



Figure 10: Duval County Location Map

Duval County

The coast of Duval County includes the barrier islands of Big Talbot Island fronting Nassau Sound, Little Talbot Island extending between Nassau Sound and Ft. George Inlet, and Wards Bank between Ft. George Inlet and the St. Johns River Entrance. The Duval County coast also includes the mainland beaches south of the St. Johns River Entrance, including Mayport Naval Station, Atlantic Beach, Neptune Beach, and Jacksonville Beach (Figure 10). There are 15 miles of Atlantic Ocean fronting beaches in Duval County. The St. Johns River Entrance has a federal navigation channel that likely experienced some additional shoaling from both Hurricanes Frances and Jeanne.

Beach and Dune Erosion

Throughout Duval County's beaches only minor beach erosion (Condition I) prevailed during Hurricane Frances. Hurricane Jeanne inflicted additional cumulative erosion throughout the county. Specifically, the reach between R36 and R56 (Atlantic Beach to northern Jacksonville Beach) sustained moderate beach and dune erosion (Condition III), and the reach between R69 and R80 (Jacksonville Beach) sustained minor beach and dune erosion (Condition II). The Duval County beaches extended approximately 230 and 245 miles from the center of both hurricanes' eyes at landfall. Prior to the landfall of the two storms, there were two critically eroded beach areas (R21-R25, 0.3 mile; and V501-R80, 10.1 miles), one critically eroded inlet shoreline area (R23-A1A bridge, 0.7 mile), and one noncritically eroded inlet shoreline area (2 miles along Big Talbot Island). The federal beach restoration project for the Duval County beaches south of the St. Johns River will need detailed follow-up surveys to quantify the loss of material from the project.

Storm Damage

Widespread minor wind damage was experienced along the Duval County coast similar to that observed in Nassau County during Hurricane Frances. Only two major structures sustained major structural damage, both condominiums with major roof damage in Jacksonville Beach. Hurricane Jeanne caused little additional significant damage along the coast of Duval County, which was battered by wind gusts to 60-mph. Two condominiums on First Street had major wind damage and First Street flooded from 2nd to 4th Avenue and from 11th to 14th Avenue in Atlantic Beach. A Neptune Beach motel sustained major wind damage, and seven dune walkovers were damaged in Atlantic Beach. In addition, unlike most of the ocean fishing piers along the central and southeast Florida coast, the newly constructed (and not yet completed) Jacksonville Beach fishing pier sustained no apparent damage from either storm.