



Figure 9 Fig 9a. Map showing the thickness, in meters, of the modern sedimentary deposit based on interpretation of seismic reflection profiles (Foster and others, 1999). Cretaceous Coastal Plain Strata and associated lag deposits, Pleistocene glaciofluvial deposits and early Holocene estuarine deposits are exposed on (or are close to) the sea floor and in areas devoid of this modern sedimentary deposit. Arrows denote backward migration of the barrier island system east of Watch Hill, and west of Fire Island Inlet. The barrier system between Watch Hill and Fire Island Inlet represents the oldest, most stable part of the system, and has experienced in place submergence over the past ~1000yrs.