North Carolina Surface Elevation Table Map

Metadata Field Definitions:

Affiliation	The organization responsible for monitoring the SETs.
Type of Institution	The organization may be academic, government or non-profit.
Geomorphic Setting	This is where the SET is located in the coastal landscape, especially with regard to its water source.
Salinity	The dominant salinity regime experienced at each SET. Freshwater is less than 0.5 parts per thousand (ppt); oligohaline is 0.5 to <5 ppt; mesohaline is 5 to <18 ppt; and polyhaline is 18 to <30 ppt.
Site Label	The unique name given to each device (each institution uses its own naming convention).
Marker Horizon	A marker horizon measures vertical sediment accretion. Many (but not all) sites have maker horizons associated with each SET.
Data Ownership	The organization that owns the SET data.
Property Ownership	The organization or individual that owns the land the SET is located on.
Installation Year	The year the SET was installed and when measurements began.
Intra-annual data available	Sampling frequency varies among the different SET sites. If intra-annual data is available (YES), then the SET has been monitored more frequently than once a year for at least a portion of the full data record. If SETs do not have intra-annual data (NO), then they have been monitored once a year or less.
Inactive since	SETs may no longer be monitored for multiple reasons (for example; study ends or SET is damaged or lost). This column shows the most recent year for which data was collected.
SET Trend rate	A positive trend implies the SET site has gained elevation over time while a negative trend implies a loss in elevation. No trend means that the SET is neither gaining nor losing elevation. In some cases the trend is currently unavailable given the type or study and when the SET was installed (trends are not reported for SETs that have been installed for fewer than 5 years).
Elevation data	The sediment surface elevation of a SET site relative to NAVD88 at the time the SET was installed. This parameter is not currently available for all SETs in the database.
Hydrologic Zone	This indicates how the site may be influenced by tides.
SET type	SETs come in several configurations and can be installed to varying depths to capture different subsurface processes.
Vegetative Community	This reflects the vegetation community at the specific plot where the SET is located.

Treatment	Some sites have been exposed to experimental treatments over time (fertilization, fire, etc.).
Contact email	Who to contact for more information about the SET and study site.
Contact phone	Who to contact for more information about the SET and study site.

Cahoon, D.R., J.C. Lynch, P. Hensel, R. Boumans, B.C. Perez, B. Segura, and J.W. Day. 2002. High precision measurements of wetland sediment elevation: I. Recent improvements to the Sedimentation-Erosion Table. Journal of Sedimentary Research, v. 72, p. 30-33.

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NC 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) throughout coastal North Carolina. This inventory is the result of a collaborative effort between individuals associated with the NOAA NC Sentinel Site Cooperative, and includes scientists from state, federal and local governments and from academic, and non-profit organizations. 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 in determining 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 North Carolina. The metadata and SET trend data 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 North Carolina coastal region that are monitored by non-NCSSC 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/.