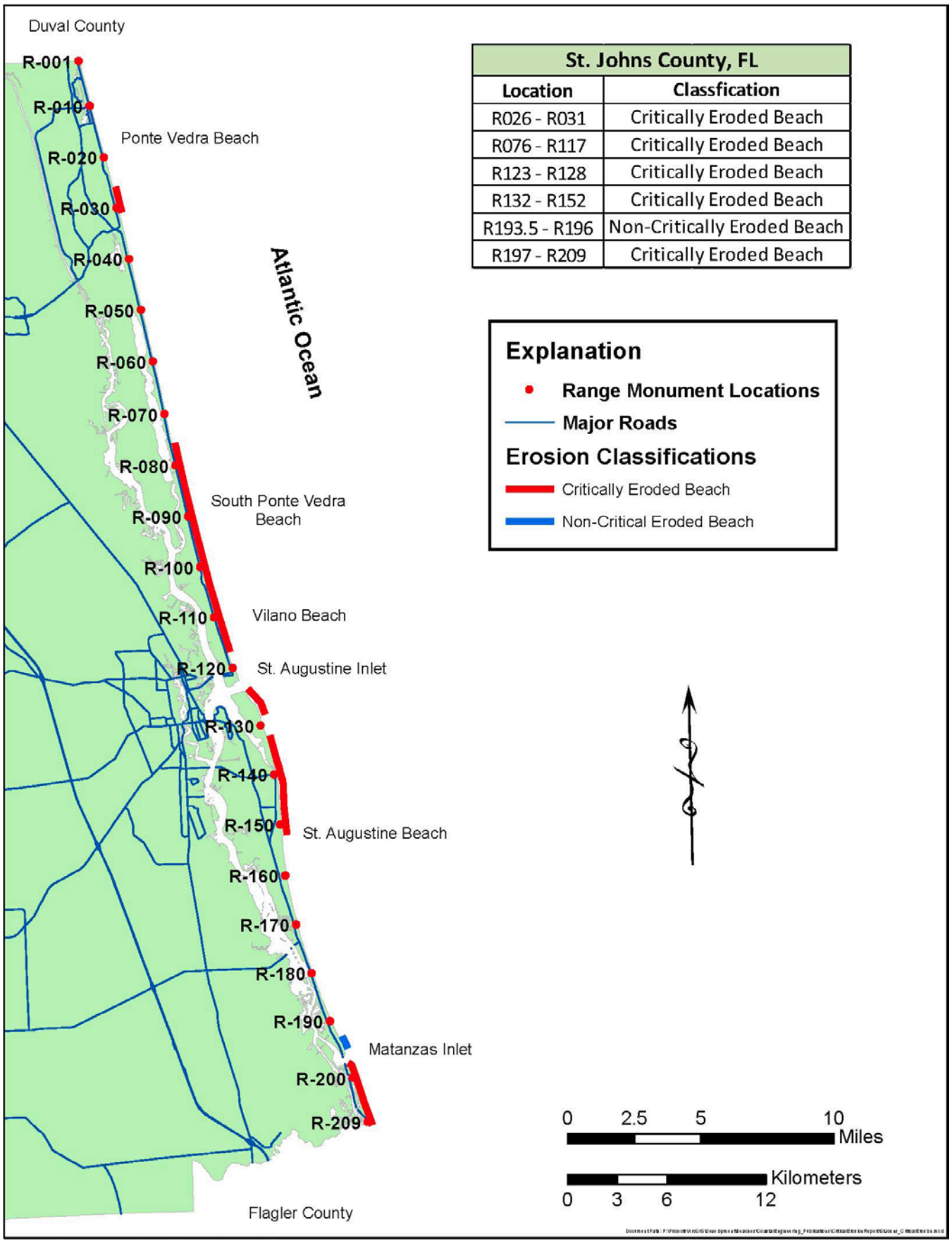


Figure 4. *Critically eroded shoreline within St. Johns County.*

Flagler County

There are five critically eroded areas (6.5 miles) in Flagler County (*Figure 5*).

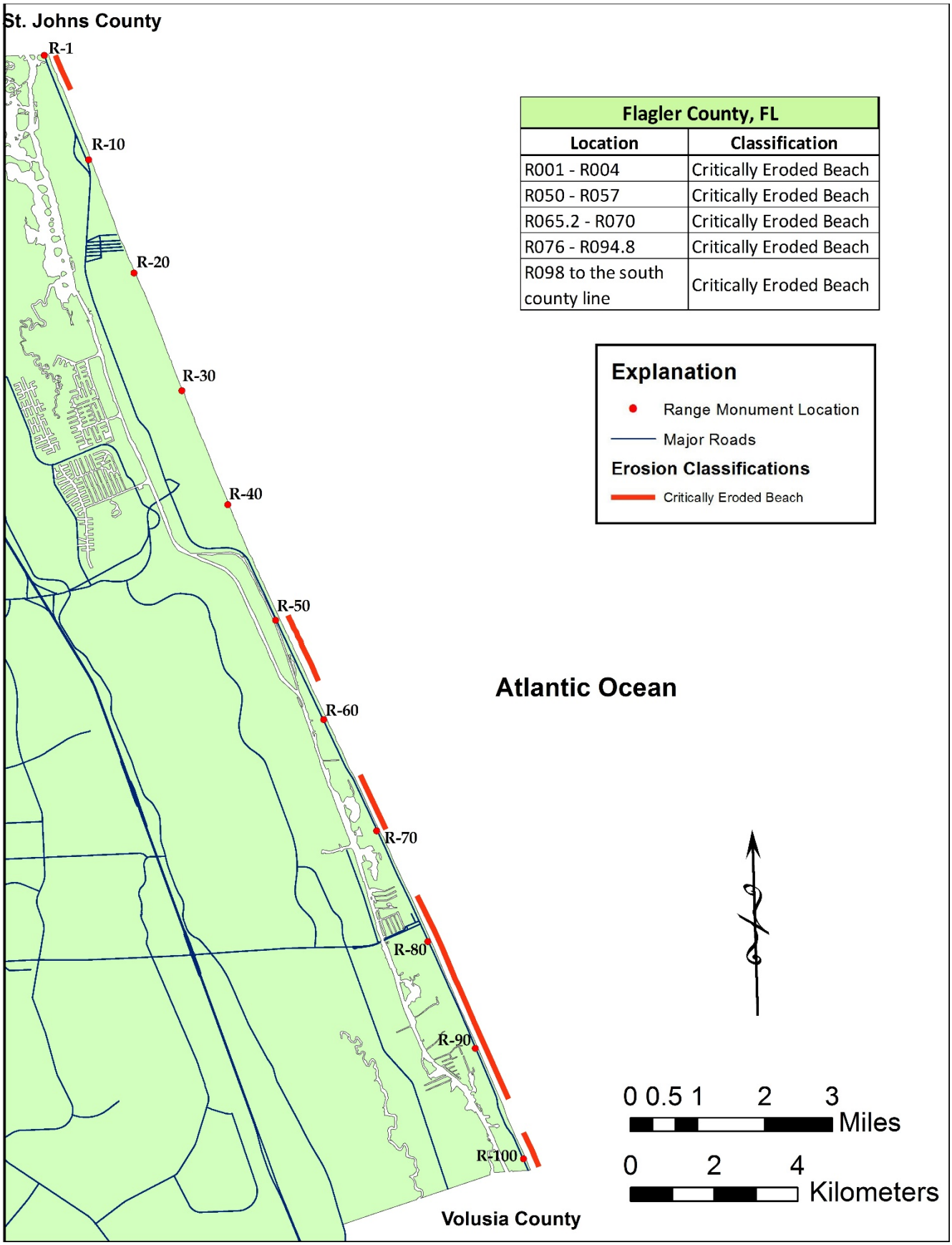
Erosion at the northern 0.6 mile of beach (R1 – R4) is threatening development and recreational interests at Marineland. This area has a rock revetment and coquina rock groins. Following storm damage by Hurricane Floyd in 1999, the revetment was restored, and a new revetment constructed to the south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

Following the impact of Hurricane Matthew in 2016, a 1.1-mile segment of Painters Hill (R50 – R57) is critically eroded, threatening development.

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.

Following the impact of Hurricane Matthew in 2016, the southernmost 0.6 mile of Flagler Beach is critically eroded, threatening State Road A1A between R98 and the south county line.

Last updated June 2017.



Flagler County, FL	
Location	**Classification**
R001 - R004	Critically Eroded Beach
R050 - R057	Critically Eroded Beach
R065.2 - R070	Critically Eroded Beach
R076 - R094.8	Critically Eroded Beach
R098 to the south county line	Critically Eroded Beach

Figure 5. *Critically eroded shoreline within Flagler County.*

Volusia County

There are three critically eroded beach areas (21.0 miles), one non-critically eroded beach area (1.1 miles) and one critically eroded inlet shoreline area (0.6 mile) in Volusia County (*Figure **6***).

Following the impact of Hurricane Matthew in 2016, a 1.6-mile segment (R24 – R33) of northern Volusia County is critically eroded, threatening State Road A1A.

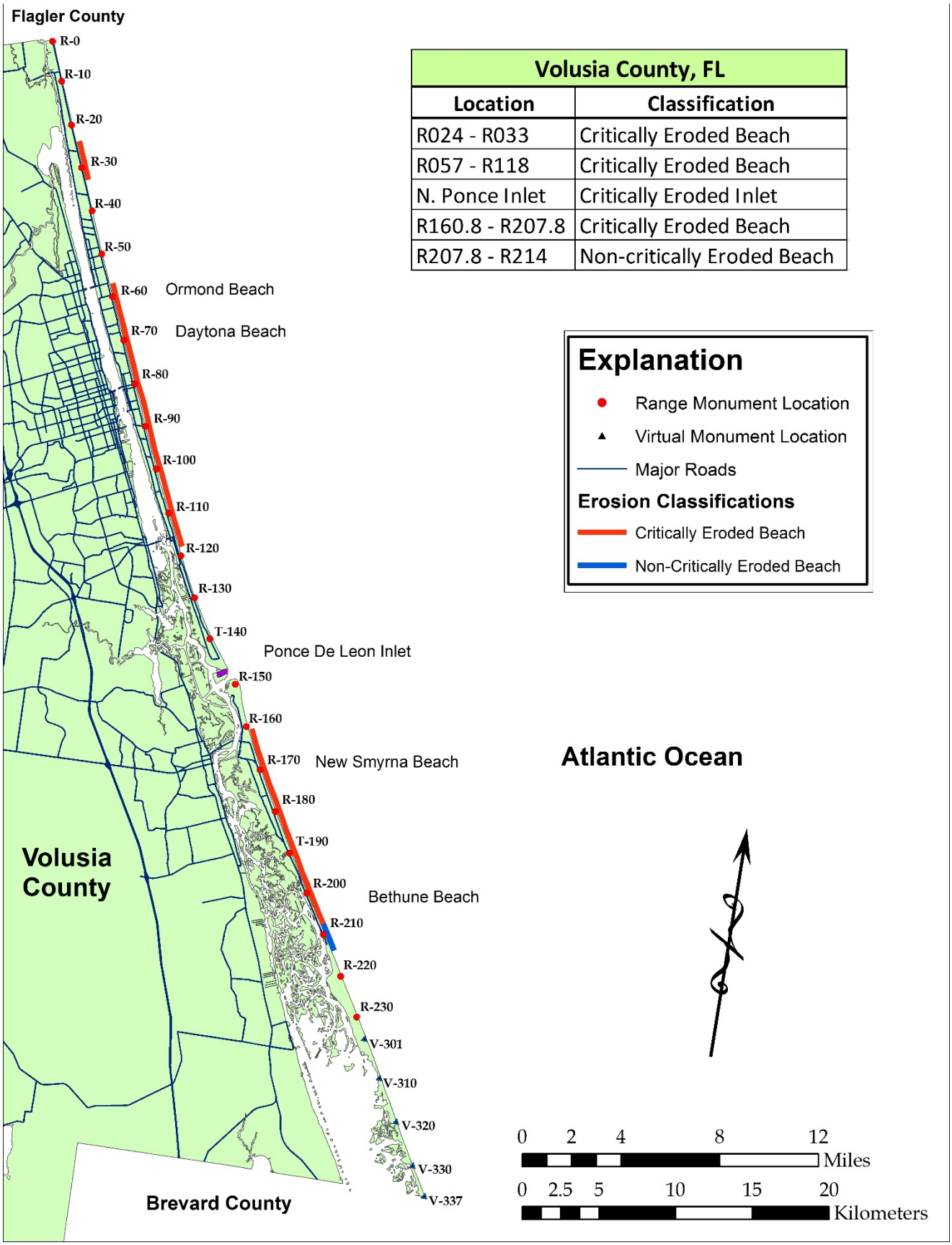
An 11.0-mile segment of beach (R57 – R118) along Ormond Beach, Daytona Beach and Daytona Beach Shores is critically eroded, threatening development and recreational interests, as well as sea turtle nesting areas where the dry sand beach has become very narrow. Most of this segment is armored with seawalls.

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, as well as sea turtle nesting habitat. Much of New Smyrna Beach is armored with seawalls, with Bethune Beach protected by a boulder rock revetment. The New Smyrna Beach area has received inlet sand transfer material from dredging within Ponce de Leon Inlet and additional material from dredging the Atlantic Intracoastal Waterway.

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

Last updated June 2017.



Volusia County, FL	
Location	**Classification**
R024 - R033	Critically Eroded Beach
R057 - R118	Critically Eroded Beach
N. Ponce Inlet	Critically Eroded Inlet
R160.8 - R207.8	Critically Eroded Beach
R207.8 - R214	Non-critically Eroded Beach

Figure 6. *Critically eroded shoreline within Volusia County.*

Brevard County

There are two critically eroded areas (41.2 miles) and two non-critically eroded areas (12.1 miles) in Brevard County (*Figure 7*).

Two areas along the Canaveral National Seashore (V320 – V365 and V417 – V436) are non-critically eroded. Both areas are located north of Cape Canaveral and are not monitored. A 4.7-mile segment along Kennedy Space Center (V365 – V390) is critically eroded, threatening manned spacecraft facilities, launch pads, Phillips Parkway and buried infrastructure. Beach and dune restoration is being investigated.

From Canaveral Inlet extending 36.5 miles to the south is a long coastal segment (R1 – R202) designated as critically eroded. With the impact of Hurricanes Frances and Jeanne in 2004, the southerly 11.5 miles of this segment became critically eroded. Threatened are development, recreational interests and wildlife habitat. Beach restoration projects have been conducted in Canaveral, Cocoa Beach, Patrick Air Force Base, Indialantic and Melbourne Beach.

Last updated June 2012.

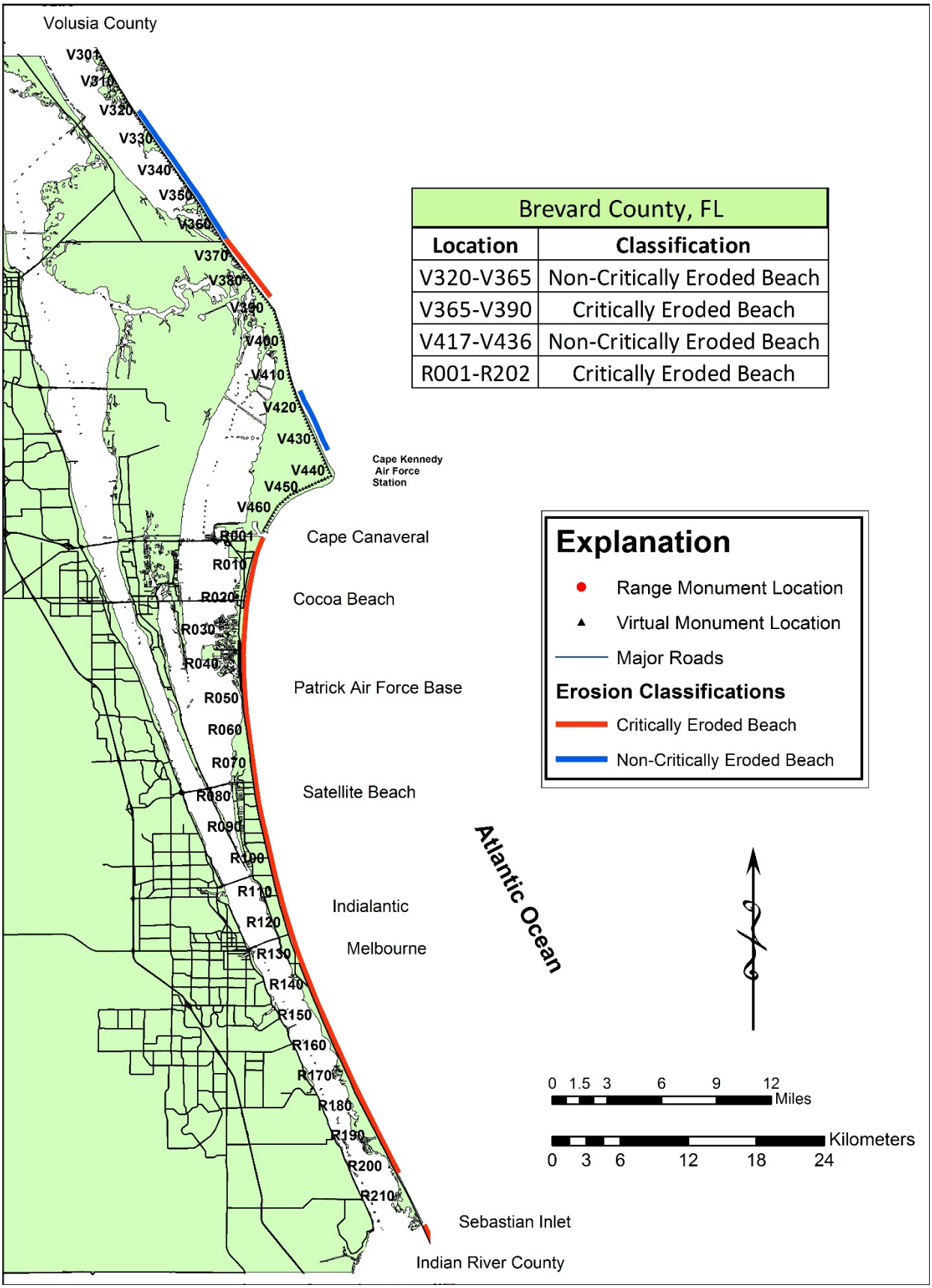


Figure 7. *Critically eroded shoreline within Brevard County.*

Indian River County

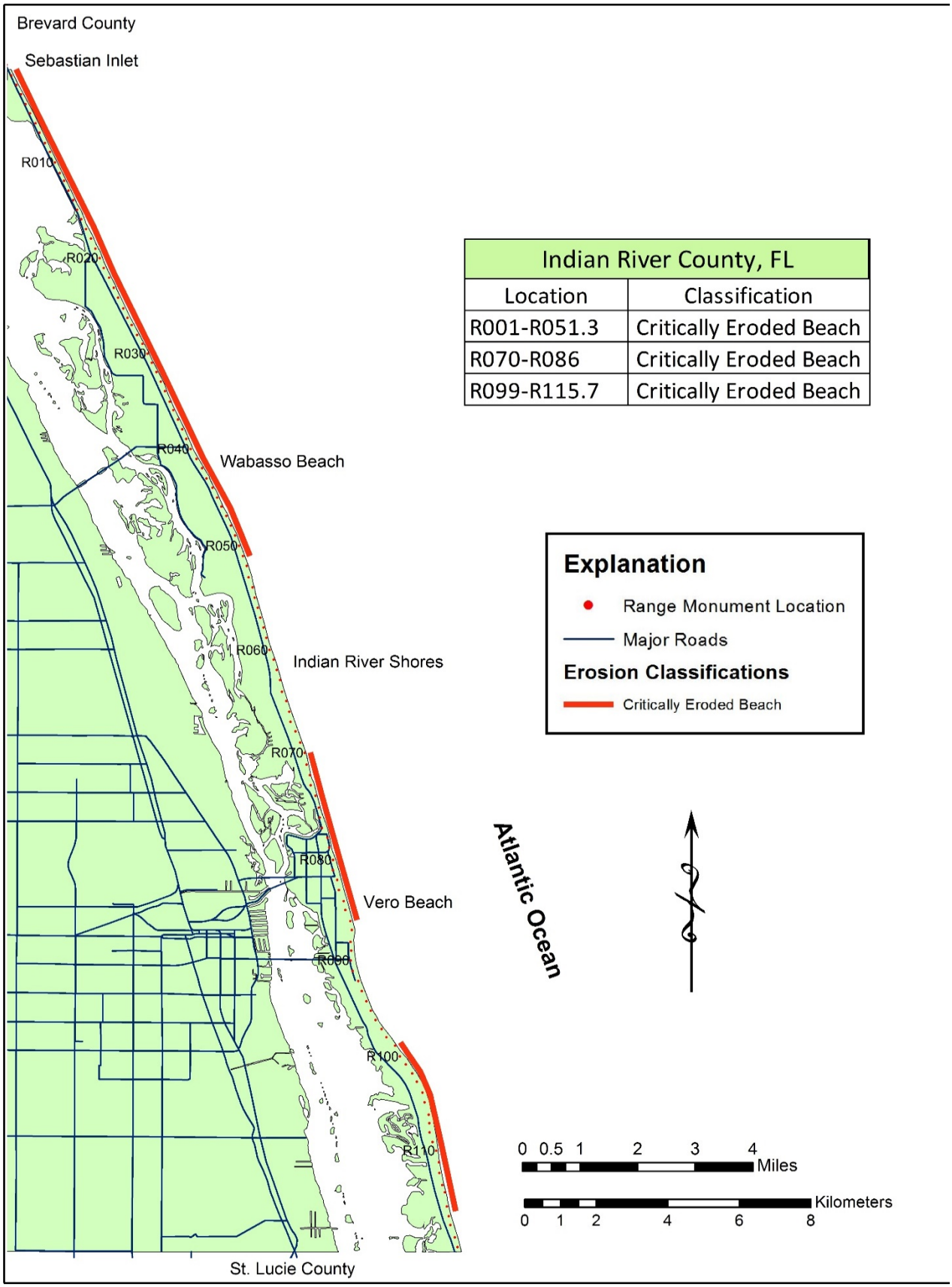
There are three critically eroded areas (15.7 miles) in Indian River County (*Figure 8*).

The northern 9.5 miles (R1 – R51.3) south of Sebastian Inlet is critically eroded, threatening State Road AIA, Sebastian Inlet State Park, 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 has been constructed along a portion of this area.

Last updated June 2005.



Indian River County, FL	
Location	Classification
R001-R051.3	Critically Eroded Beach
R070-R086	Critically Eroded Beach
R099-R115.7	Critically Eroded Beach

Figure 8. *Critically eroded shoreline within Indian River County.*

St. Lucie County

There are three critically eroded areas (7.6 miles) and two non-critically eroded areas (7.9 miles) in St. Lucie County (*Figure 9*).

The 2.3 miles of Fort Pierce Beach (R34 – R46) extending south from Fort 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 non-critically 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.

Last updated June 2012.

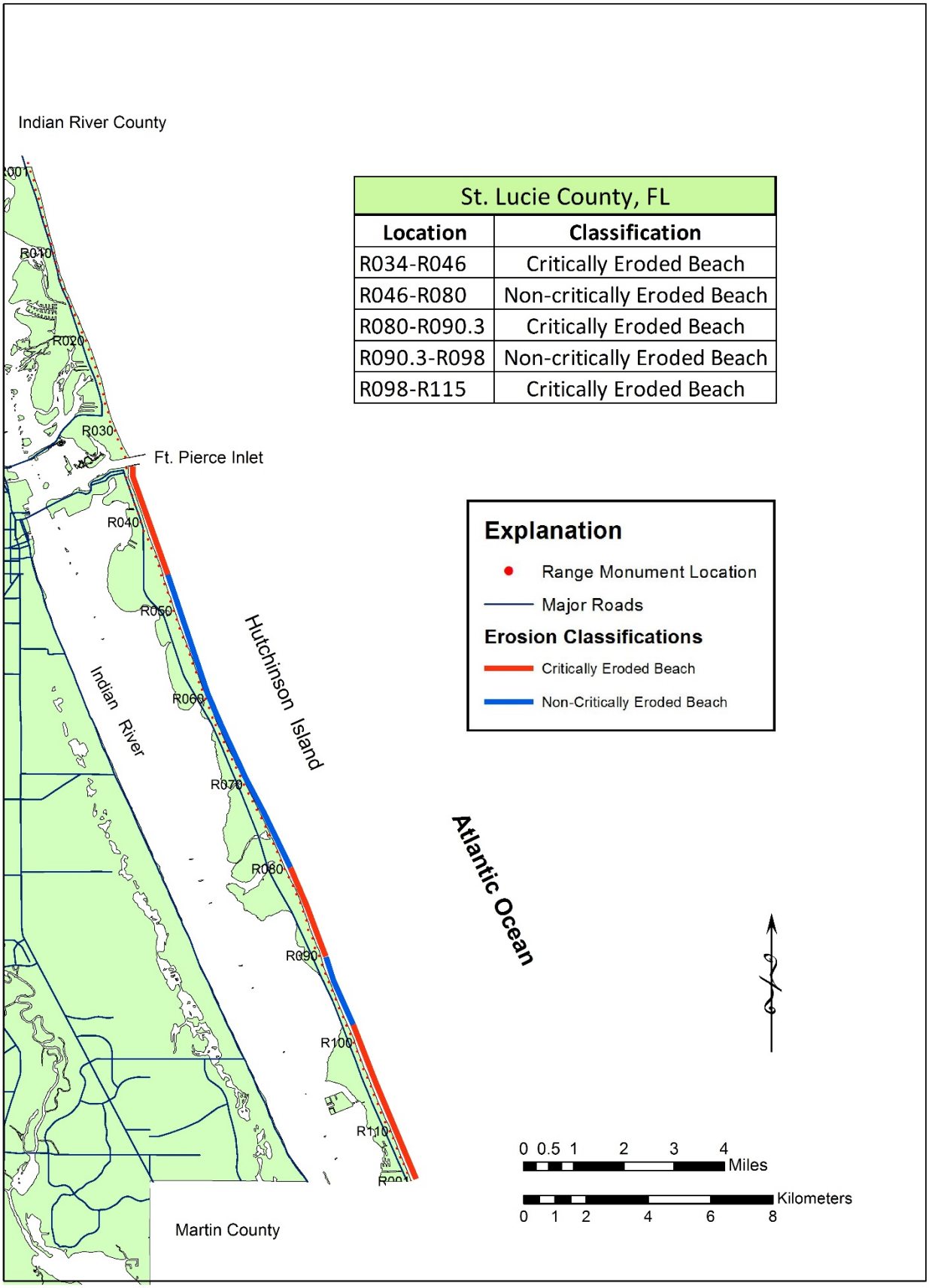


Figure 9. *Critically eroded shoreline within St. Lucie County.*

Martin County

There are three critically eroded areas (18.4 miles) in Martin County (*Figure 10*).

The northern 6.7 miles of Martin County on Hutchinson Island (R1 – R40) 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. A beach restoration project is proposed for the segment between R34.5 – R40.

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 Preserve State Park 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.

Last updated June 2015.

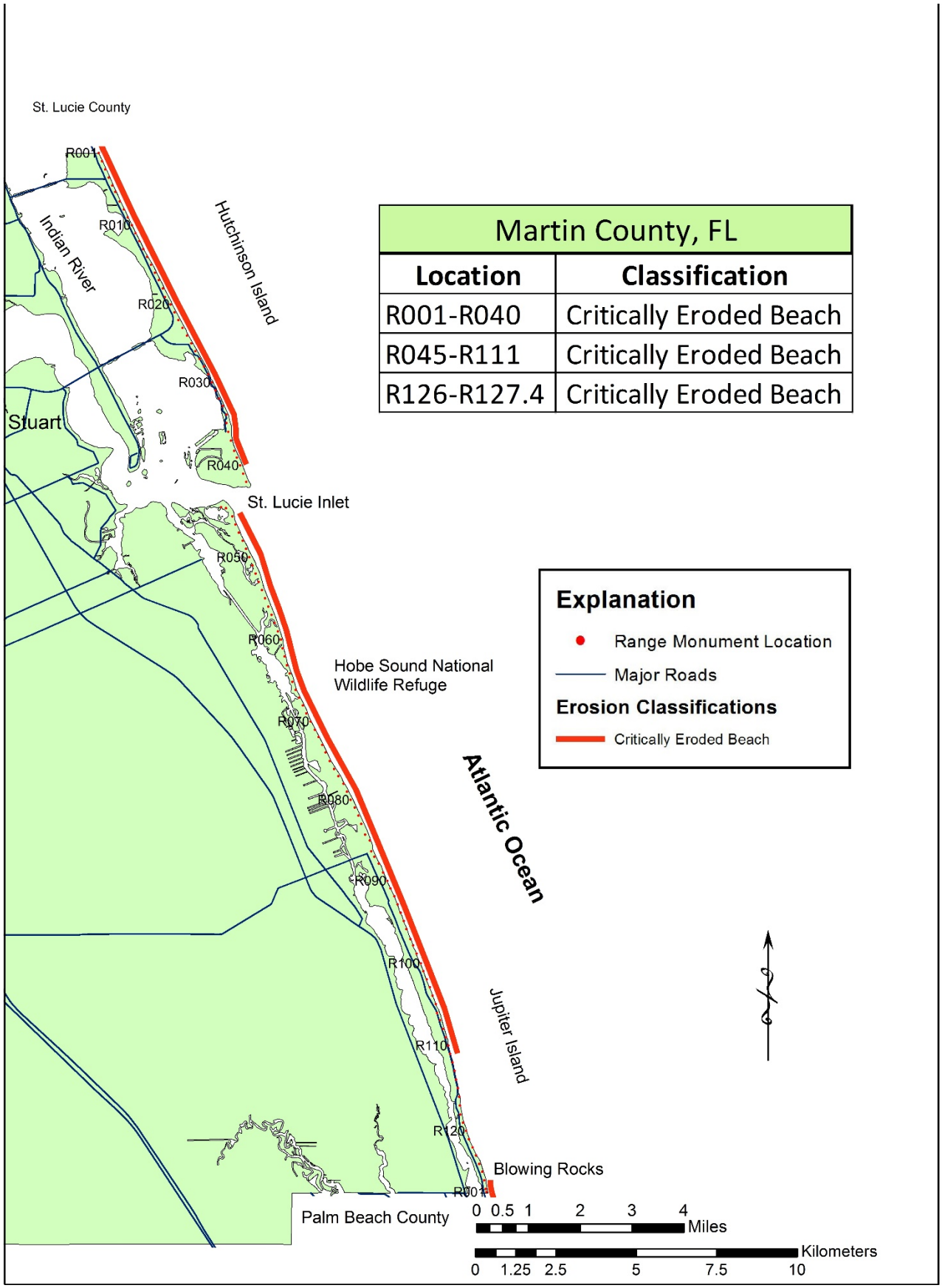


Figure 10. *Critically eroded shoreline within Martin County.*

Palm Beach County

There are eight critically eroded areas (33.6 miles), two non-critically eroded areas (0.9 mile) and one critically eroded inlet shoreline area (0.8 mile) in Palm Beach County (*Figure 11*).

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 5.0 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 non-critically eroded segment (R58 – R60.5) extends 0.5 mile along John D. MacArthur Beach State Park.

Along northern Riviera Beach on Singer Island (R60.5 – R69) south of John D. MacArthur Beach State Park is 1.7 miles of critical erosion 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.

A 0.9-mile southern segment of the Town of Palm Beach (R128. – -R133.5) south of Lake Worth has been designated critically eroded for continuity of management of the coastal system. The Town of South Palm Beach and Lantana Municipal Beach (R133.5 – R138.4) comprises 1.0 mile of critical erosion threatening private development and recreational interests at the public park. The South Palm Beach portion of this critically eroded area has nearly continuous seawalls. Due to the severe impact of

Hurricane Sandy in 2012, much of the Town of Manalapan (R138.4 – R145.8) was added as critically eroded. At least 20 seawalls were destroyed by the storm along this 1.4-mile stretch.

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.

Last updated June 2014.

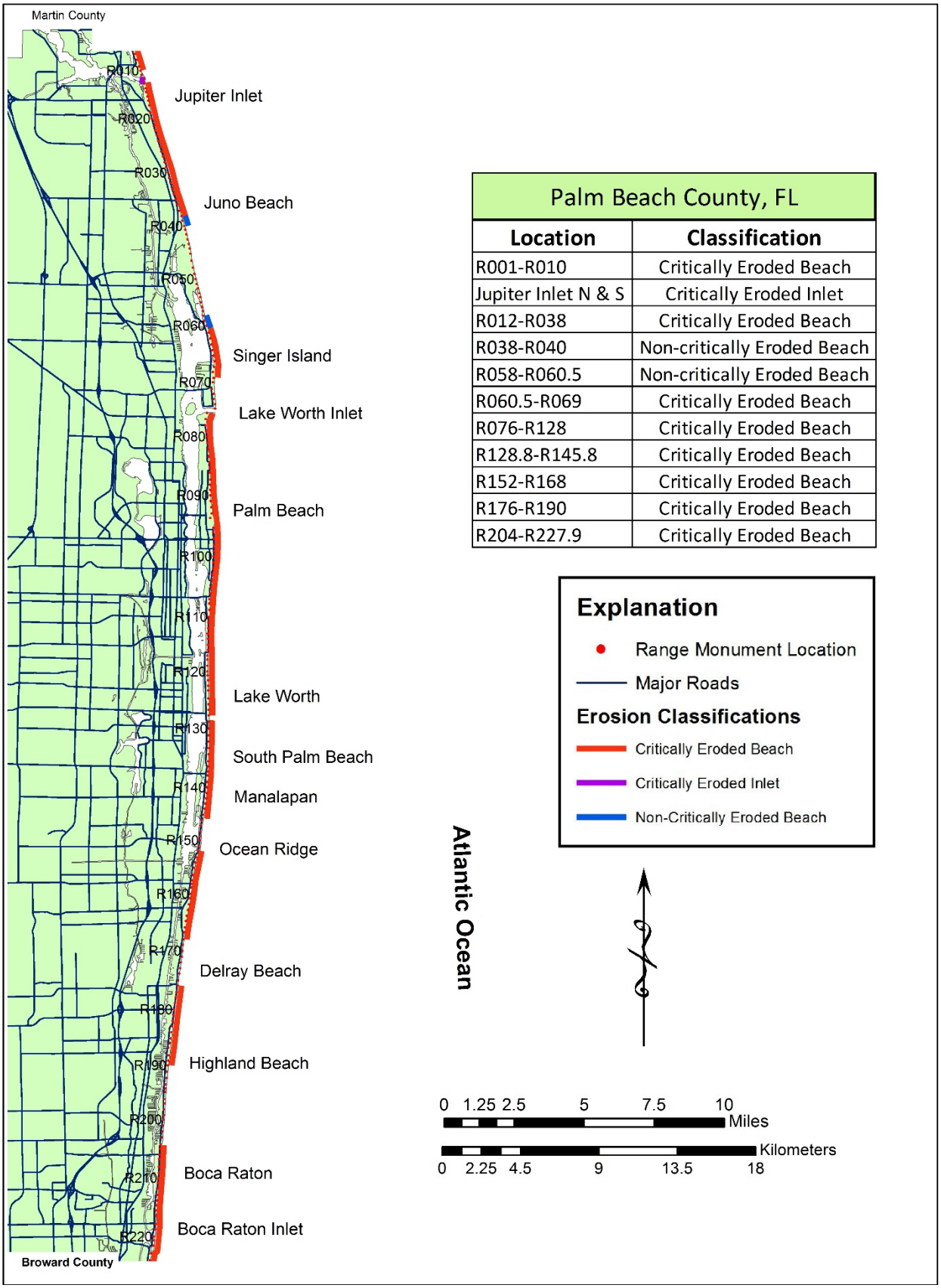


Figure 11. *Critically eroded shoreline within Palm Beach County.*

Broward County

Nearly all of Broward County is critically eroded (*Figure 12*). Three critical erosion areas (21.3 miles) are specifically identified.

The south end of Deerfield Beach and the entire Town 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 10.0 miles along Pompano Beach, Sea Ranch Lakes, Lauderdale-by-the-Sea and Fort 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 the entrance to Port Everglades is a critically eroded area (R86 – R128) that threatens recreational interests at John U. Lloyd Beach State Park and development and recreational interests along the communities of Dania, Hollywood and Hallandale. Beach restoration projects are ongoing at John U. Lloyd Beach State Park and at Hollywood and Hallandale. Seawalls also exist along the private development.

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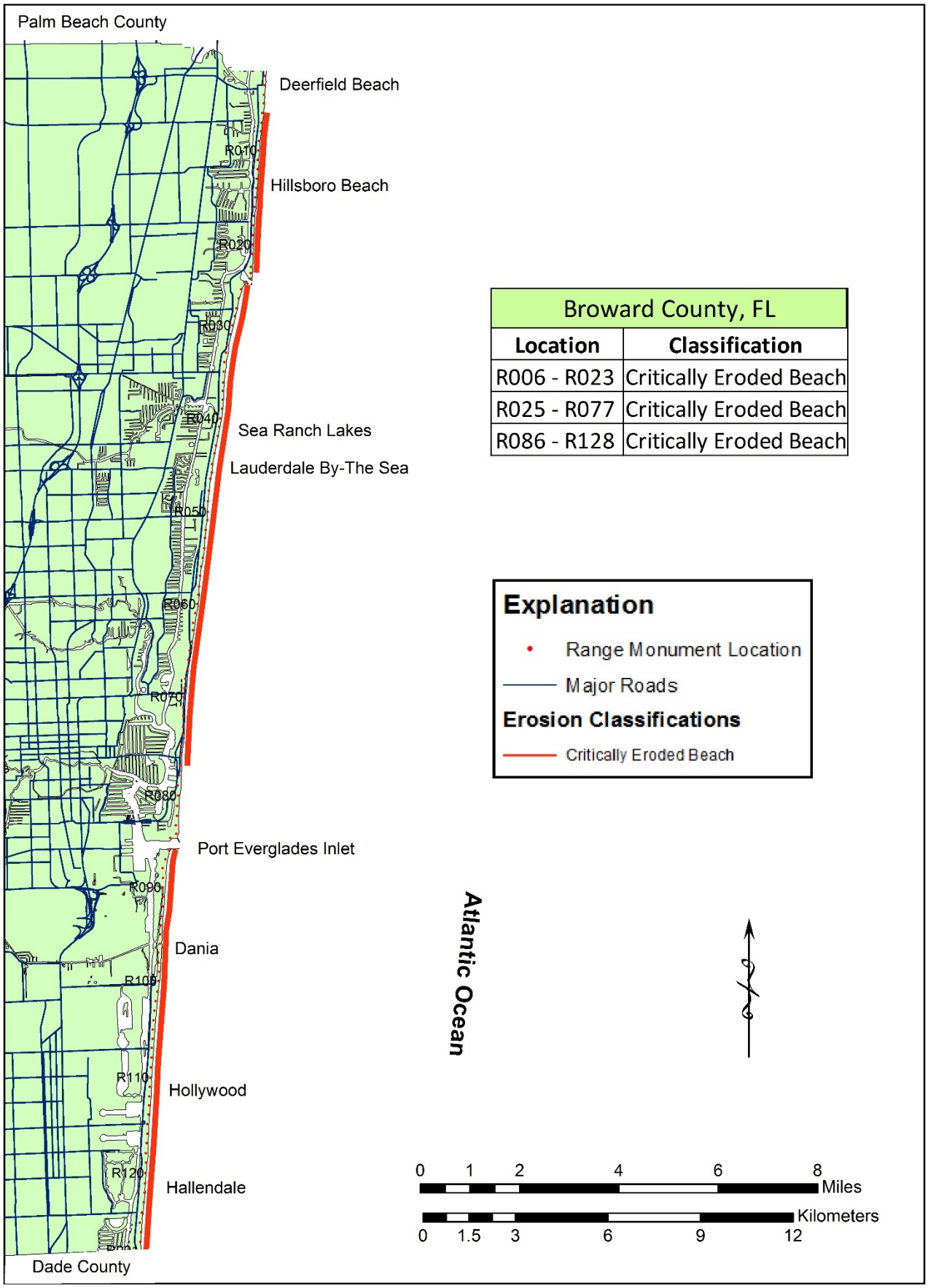


Figure 12. *Critically eroded shoreline within Broward County.*

Miami-Dade County

Most of Miami-Dade County's barrier island coast north of Cape Florida is critically eroded (*Figure 13*). The erosion is identified by three critically eroded areas (17.0 miles), two non-critically eroded areas (1.4 miles) and one non-critically eroded inlet shoreline area (0.3 mile).

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

Between Bakers Haulover Inlet and Government Cut (R27 – R74.4) are 9.4 miles of critical erosion, which threaten 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 non-critical inlet shoreline erosion. The southern 0.8-mile of beach on Virginia Key (R84 – R88) is also non-critically eroded.

The northern end of Key Biscayne (R89 – R92) has 0.6 mile of non-critical 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.

Last updated March 1999.

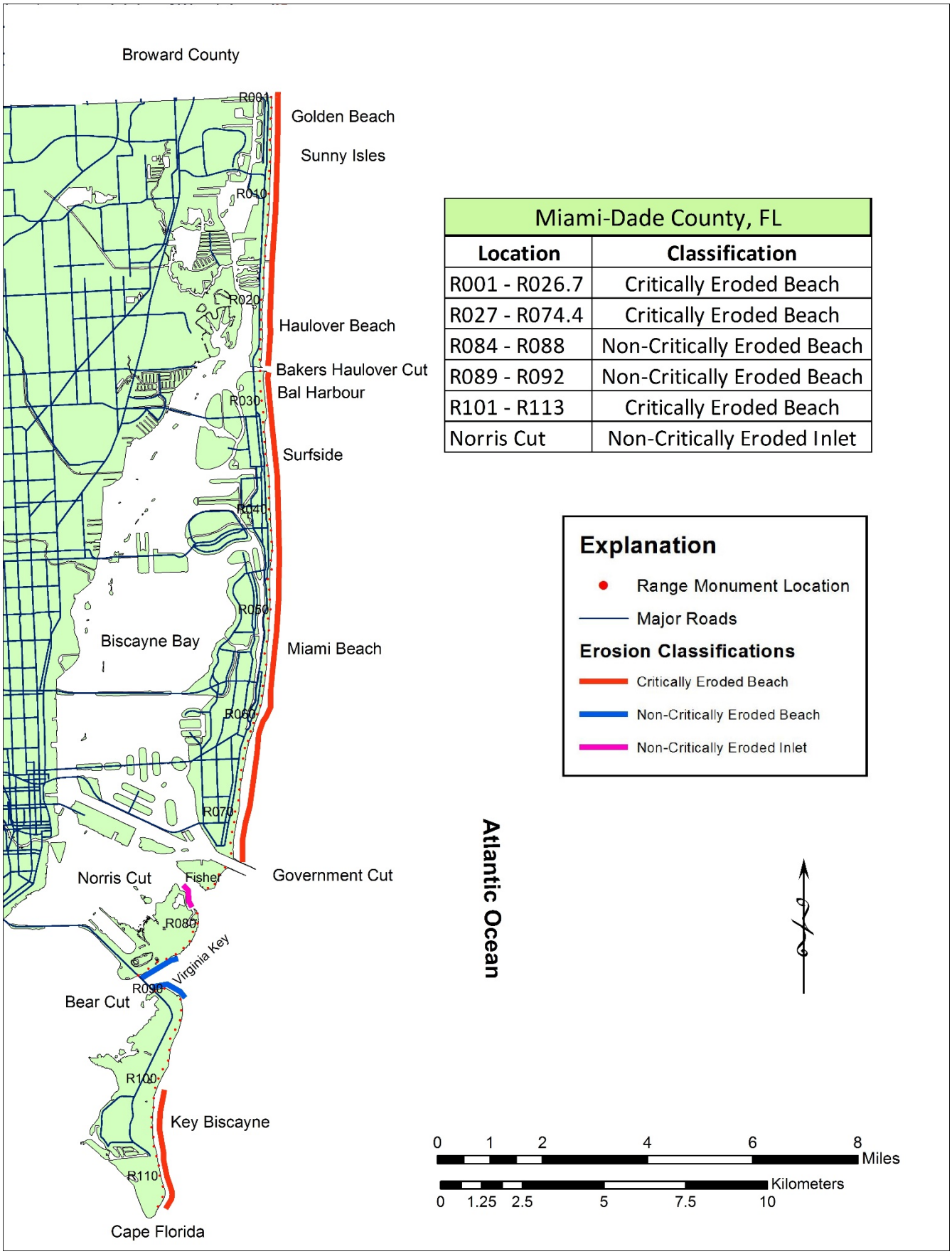


Figure 13. *Critically eroded shoreline within Miami-Dade County.*

Monroe County

There are 14 critically eroded beach areas (13.7 miles) along the Florida Keys fronting on the Straits of Florida and Gulf of Mexico between Key Largo and Key West (*Figure **14***). The distal sand keys west of Key West including Woman Key, Boca Grande Key, Marquesas Keys and 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. These beaches sustained severe erosion conditions due to Hurricane Wilma in 2005.

There are no identified erosion problem areas in the upper keys but there are eight in the middle keys. A 1.3-mile segment of Lower Matecumbe Key (Islamorada) is critically eroded, threatening recreational interests, private development and U.S. Highway 1 along Sea Oats Beach. A 1.6-mile segment of Long Key is critically eroded, threatening recreational interests at the Long Key State Park and private development. Another 0.3-mile segment on Little Crawl Key is critically eroded, threatening recreation interests at Curry Hammock State Park. The Curry Hammock segment is a beach restoration project.

All 1.4 miles of Coco Plum Beach is critically eroded, threatening private development, wildlife habitat and recreation interests along a Monroe County park. 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 Monroe County's public park is critically eroded. This segment is a beach restoration project.

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.

Following the impact of Hurricane Irma, Long Beach on Big Pine Key is a 1.0-mile segment of critically 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 in 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 Historic State Park is critically eroded, threatening recreational interests. A terminal groin and breakwater project has been constructed and periodic 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 in 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 Grande Key, Marquesas Keys and 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 in 2005. These areas are now being monitored by aerial videography.

Last updated December 2017.

Monroe County, FL	
Location	**Classification**
Sea Oats Beach	Critically Eroded Beach
Long Key	Critically Eroded Beach
Curry Hammock SP, Little Crawl Key	Critically Eroded Beach
Coco Plum Beach	Critically Eroded Beach
Key Colony Beach	Critically Eroded Beach
Sombrero Beach	Critically Eroded Beach
Little Duck Key	Critically Eroded Beach
Bahai Honda State Park (SP)	Critically Eroded Beach
Long Beach, Big Pine Key	Critically Eroded Beach
Boca Chica Key	Critically Eroded Beach
Key West	Critically Eroded Beach
Simonton Beach	Critically Eroded Beach
Fort Zachary Taylor SP	Critically Eroded Beach

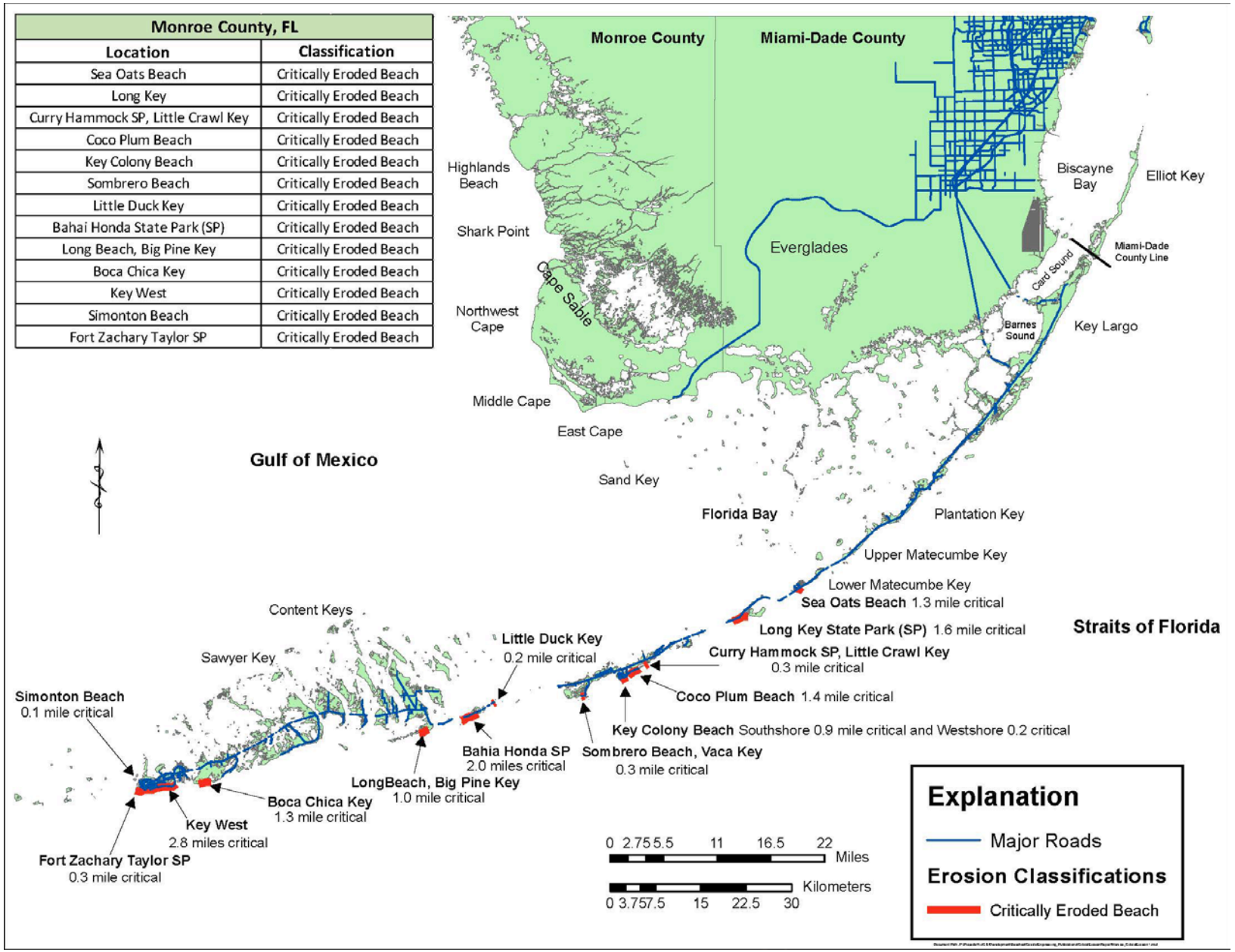


Figure 14. *Critically eroded shoreline within Monroe County – Florida Keys.*

Escambia County

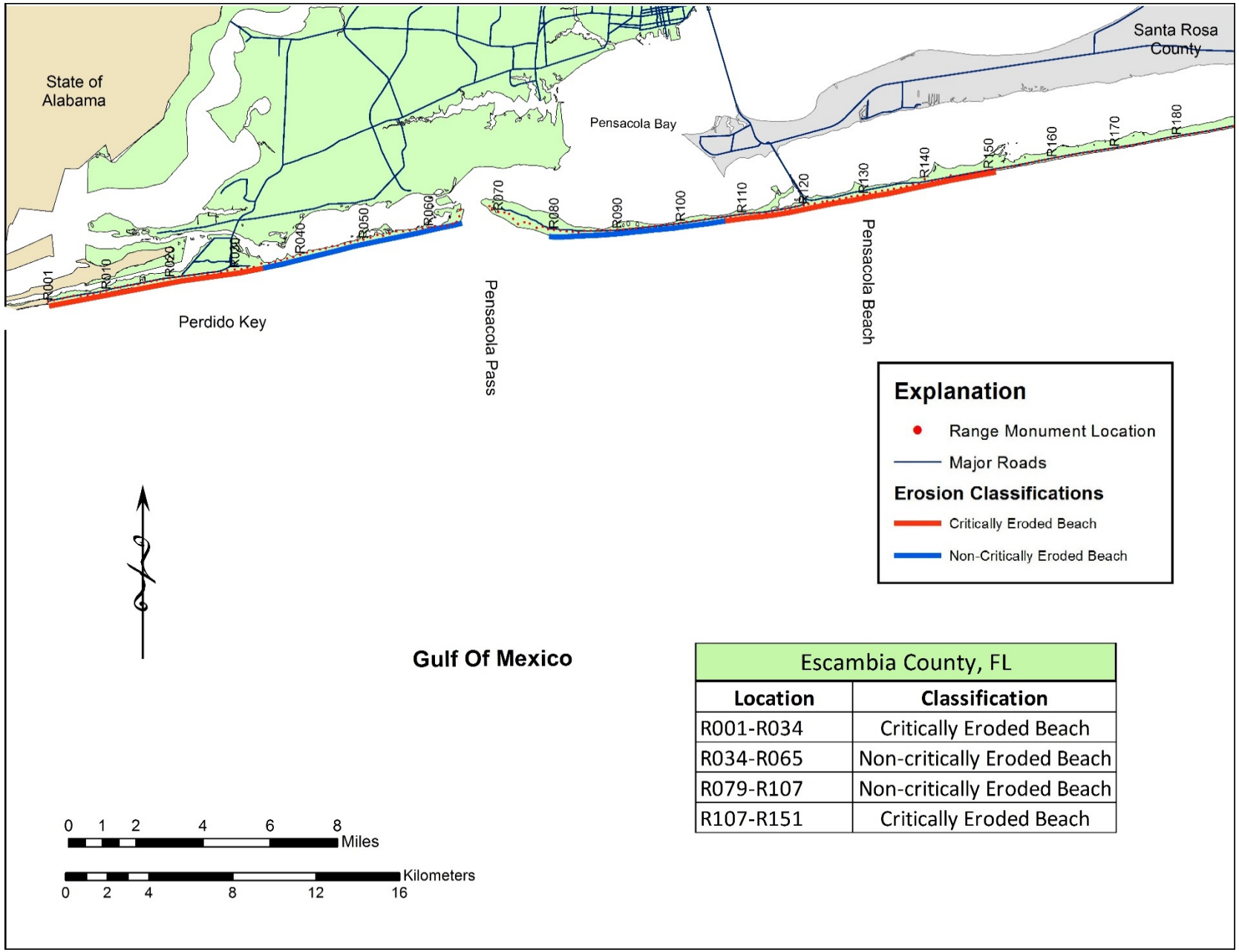
There are two critically eroded areas (14.7 miles) and two non-critically eroded areas (11.2 miles) in Escambia County (*Figure **15***).

The westernmost 6.5 miles of Perdido Key in Escambia County are critically eroded (R1 – R34), threatening development and recreational interests. A beach and dune restoration project is planned for this area. The eastern 5.9 miles (R34 – R65) of Perdido Key are non-critically 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 Fort 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.

Last updated June 2008.



Escambia County, FL	
Location	**Classification**
R001-R034	Critically Eroded Beach
R034-R065	Non-critically Eroded Beach
R079-R107	Non-critically Eroded Beach
R107-R151	Critically Eroded Beach

Figure 15. *Critically eroded shoreline within Escambia County.*

Santa Rosa County

There is one critically eroded area (4.1 miles) in Santa Rosa County (*Figure 16*). 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 was completed in 2006.

Last updated June 2005.

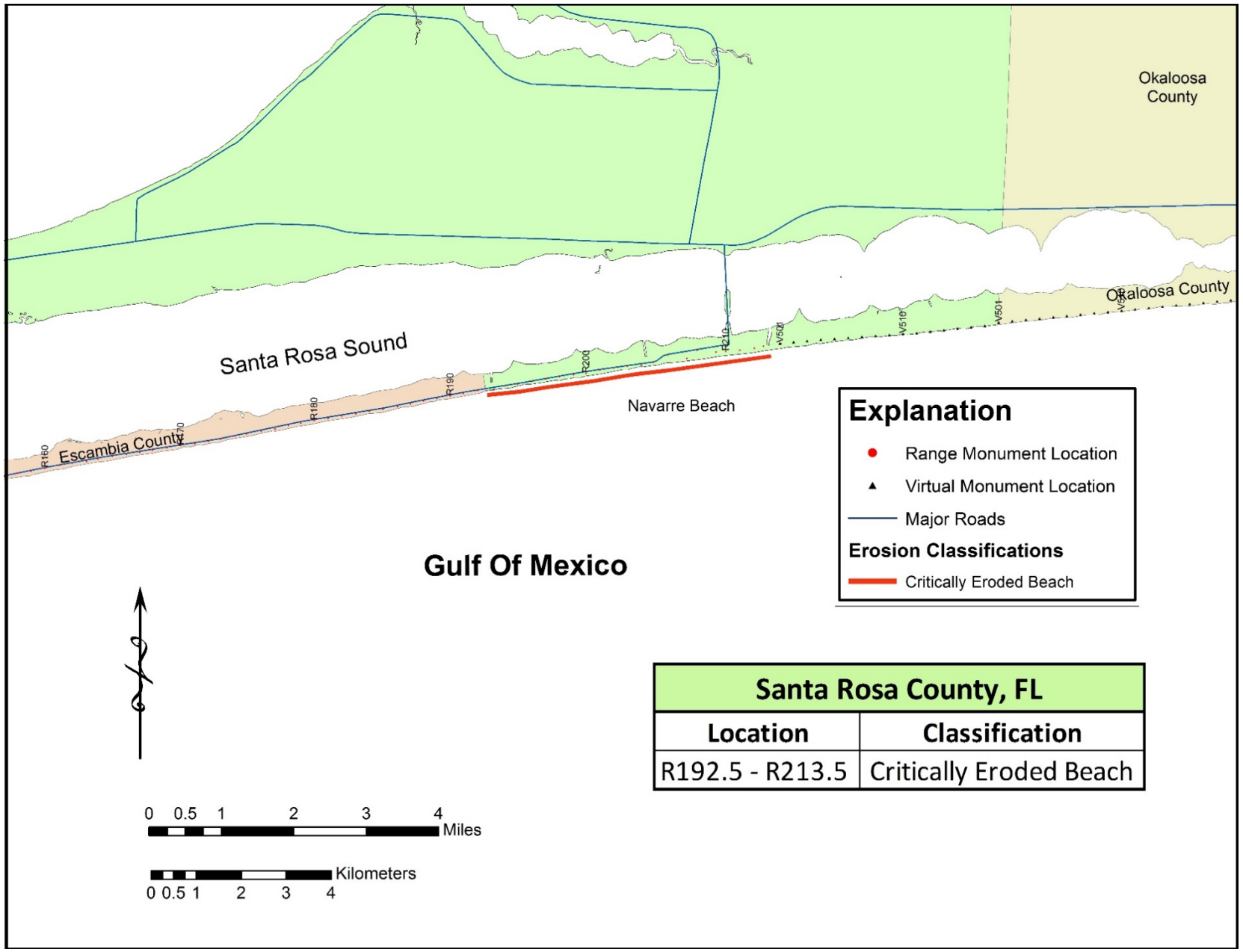


Figure 16. *Critically eroded shoreline within Santa Rosa County.*

Okaloosa County

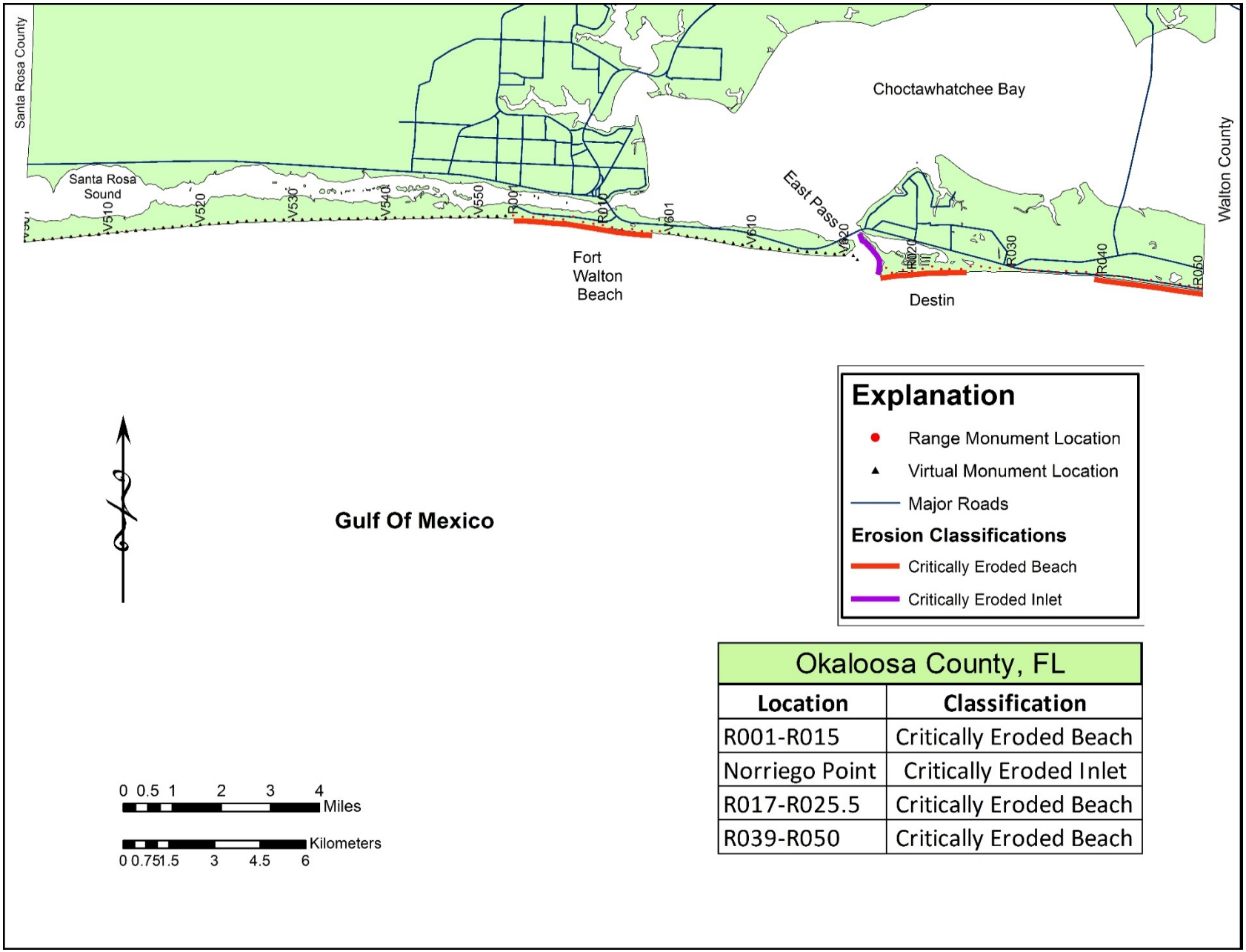
There are three critically eroded beach areas (6.5 miles) and one critically eroded inlet shoreline area (0.8 mile) in Okaloosa County (*Figure 17*).

The 2.8 miles of developed Santa Rosa Island, known as Okaloosa Island (R1 – R15) near Fort Walton Beach, is critically eroded. Dune restoration projects were constructed after the hurricanes of 1995, 1998, 2004 and 2012.

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 and on-going erosion conditions. The western portion on Holiday Isles (R17.2 – R19.8) received emergency nourishment in 2010, and the entire beach restoration project was completed in 2013. The eastern 2.1 miles of Destin (R39 – R50) is designated critically eroded, threatening development and the coastal road. This area is a beach restoration project constructed in 2007.

Last updated June 2014.



Okaloosa County, FL	
Location	**Classification**
R001-R015	Critically Eroded Beach
Norriego Point	Critically Eroded Inlet
R017-R025.5	Critically Eroded Beach
R039-R050	Critically Eroded Beach

Figure 17. *Critically eroded shoreline within Okaloosa County.*

Walton County

There are five critically eroded areas (18.8 miles) designated in Walton County (*Figure **18***). Within these areas, 3.1 miles were added following Congressional authorization of the Walton County Hurricane and Storm Damage Reduction Project.

The western 5.2 miles (R1 – R23.6) is designated critically eroded. A 5.0-mile segment (R1 – R22.8) had erosion that threatened development, recreational interests and the coastal road. This area has a beach restoration project that was completed in 2007. An additional 800 feet has been added to the east for continuity of management of the coastal system following federal project authorization.

A 4.5-mile critically eroded segment at Dune Allen and Blue Mountain Beach (R41 – R64) threatens development, Fort Panic Road and County Road 30A. The segment between R54.5 – R58 is designated critical for the design integrity of the County's proposed beach restoration project. The east end of this segment, between R63 – R64, is designated critical for the construction of a dune taper for the design integrity of the beach restoration project.

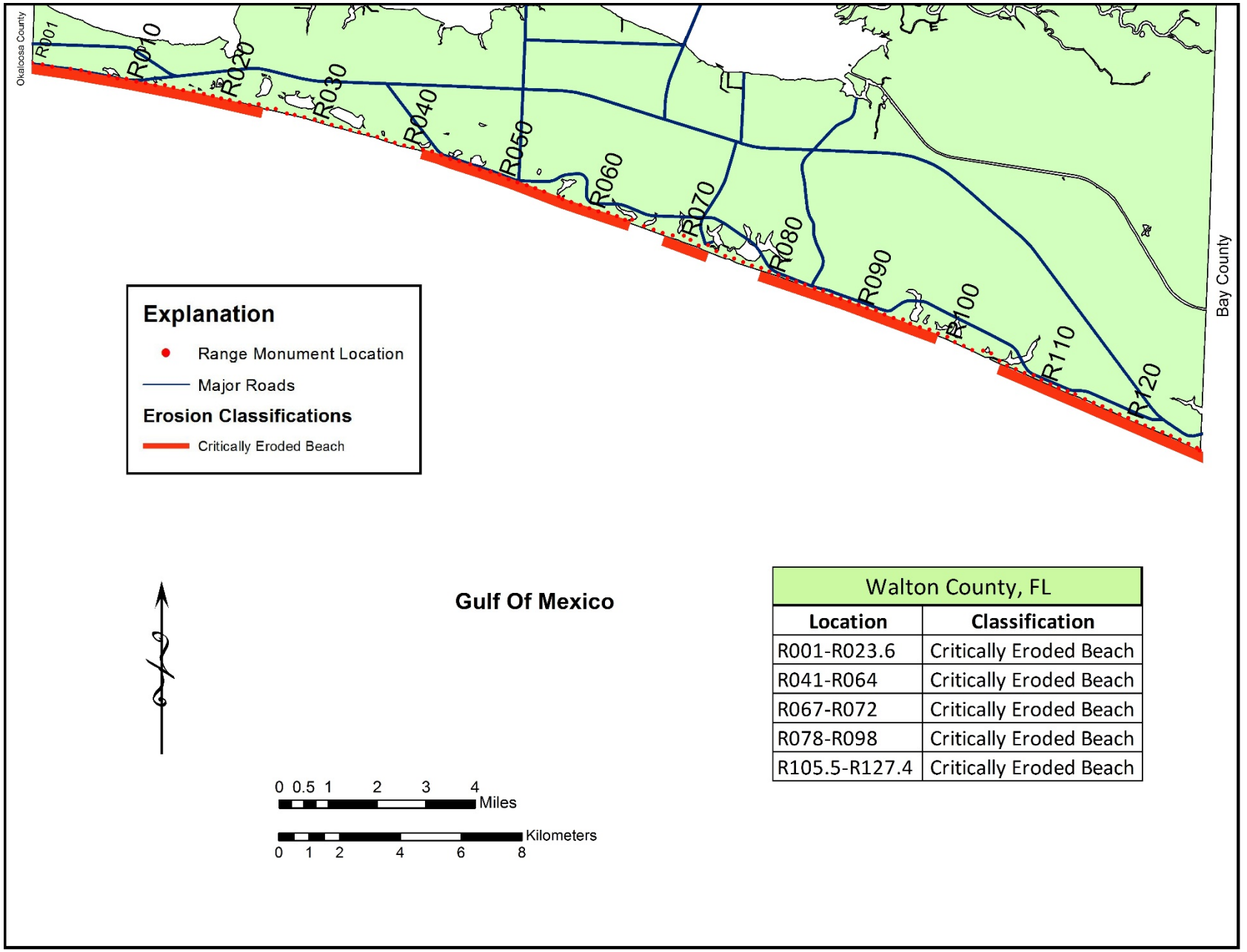
At the center of the County's shoreline, a 1.0-mile segment (R67 – R72) is designated critically eroded. Erosion of a 0.2-mile segment of Gulf Trace (R67.3 – R68.3) and a 0.1-mile segment of Grayton Beach (R70.95 – R71.4) threatens development. An additional 1,900-foot gap between the threatened areas, which contains undeveloped park lands, has been added for continuity of management of the coastal system following federal project authorization. Additionally, two segments (300 feet to the west and 500 feet to the east), where no development exists seaward of the Coastal Construction Control Line (CCCL), has been added for continuity of management of the coastal system following federal project authorization.

A 3.9-mile segment (R78 – R98) is designated critically eroded. Critical erosion along 3.1 miles of Seagrove Beach (R82 – R98) threatens development. Along the western 4,000 feet, the developments of WaterColor, with its development landward the CCCL, and Seaside, with most of its development landward the CCCL, have been added to the Seagrove Beach segment for continuity of management of the coastal system following federal project authorization.

The eastern 4.2 miles of Walton County (R105.5 – R127.4) is designated critically eroded. Along Seacrest Beach is a 1.8-mile segment (R105.5 – R114.7) where development is threatened by erosion of the bluff. To the east at Inlet Beach, a 1.0-mile segment (R122 – R127) was previously designated critically eroded. The portion between R122 – R124 was designated critical due to its post-storm

vulnerability threatening development interests. The portion between R124 – R127 was designated critical for the design integrity of the beach restoration project. Between R114.7 – R122 is a 1.4-mile gap between threatened areas where nearly all of the development is completely landward of the CCCL. This area, along with a 400-foot segment at the east end where there is currently no development seaward of the CCCL, were added for continuity of management of the coastal system following federal project authorization.

Last updated June 2014.



Walton County, FL	
Location	**Classification**
R001-R023.6	Critically Eroded Beach
R041-R064	Critically Eroded Beach
R067-R072	Critically Eroded Beach
R078-R098	Critically Eroded Beach
R105.5-R127.4	Critically Eroded Beach

Figure 18. *Critically eroded shoreline within Walton County.*

Bay County

There are two critically eroded beach areas (19.5 miles), three non-critically eroded beach areas (10.1 miles) and one critically eroded inlet shoreline (0.2 mile) in Bay County (*Figure 19*).

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 the entire critically eroded area. Numerous concrete and wood bulkheads and retaining walls also exist throughout the area of private development.

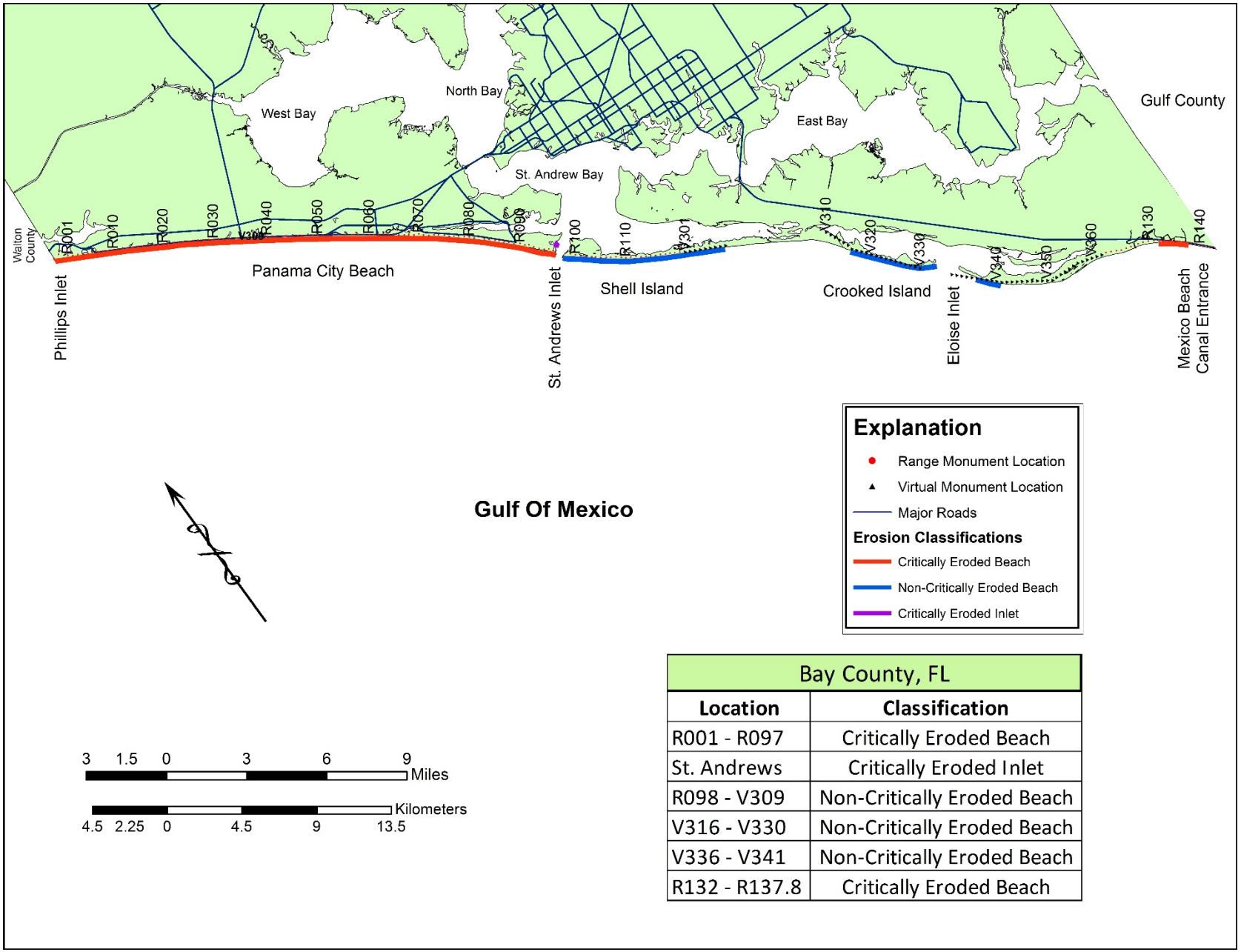
The western shoreline of St. Andrews Inlet adjacent to Gator Lake is critically eroded requiring periodic fill placement to protect wildlife habitat in St. Andrews State Park. A shoreline stabilization project to construct nearshore detached breakwaters is to be constructed.

Along the western 6.1 miles of Shell Island (R9 – V9) east of St. Andrew's Inlet, the beach is non-critically eroded without any threatened interests.

On Crooked Island, there are two non-critically 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 0.9 mile of Bay County (R132 – R137.8) along the City 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).

Last updated April 2007.



Bay County, FL	
Location	**Classification**
R001 - R097	Critically Eroded Beach
St. Andrews	Critically Eroded Inlet
R098 - V309	Non-Critically Eroded Beach
V316 - V330	Non-Critically Eroded Beach
V336 - V341	Non-Critically Eroded Beach
R132 - R137.8	Critically Eroded Beach

Figure 19. *Critically eroded shoreline within Bay County.*

Gulf County

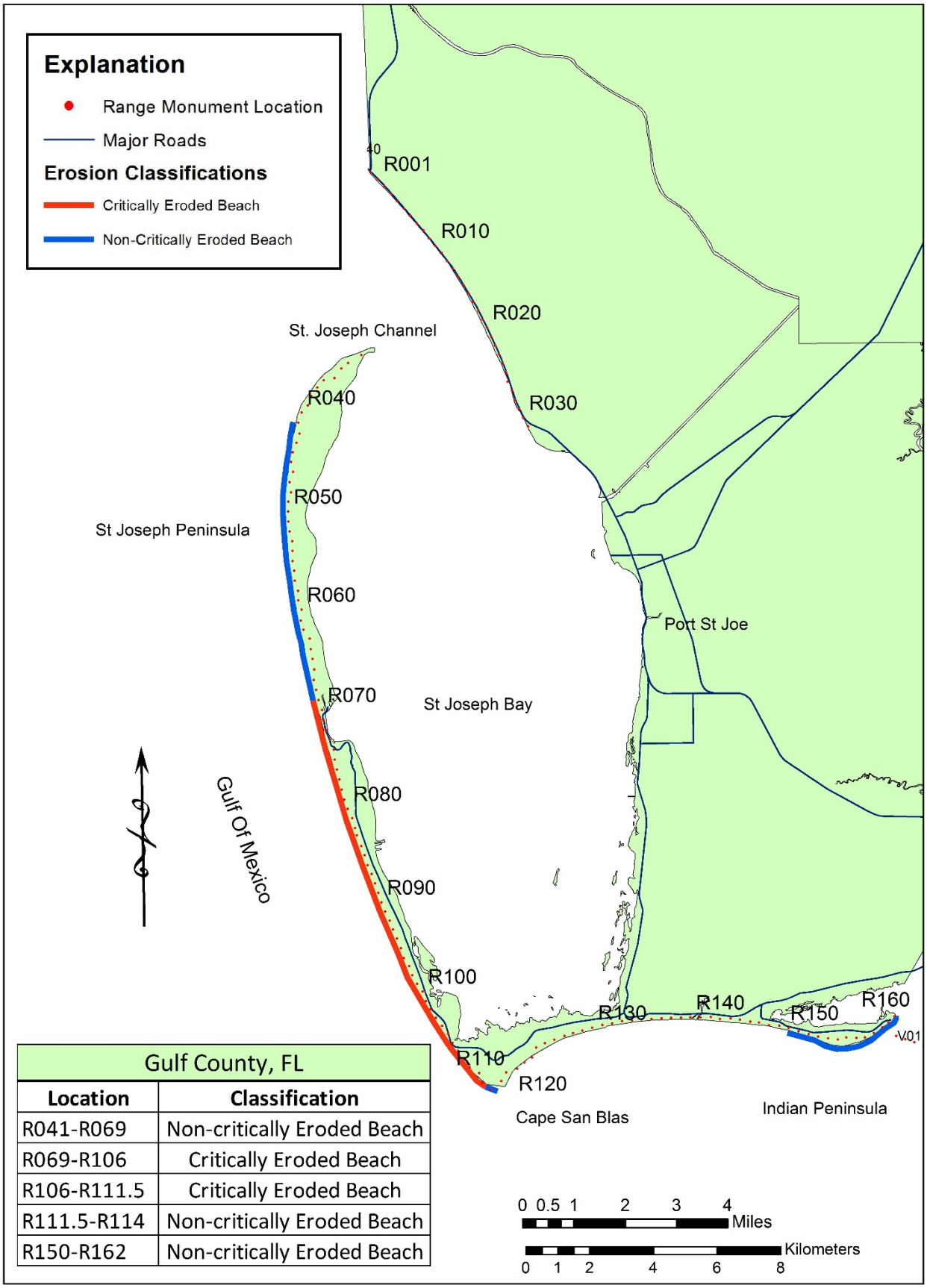
There are two critically eroded areas (8.3 miles) and three non-critically eroded areas (8.6 miles) in Gulf County (*Figure 20*).

Most of St. Joseph Peninsula is eroded between R41 – R106. A segment of T.H. Stone Memorial St. Joseph Peninsula State Park (R41 – R69) is non-critically eroded for 5.5 miles and a segment of the peninsula (R69 – R106) is critically eroded for 7.2 miles due to threatened development and recreational interests. Two segments within the designated critically eroded area (R85.5 – R90.1 and R91.3 – R95.5) are included for continuity of management of the coastal system and for the design integrity of a beach management project. The St. Joseph Peninsula Beach Restoration project was completed in the winter of 2009.

The west shoreline of Cape San Blas is severely eroded and is considered to have the highest erosion rate along the coast of Florida. The segment between R106 – R111.5 (1.1 mile) is designated critically eroded from Stump Hole to the threatened and damaged U.S. Air Force facilities because the erosion has destroyed nesting sea turtle habitat along 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). An engineered boulder mound structure was constructed in 2009 to replace the earlier rock mound to provide major storm protection to the County road. South of the U.S. Air Force facilities, Cape San Blas (111.5 – R114) has sustained severe but non-critical erosion for an additional 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.

Last updated June 2008.



Gulf County, FL	
Location	**Classification**
R041-R069	Non-critically Eroded Beach
R069-R106	Critically Eroded Beach
R106-R111.5	Critically Eroded Beach
R111.5-R114	Non-critically Eroded Beach
R150-R162	Non-critically Eroded Beach

Figure 20. *Critically eroded shoreline within Gulf County.*

Franklin County

There are six critically eroded beach areas (11.1 miles), nine non-critically eroded beach areas (19.7 miles) and one non-critically eroded inlet shoreline area (0.5 mile) in Franklin County (*Figure 21*).

St. Vincent Island has a 3.2-mile long non-critically eroded area along its most gulfward protruding midsection (V317 – V334). 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 (V334 – V339) 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 (R18.5 – R22.5) extends along a 0.6-mile length of shoreline and is adjoined at both ends by a 0.7-mile non-critically eroded segment to the west (R15 – R18.5) and a 0.3-mile non-critically eroded segment to the east (R22.5 – R24).

The west end of the historical length of St. George Island west of Sikes Cut (R34 – R51) is non-critically eroded for 3.3 miles. Both interior shorelines of Sikes Cut also have non-critical erosion for 0.5 mile. East of Sikes Cut, the St. George Island Plantation (R53 – R69) also is non-critically eroded for 3.3 miles. Some inlet sand transfer of Sikes 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 Dr. Julian G. Bruce 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 non-critically eroded.

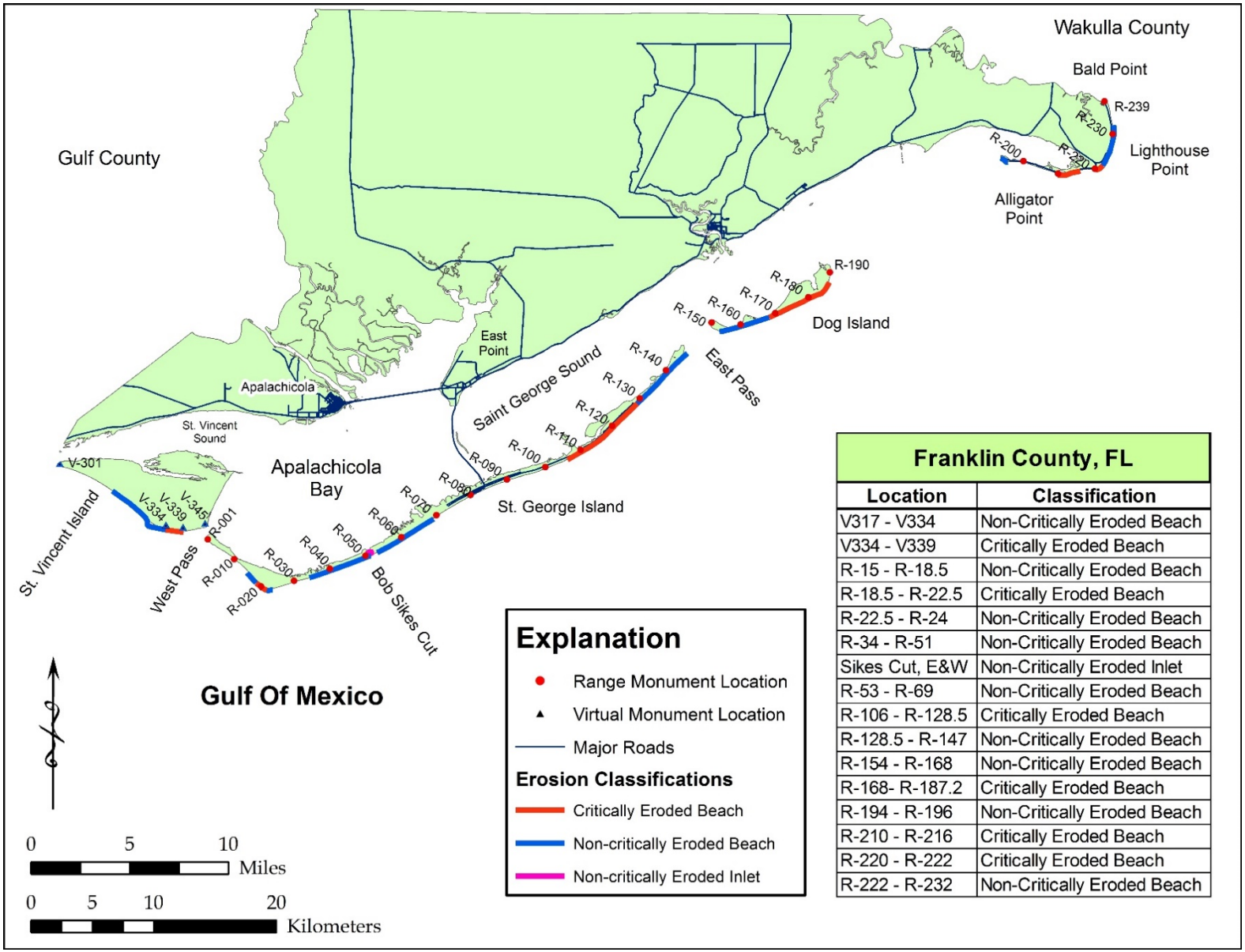
Most of Dog Island is eroded, including the western 2.6 miles (R154 – R168) which is non-critically eroded. To the east, a 3.6-mile segment (R168 – R187.2) is critically eroded where private development has been destroyed and continues to be threatened following Hurricane Dennis (2005).

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 County road.

The southeast end of St. James Island is critically eroded extending north from Lighthouse Point (R220 – R222) for 0.4 mile threatening residential development. Further north from Lighthouse Point (R222 – R232), a non-critically eroded area extends for 2.1 miles.

Last updated June 2009.



Franklin County, FL

Location	Classification
V317 - V334	Non-Critically Eroded Beach
V334 - V339	Critically Eroded Beach
R-15 - R-18.5	Non-Critically Eroded Beach
R-18.5 - R-22.5	Critically Eroded Beach
R-22.5 - R-24	Non-Critically Eroded Beach
R-34 - R-51	Non-Critically Eroded Beach
Sikes Cut, E&W	Non-Critically Eroded Inlet
R-53 - R-69	Non-Critically Eroded Beach
R-106 - R-128.5	Critically Eroded Beach
R-128.5 - R-147	Non-Critically Eroded Beach
R-154 - R-168	Non-Critically Eroded Beach
R-168- R-187.2	Critically Eroded Beach
R-194 - R-196	Non-Critically Eroded Beach
R-210 - R-216	Critically Eroded Beach
R-220 - R-222	Critically Eroded Beach
R-222 - R-232	Non-Critically Eroded Beach

Figure 21. *Critically eroded shoreline within Franklin County.*

Wakulla County

There are two critically eroded beach areas (1.3 miles) and one non-critically eroded beach area (0.4 mile) in Wakulla County (*Figure 22*).

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. Non-critical erosion extends another 0.4 mile to the north.

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

Last updated March 1999.

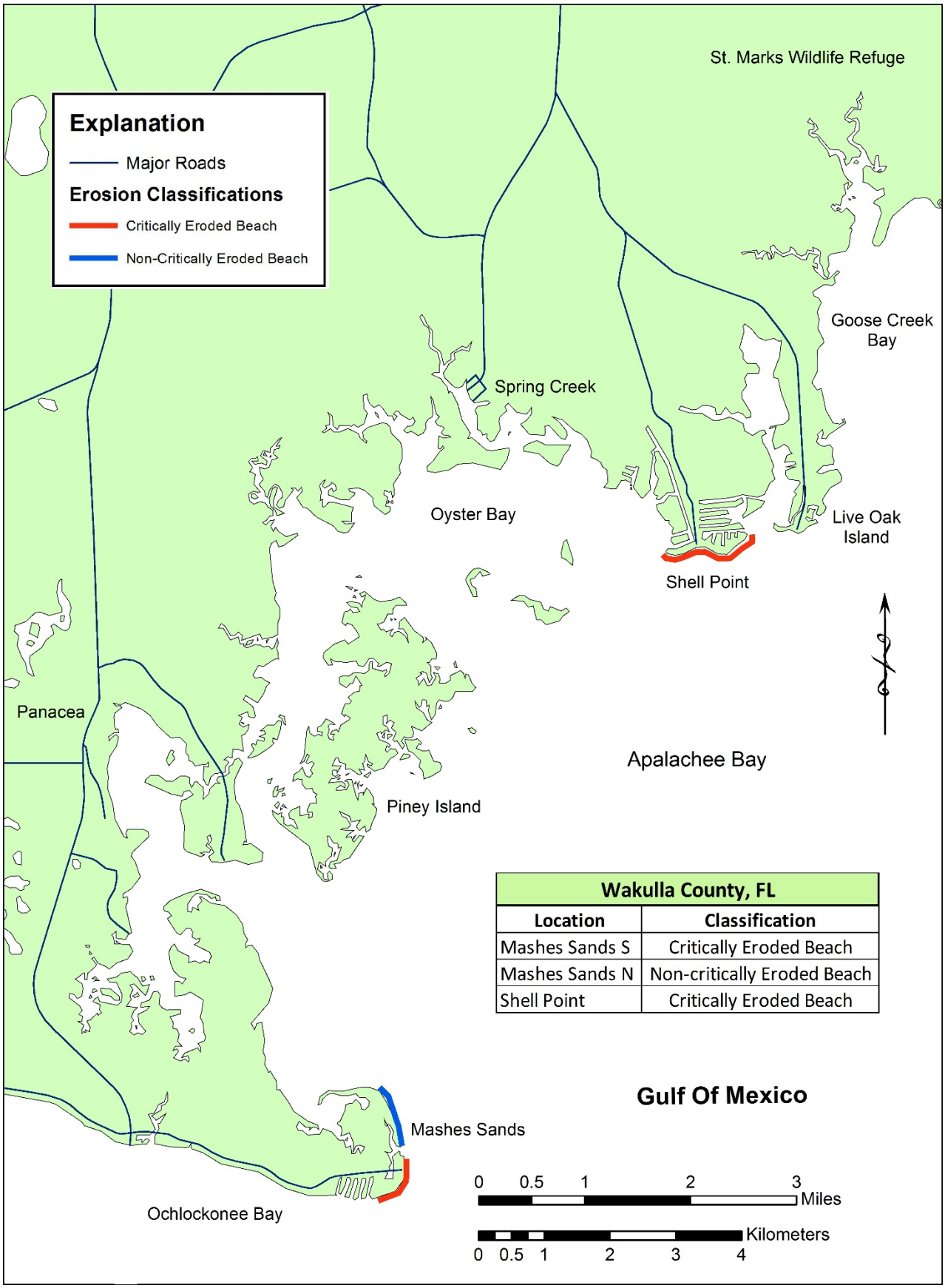


Figure 22. *Critically eroded shoreline within Wakulla County.*

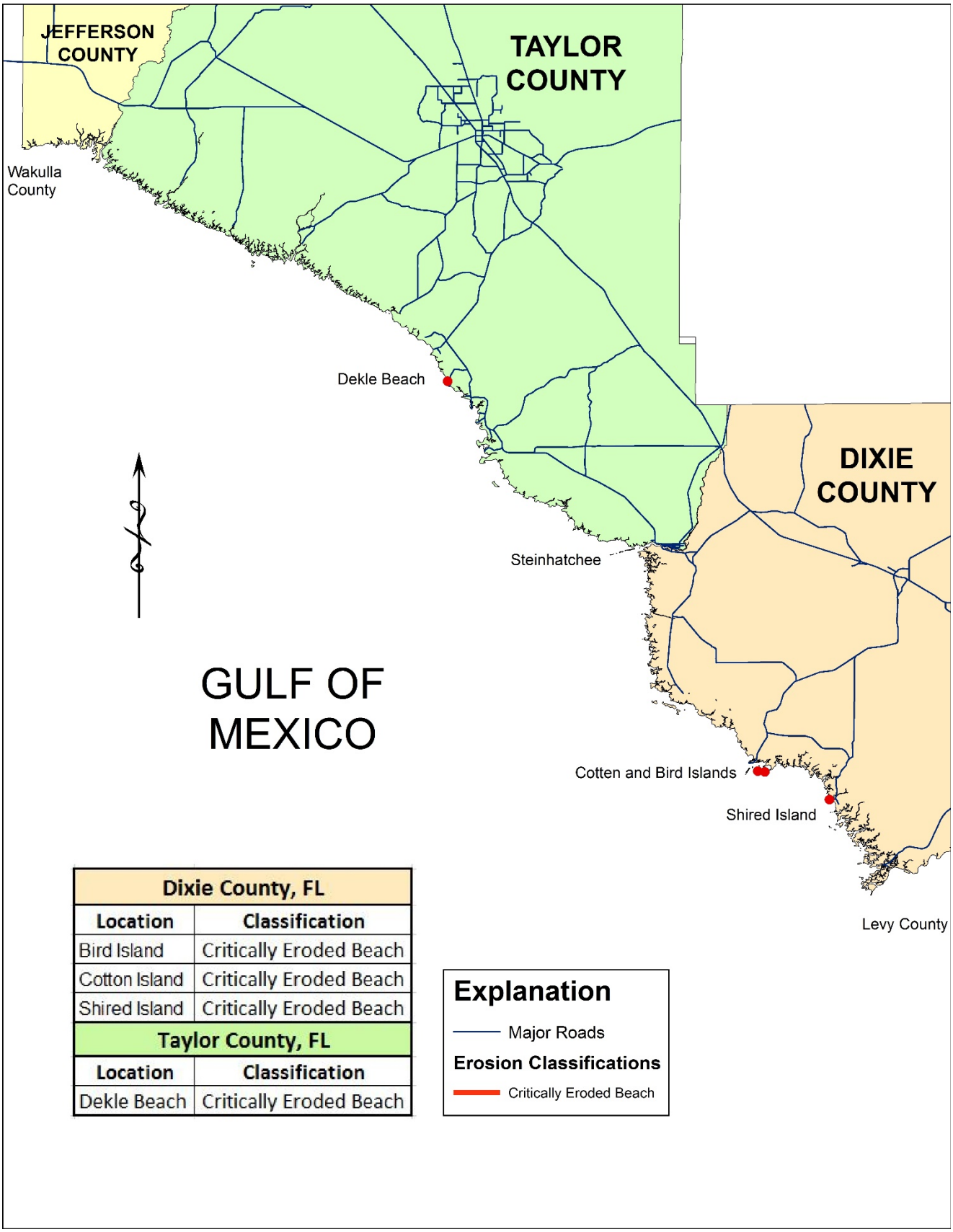
Jefferson, Taylor and Dixie Counties

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 (*Figure 23*).

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 (2250 B.C. – 1500 B.C.).

Last updated March 1999.



Dixie County, FL	
Location	**Classification**
Bird Island	Critically Eroded Beach
Cotton Island	Critically Eroded Beach
Shired Island	Critically Eroded Beach
Taylor County, FL	
Location	**Classification**
Dekle Beach	Critically Eroded Beach

Figure 23. *Critically eroded shoreline within Dixie and Taylor Counties.*

Levy County

There are three critically eroded beach areas (1.1 mile) and one non-critically eroded beach area (1.2 miles) in Levy County (*Figure 24*).

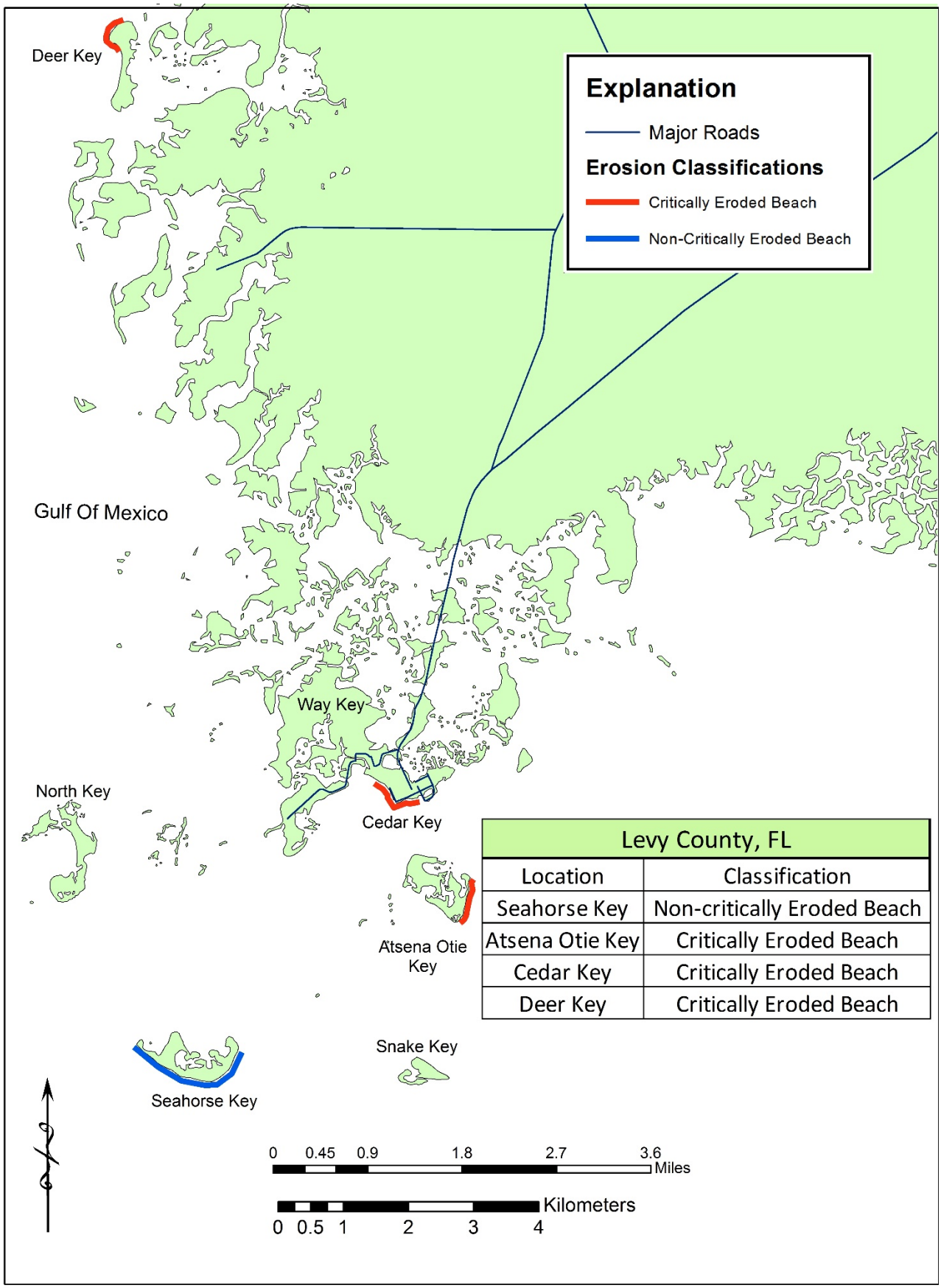
As a result of studies completed in 2012 by the University of Florida's Laboratory of Southeastern Archaeology, the northern 2,000 feet (0.4 mile) of the gulf fronting beach along Deer Island is designated critically eroded, threatening ancient pre-Columbian shell middens and burial sites dating to the late archaic period (2250 B.C. – 1500 B.C.).

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 non-critical 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.

Last updated June 2014.



Levy County, FL	
Location	Classification
Seahorse Key	Non-critically Eroded Beach
Atsena Otie Key	Critically Eroded Beach
Cedar Key	Critically Eroded Beach
Deer Key	Critically Eroded Beach

Figure 24. *Critically eroded shoreline within Levy County.*

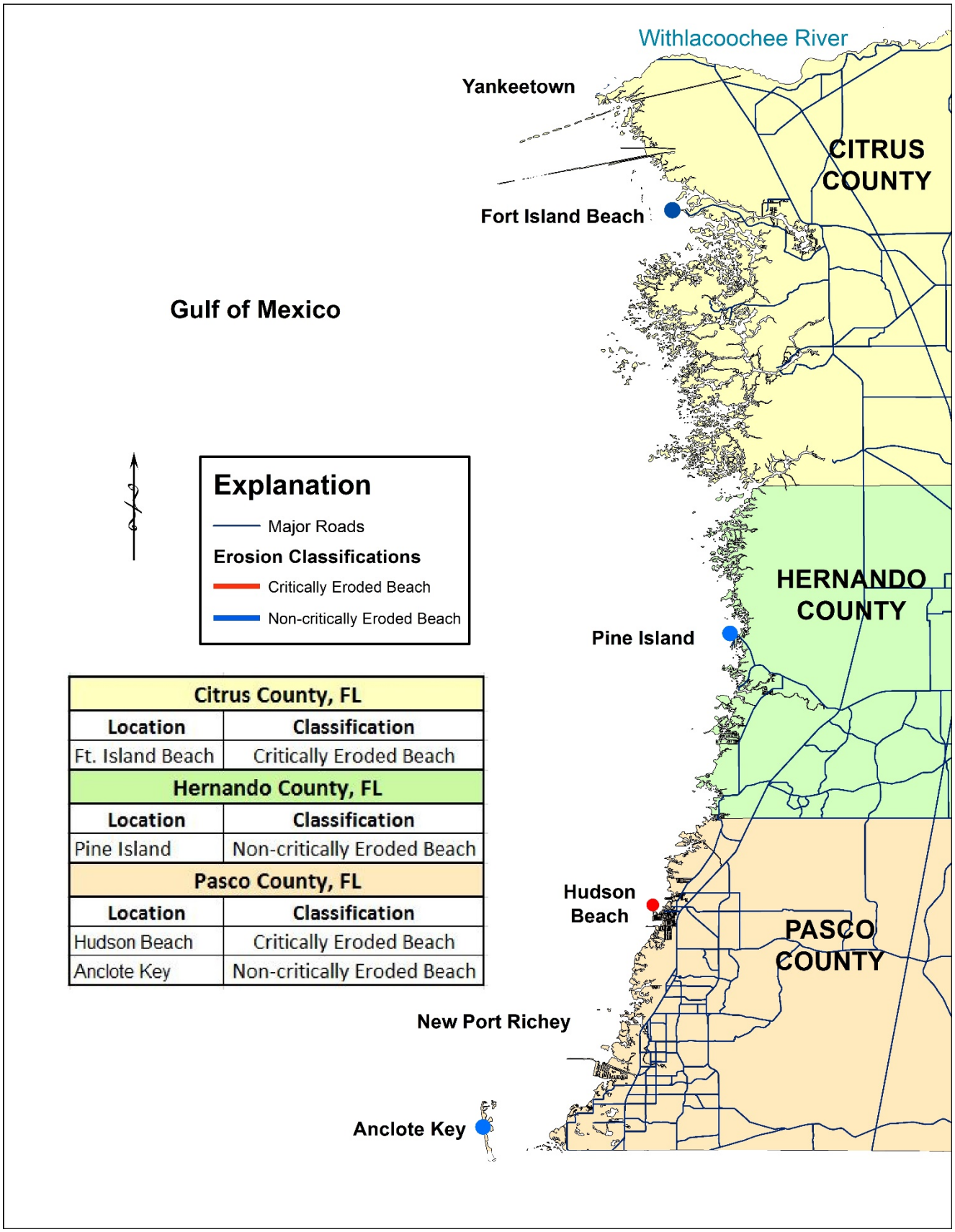
Citrus, Hernando and Pasco Counties

Citrus County has 0.2 mile of Fort Island Beach that is critically eroded, threatening recreation interests at the County park (*Figure 25*). Beach nourishment was conducted to mitigate erosion losses sustained during 2004.

Hernando County has 0.5 mile of non-critically eroded shoreline along Pine Island.

There is one critically eroded beach area (0.2 mile) and one non-critically 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 non-critically eroded beach.

Last updated June 2005.



Citrus County, FL	
Location	**Classification**
Ft. Island Beach	Critically Eroded Beach
Hernando County, FL	
Location	**Classification**
Pine Island	Non-critically Eroded Beach
Pasco County, FL	
Location	**Classification**
Hudson Beach	Critically Eroded Beach
Anclote Key	Non-critically Eroded Beach

Figure 25. *Critically eroded shoreline within Citrus, Hernando and Pasco Counties.*

Pinellas County

There are five critically eroded beach areas (21.4 miles), two non-critically eroded beach areas (4.4 miles) and one critically eroded inlet shoreline area (0.5 mile) in Pinellas County (*Figure 26*).

The southern end of Anclote Key (most of which is in Pasco County to the north) is non-critically 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. Beach restoration and nourishment projects have been constructed in this area.

The north end of Caladesi Island (R17 – R20) south of Hurricane Pass has a 0.5-mile segment of non-critical 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. A federal beach restoration project 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 federal 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 federal 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, Shell Key has 1.4 miles of non-critical erosion. South of Bunces Pass, Mullet Key has 2.2 miles of non-critical 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 (most recently in 2007) using Egmont Channel maintenance dredge material.

Last updated April 2006.

Pinellas County, FL	
Location	**Classification**
Anclote Key	Non-critically Eroded Beach
R006 - R012	Critically Eroded Beach
R017 - R020	Non-critically Eroded Beach
R047 - R049	Critically Eroded Beach
R056 - R115.4	Critically Eroded Beach
R126 - R143	Critically Eroded Beach
R144 - R166	Critically Eroded Beach
Shell Key	Non-critically Eroded Beach
R168 - R176	Non-critically Eroded Beach
R176 - R182	Critically Eroded Beach

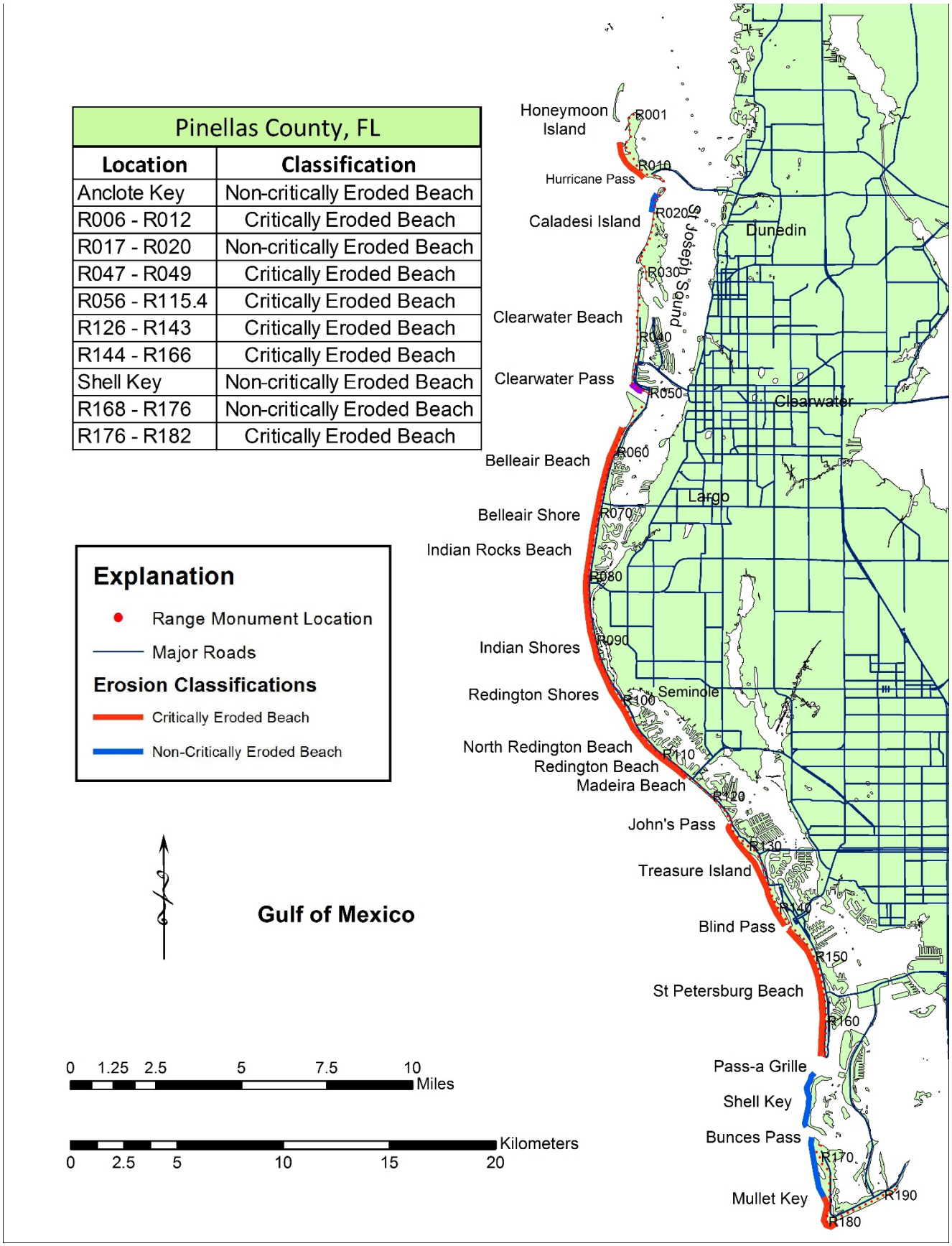


Figure 26. *Critically eroded shoreline within Pinellas County.*

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 (*Figure 27*). 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. Nourishment projects using Egmont Channel maintenance dredging material were also conducted in 2006 and 2015.

Last updated March 1999.

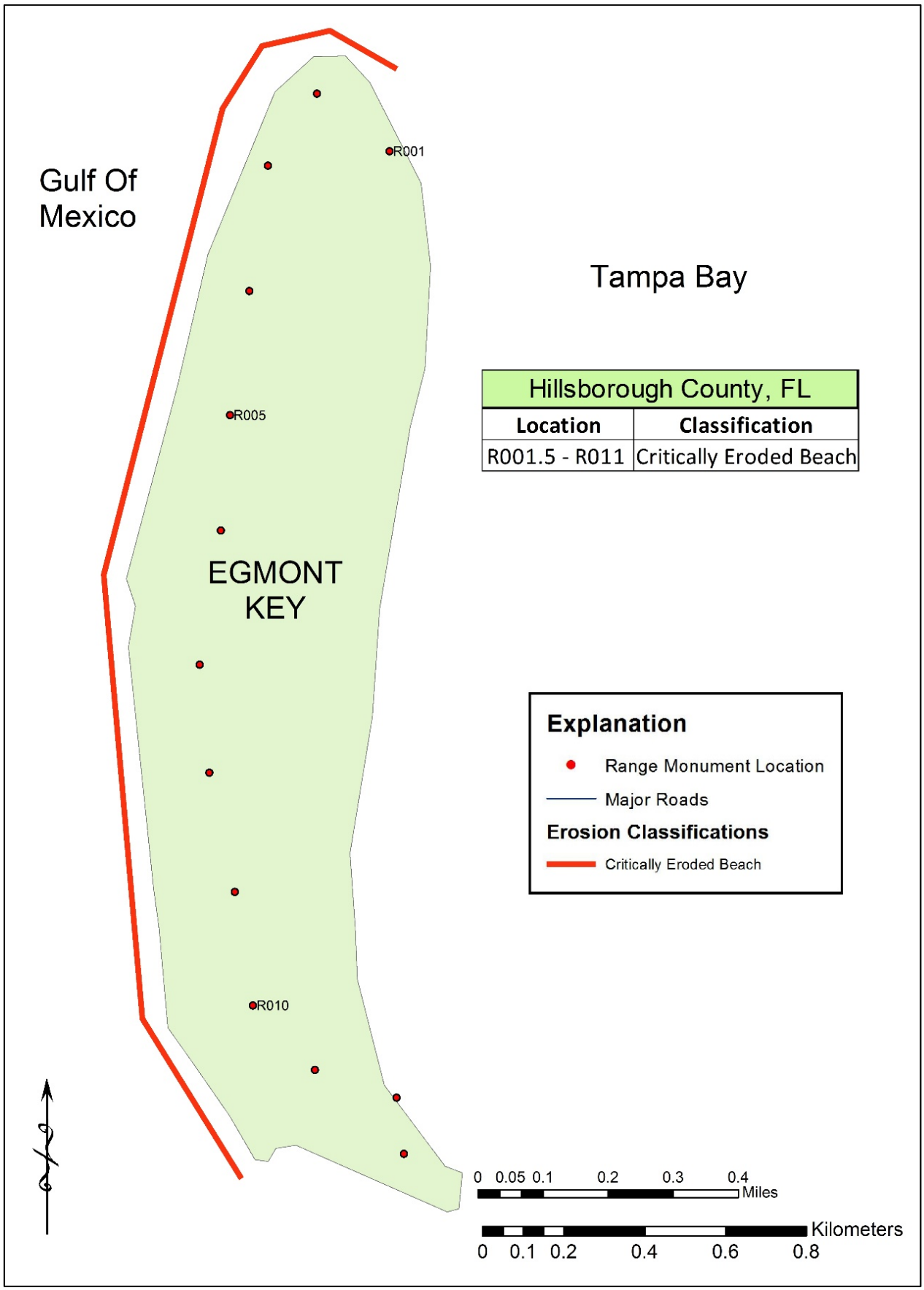


Figure 27. *Critically eroded shoreline within Hillsborough County.*

Manatee County

All of Manatee County (*Figure 28*) is critically eroded (13.0 miles). Passage Key (0.3 mile) is a national wildlife refuge, which has been reduced to an intertidal shoal due to erosion that has threatened a major sea bird rookery. The full-length of Anna Maria Island between the Rod and Reel Pier and Longboat Pass (R41.3) has 7.9 miles of critically eroded beach that has threatened development and recreational interests. This barrier island has a federal beach restoration project, and numerous bulkheads and revetments exist along the road and in front of private development. A groin field and terminal groin exist at the island's south end.

Between Longboat Pass and Sarasota County, the northern half of Longboat Key (R42 – R67.3) 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.

Last updated June 2009.

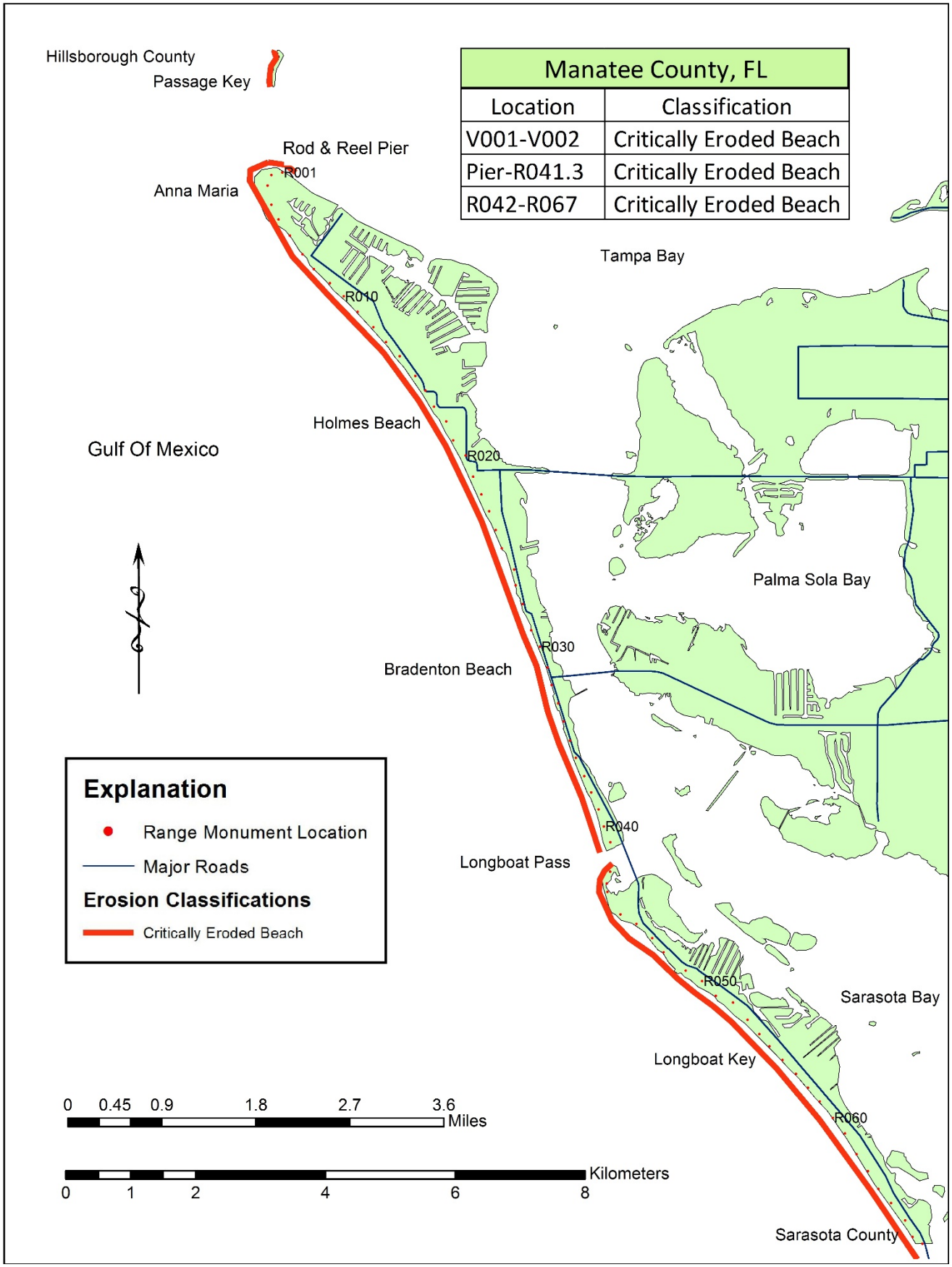


Figure 28. *Critically eroded shoreline within Manatee County.*

Sarasota County

There are eight designated critically eroded beach areas (24.2 miles), one non-critically eroded beach area (0.7 mile) and two critically eroded inlet shoreline areas (1.1 miles) in Sarasota County (*Figure 29*).

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 1,500 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.

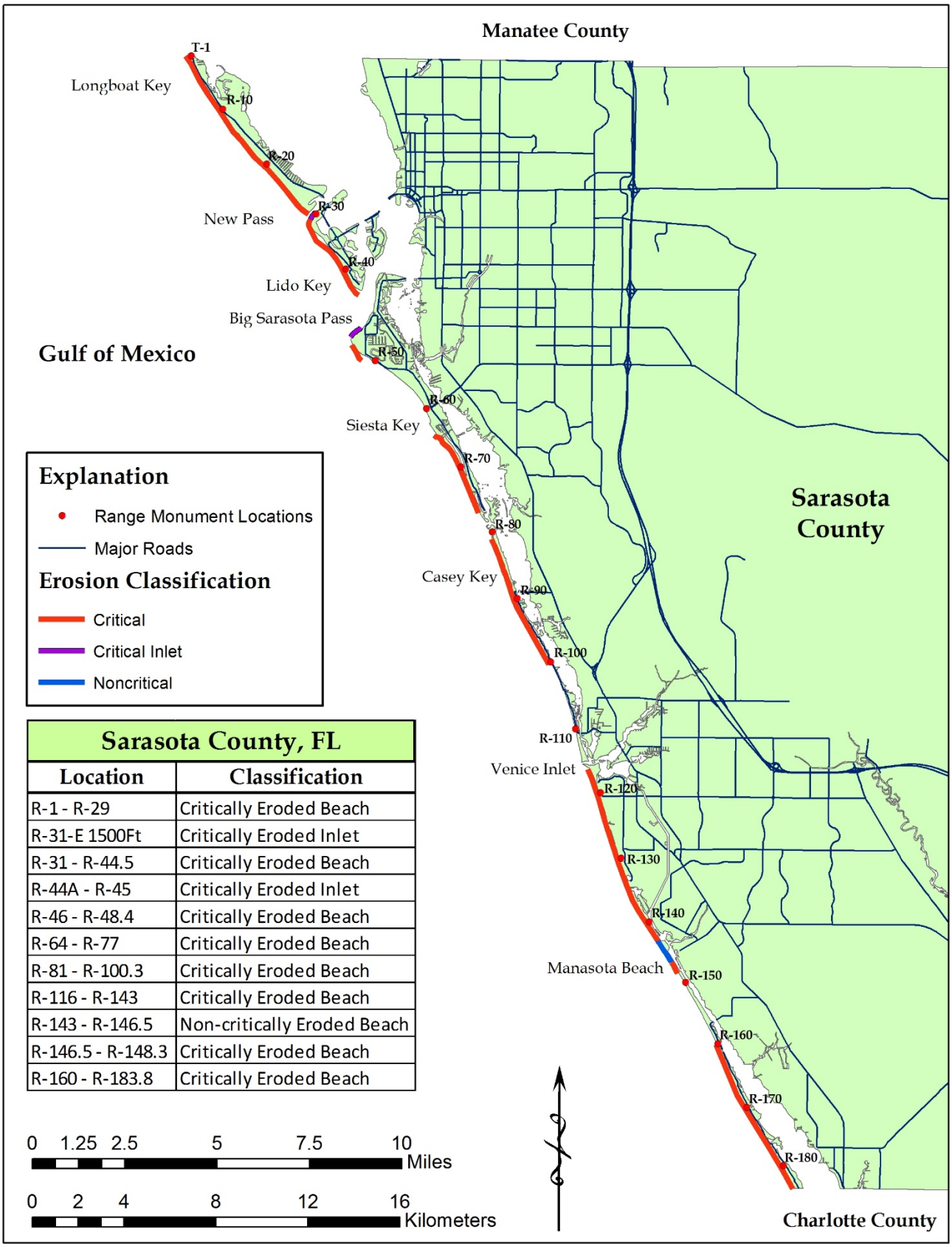
Along the southern half of Siesta Key south of the Point of Rocks headland is a 2.4-mile long critically eroded beach area (R64 – R77) that threatens private development. Some rock revetments exist in this area and a beach restoration project has been constructed.

Along the northern half of Casey Key (R81 – R100.3) is a 3.7-mile long critically eroded beach area that threatens private development and Casey Key Road. Much 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 0.7-mile segment of non-critical erosion (R143 – R146.5) and a 0.3-mile segment of critical erosion (R146.5 – R148.3) threatening private development.

The south end of Sarasota County (R160 – R183.7) is critically eroded for 4.5 miles along Manasota Key, threatening private development as well as Manasota Key Road. Some rock revetments have been constructed in this area.

Last updated June 2017.



Sarasota County, FL	
Location	**Classification**
R-1 - R-29	Critically Eroded Beach
R-31-E 1500Ft	Critically Eroded Inlet
R-31 - R-44.5	Critically Eroded Beach
R-44A - R-45	Critically Eroded Inlet
R-46 - R-48.4	Critically Eroded Beach
R-64 - R-77	Critically Eroded Beach
R-81 - R-100.3	Critically Eroded Beach
R-116 - R-143	Critically Eroded Beach
R-143 - R-146.5	Non-critically Eroded Beach
R-146.5 - R-148.3	Critically Eroded Beach
R-160 - R-183.8	Critically Eroded Beach

Figure 29. *Critically eroded shoreline within Sarasota County.*

Charlotte County

There are three critically eroded areas (6.5 miles) and one critically eroded inlet shoreline (0.1 mile) in Charlotte County (*Figure 30*).

The northern 3.8 miles of Charlotte County (R1 – R21.2) 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 Beach State Park. 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.

The south inlet shoreline of Stump Pass (0.1 mile) is critically eroded, threatening residential development on Knight Island. Along Knight Island and Bocilla Island (R28 – R40.5) are 2.3 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 threatening private development.

Last updated August 2016.

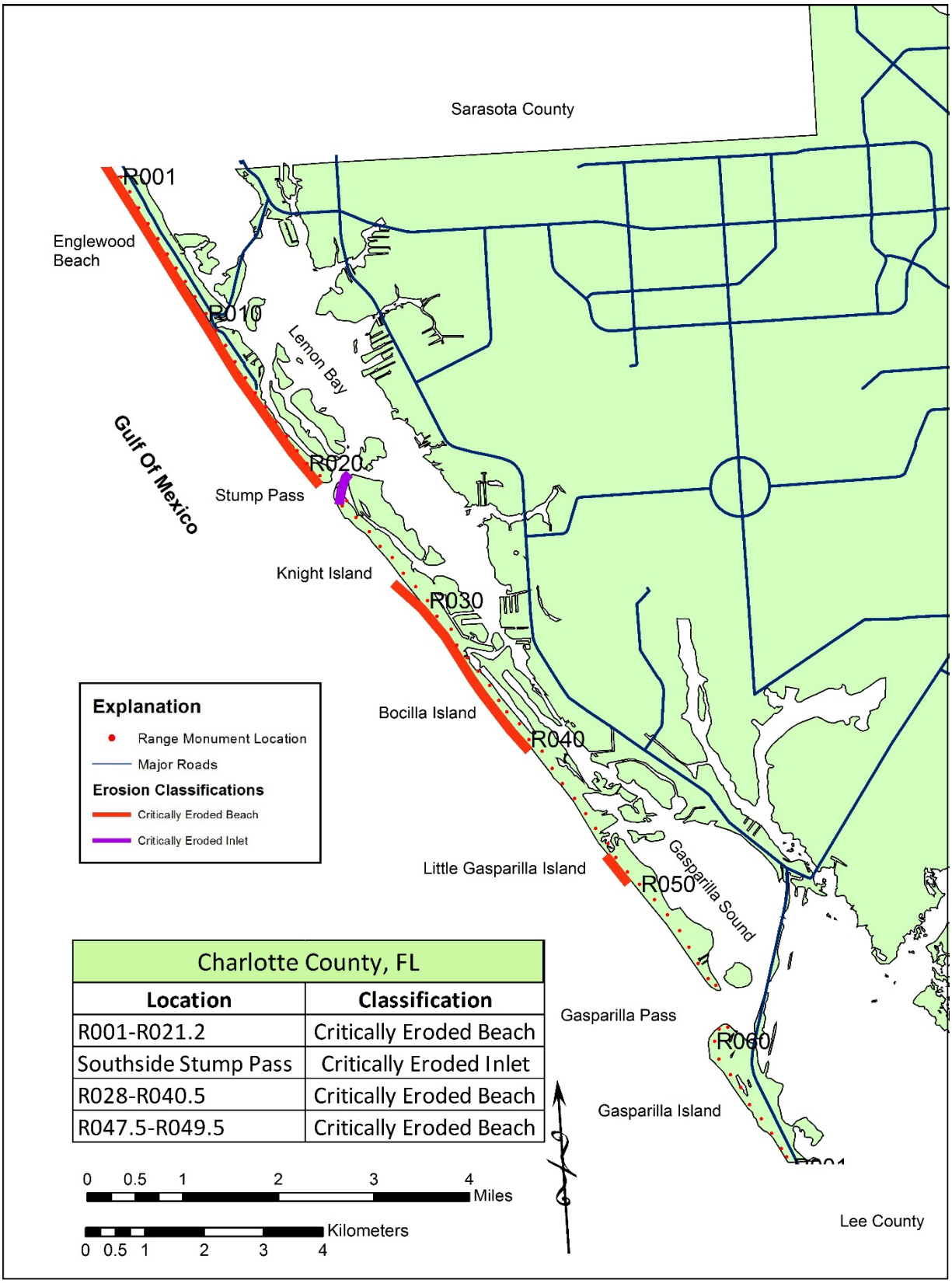


Figure 30. *Critically eroded shoreline within Charlotte County.*

Lee County

There are 11 critically eroded beach areas (22.4 miles), four non-critically eroded beach areas (5.3 miles), three critically eroded inlet shoreline areas (0.6 mile) and two non-critically eroded inlet shoreline areas (0.4 mile) in Lee County (*Figure 31*).

The southern 4.0 miles of Gasparilla Island (R7 – R26.7) 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. The north shoreline of Boca Grande Pass within the Gasparilla Island State Park (0.2 mile) is also critically eroded.

Three areas on Cayo Costa Island are non-critically 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.

All of North Captiva Island is eroded. The north shore fronting on Captiva Pass (R66, east 1,000 feet) has critical inlet shoreline erosion threatening development interests. The northern 1.0 mile of gulf beach (R66 – R71) is critically eroded, threatening development interests and from R71 – R78 is 2.0 miles of non-critical erosion. The island was breached between R78 – 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 – R109 has 5.0 miles that is critically eroded. This entire island segment is a beach restoration project.

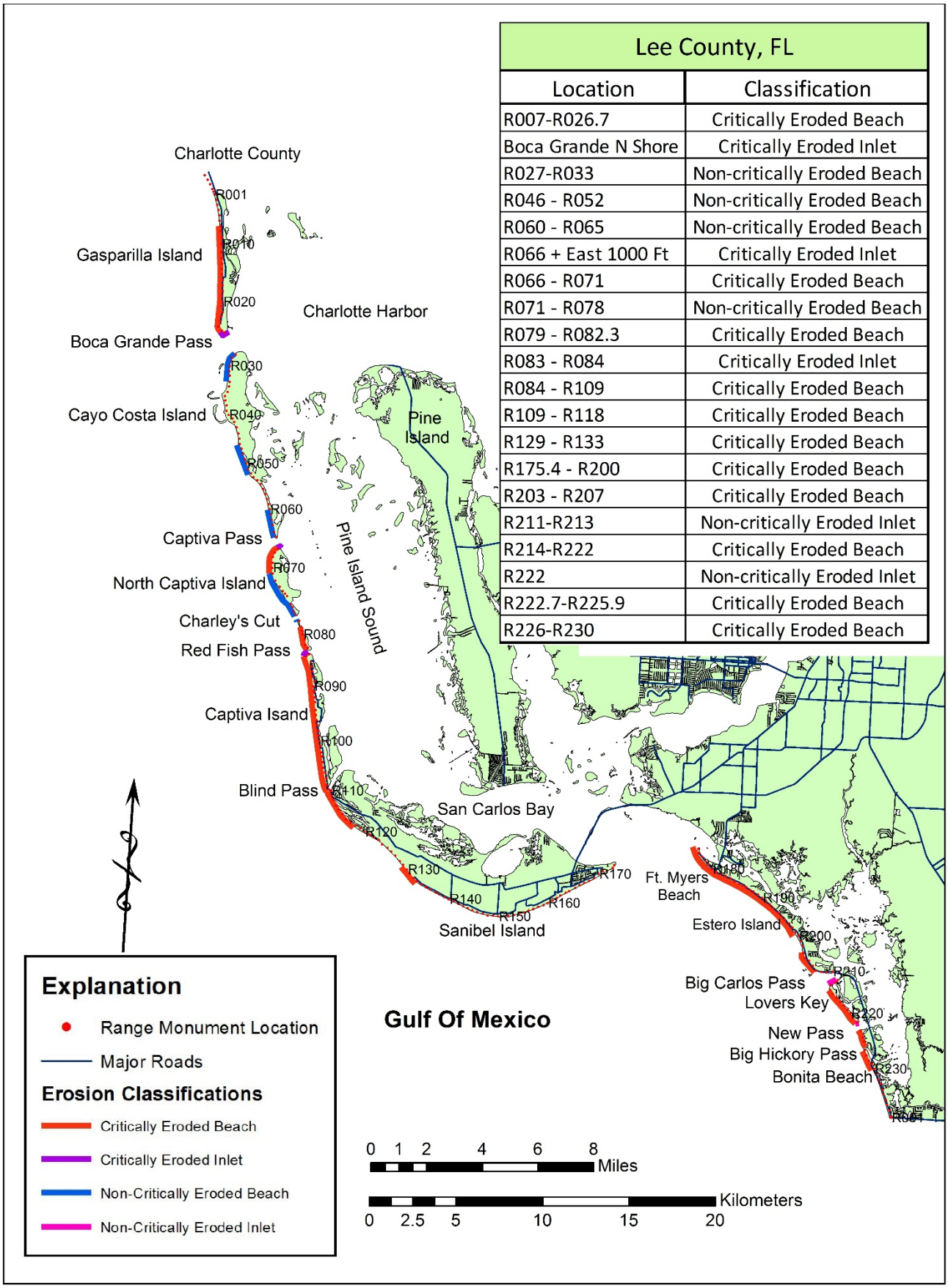
Northern Sanibel Island is eroded. From R109 – R118 the beach is critically eroded, extending 1.7 miles south of Blind Pass where the road, development, recreation and wildlife habitat are threatened. Part of this segment received nourishment from the Captiva Island beach restoration project. Another 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) – R200, Fort 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. A 0.8-mile southern segment of Estero Island (R203 – R207) is also critically eroded along the Little Estero Island Critical Wildlife Area. During the 1970s, a subaerial portion of the Big Carlos Pass ebb tidal shoal migrated landward and attached to southern Estero Island entrapping an alongshore lagoon. This barrier continued to migrate landward through storm tide overtopping events and has gradually disintegrated through erosion, which threatens development, infrastructure and wildlife habitat.

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

Between New Pass and Big Hickory Pass, Big Hickory Island (R222.7 – R225.9) has 0.8 mile that is critically eroded where wildlife habitat and recreation has been lost. 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.

Last updated June 2014.



Lee County, FL	
Location	Classification
R007-R026.7	Critically Eroded Beach
Boca Grande N Shore	Critically Eroded Inlet
R027-R033	Non-critically Eroded Beach
R046 - R052	Non-critically Eroded Beach
R060 - R065	Non-critically Eroded Beach
R066 + East 1000 Ft	Critically Eroded Inlet
R066 - R071	Critically Eroded Beach
R071 - R078	Non-critically Eroded Beach
R079 - R082.3	Critically Eroded Beach
R083 - R084	Critically Eroded Inlet
R084 - R109	Critically Eroded Beach
R109 - R118	Critically Eroded Beach
R129 - R133	Critically Eroded Beach
R175.4 - R200	Critically Eroded Beach
R203 - R207	Critically Eroded Beach
R211-R213	Non-critically Eroded Inlet
R214-R222	Critically Eroded Beach
R222	Non-critically Eroded Inlet
R222.7-R225.9	Critically Eroded Beach
R226-R230	Critically Eroded Beach

Figure 31. *Critically eroded shoreline within Lee County.*

Collier County

There are nine critically eroded beach areas (14.9 miles), three non-critically eroded beach areas (5.1 miles) and one critically eroded inlet shoreline area (0.8 mile) in Collier County (*Figure 32*).

In northern Collier County, a 0.4-mile beach segment north of Wiggins Pass (R14 – R16.3) is critically eroded, threatening sea turtle and gopher tortoise habitat. A 0.1-mile segment south of Wiggins Pass (R16.8 – R17.3) is critically eroded, threatening recreation interests and sea turtle nesting habitat. 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 (R45 – R57.5) is a 2.4-mile critically eroded segment with the northern 1.1 mile included for the design integrity of the beach restoration project. Between Doctors Pass and Gordon Pass (R57.8 – R89) is a 5.6-mile critically eroded segment. These areas of Naples have continuous beach restoration projects. 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 non-critically 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 non-critically eroded.

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 (V323 – V331.4) is critically eroded. South of Morgan Pass, Morgan Island has a 1.5-mile segment (V333.8 – V341.8) that is critically eroded and a 0.3-mile segment (V341.8 – V343.5) that is non-critically eroded.

Last updated December 2017.

Collier County, FL	
Location	**Classification**
R014 - R16.3	Critically Eroded Beach
R016.8 - R017.3	Critically Eroded Beach
R050.6 - R089	Critically Eroded Beach
R090 - R111	Non-Critically Eroded Beach
Sea Oat Island	Non-Critically Eroded Beach
Coconut Island	Non-Critically Eroded Beach
H3 - H11	Critically Eroded Beach
R134.5 - R139	Critically Eroded Beach
R143 - R148	Critically Eroded Beach
V323 - V331.4	Critically Eroded Beach
V333.8 - V341.8	Critically Eroded Beach
V341.9 - V343.5	Non-Critically Eroded Beach

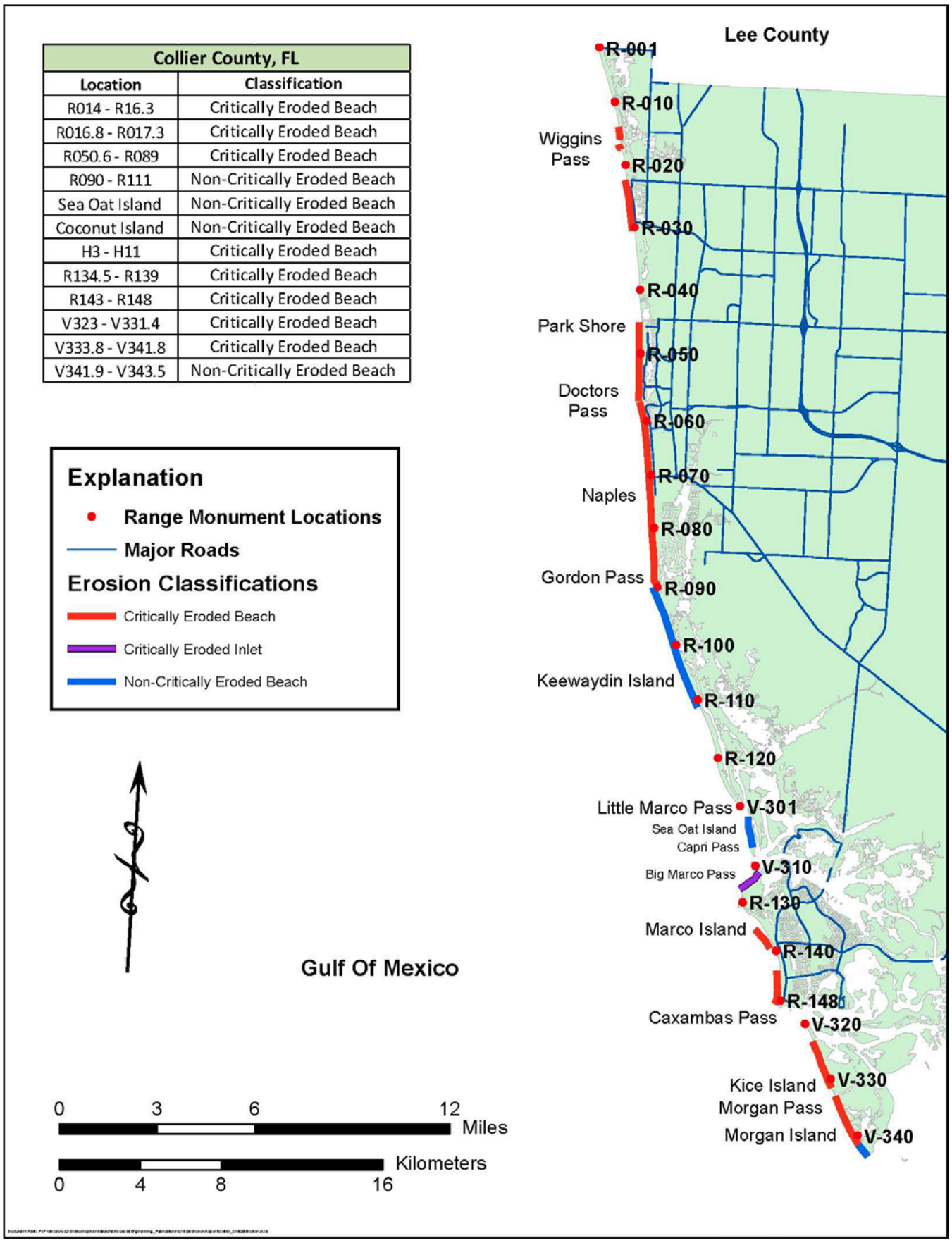


Figure 32. *Critically eroded shoreline within Collier County.*