

Figure 29. Critically eroded shoreline within Lee County.

Lee County

There are eleven 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 29).

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 1000 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 R71through R78 is 2.0 miles of non-critical erosion. The island was breached between R78 and R79 during Hurricane Charley (2004). The truncated southern 0.8 mile of North Captiva Island extending into Redfish Pass (R79-R82.3) is critically eroded threatening development and losing wildlife habitat.

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

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

Most of Estero Island is eroded. From R175 (-.4) to R200, Ft. Myers Beach has 5.0 miles that is critically eroded threatening development and recreational interests. This entire segment is a beach restoration project. Matanzas Pass channel dredge material has been previously placed at the north end on Bowditch Point. 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 1970's 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 Lover's Key is eroded. The north shore of Lover's Key (R211-R213) fronting on Big Carlos Pass has 0.3 mile that is non-critically eroded. Most of the gulf beach extending from R214 to R222 has 1.5 miles that is critically eroded threatening recreational interests and wildlife habitat in Lover's Key State Park. A beach restoration project was constructed in 2004. The south shore of Lover's Key (R222) fronting on New Pass also has 0.1 mile of 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.

Critically Eroded Beaches In Florida

Division of Water Resource Management Florida Department of Environmental Protection June 2015



