

Chesapeake Bay Sentinel Site Cooperative SET Inventory:

Description:

This dataset provides an initial inventory of approximate locations of Surface Elevation Tables (SETs) that are currently installed in coastal wetland ecosystems (e.g., salt marshes, estuarine brackish marshes, tidal fresh marshes, back barrier lagoons) along coastal Virginia and Maryland. This inventory is the result of a cooperative effort between individuals at the NOAA Chesapeake Bay Sentinel Site Cooperative, who have worked with scientists from other state, federal, academic, and non-profit organizations to compile this information. Due to their position at the land-sea interface, coastal wetlands are highly sensitive to sea-level change. Measurements of coastal wetland surface elevation change [via the surface elevation table-marker horizon (SET-MH) approach] improve our understanding of the ability (or inability) of coastal wetlands to keep pace with sea-level rise (for more information, see: Cahoon et al. 2002a, Cahoon et al. 2002b, Webb et al. 2012, Callaway et al. 2013). Wetland surface and shallow subsurface processes play an important role to determine vertical movement in coastal wetlands, and measurements made via the SET-MH approach can be used help better model these important processes and predict future coastal wetland change. This inventory provides the foundation for the potential development and/or expansion of SET networks and helps identify local gaps in measurements of coastal wetland sediment elevation change in the Chesapeake Bay. The metadata and SET trend rate also serve as a regional baseline to analyze trends or patterns at different spatial and temporal scales. Although this initial inventory includes the majority of SETs present in this region, it is not comprehensive and there are some SETs that have not yet been or may not be included with this dataset. Additionally, other SETs may exist within the Chesapeake Bay region that are monitored by non-CBSSC members. For more information about SETs and the SET-MH approach, please refer to Cahoon et al. (2002a, 2002b), (Webb et al. 2012), Callaway et al (2013), and/or visit the following website: <http://www.pwrc.usgs.gov/set/>.