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**Why does Sandy Hook have that sinking feeling? Localization of sea-level changes**

We continuously cored 3 upper Pleistocene-Holocene sites (North Maintenance Yard [SH-NMY], Salt Shed [SH-SS], South Maintenance Yard [SH-SMY]) along a transect on the Sandy Hook peninsula. Deciphering cause of excess relative sea-level rise is a major goal of the Sandy Hook coring project that will provide an understanding of the roles of ground subsidence due to natural compaction versus extraction of groundwater. We recovered thick upper Pleistocene muds (135 ft, 41 m) and Holocene sands (140 ft, 43 m) at SH-NMY sitting on basal Pleistocene (ca. 18 ka?) gravels; compaction of Pleistocene muds is likely cause of the excess subsidence of this site and the adjacent tide gauge. At SH-SS, the upper Pleistocene is 62 ft (19 m) thick and consists of upper estuarine sands overlain by lower estuarine muds and Holocene barrier deposits (132 ft, 40 m). This succession is consistent with slower relative rise during the Younger Dryas and flooding during meltwater pulse 1a. Thin muds suggest that compaction and subsidence would be less. The SH-SMY site cored Pleistocene gravels and estuarine sands (80 ft, 24 m) and Holocene barrier sands (75 ft, 22.8 m), that suggest much less compaction and subsidence at this site.