



Coastal Boundary Survey (CBS)

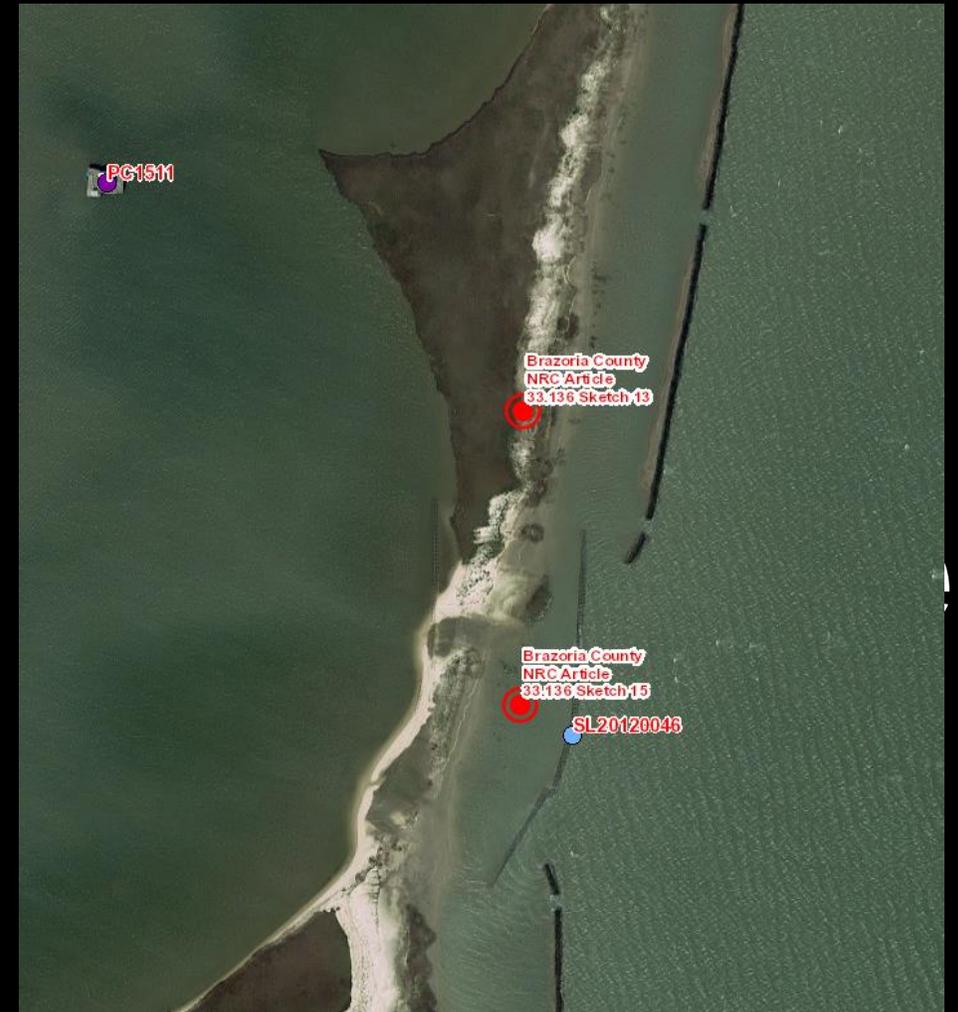
David Klotz, RPLS, LSLS

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Coastal Boundary Survey

Why it's required

The State of Texas wants to know where the boundary to State-owned submerged land is located before any work is done that may artificially alter or move the shoreline.



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Coastal Boundary Survey

Who requires it?

The Texas Natural Resource Code Sec. 33.136 states a person may not undertake an action on or immediately landward of a public beach or submerged land, including state mineral lands, relating to erosion response that will cause or contribute to shoreline alteration before the person has conducted and filed a Coastal Boundary Survey (CBS).

NOTE: Erosion response is any action intended to address coastal erosion, mitigate the effect of coastal erosion, or maintain or enhance beach stability or width. The term includes:

- beach nourishment;
- sediment management;
- beneficial use of dredged material;
- construction of breakwaters;
- dune creation or enhancement; and
- revegetation.

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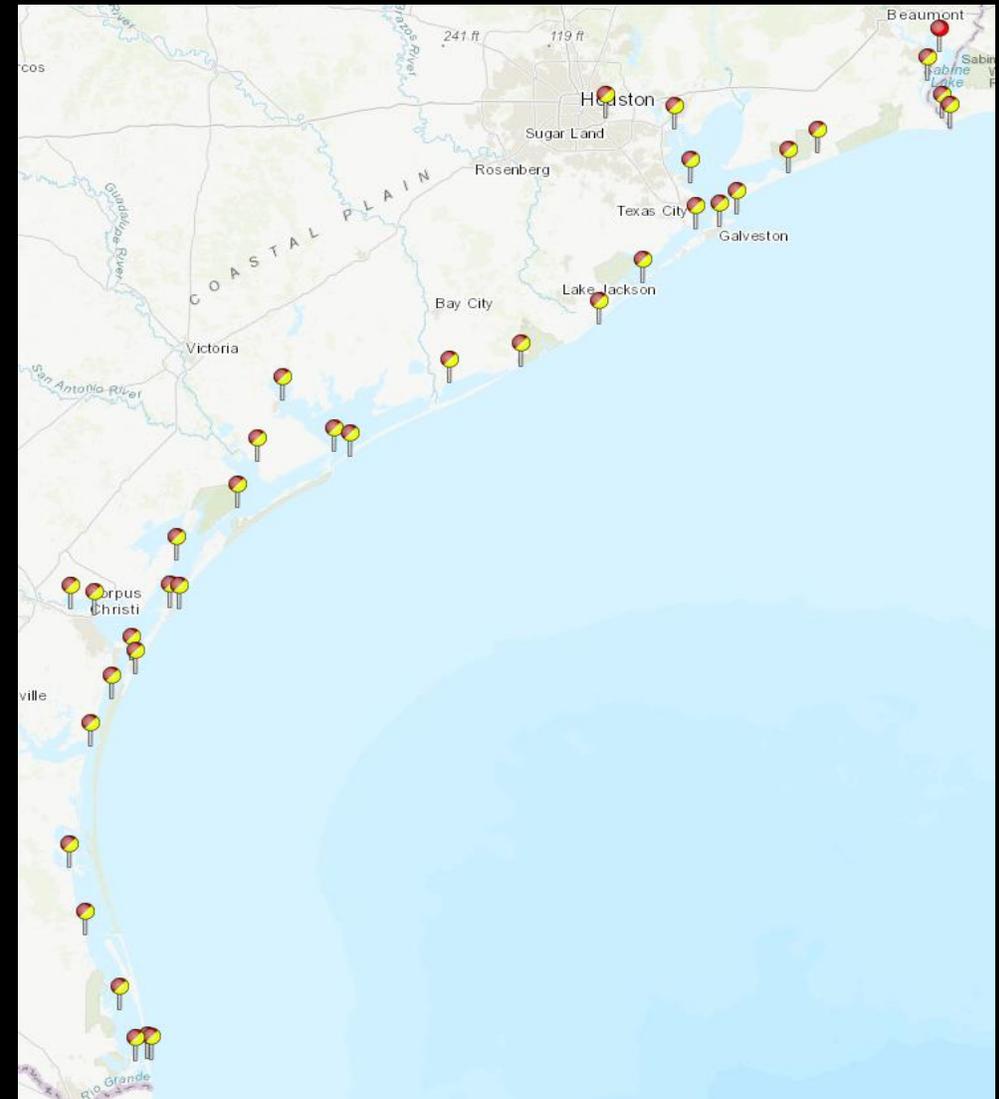
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Coastal Boundary Survey

The process

Involves locating either the Mean High Water (MHW) line or the Mean Higher High Water (MHHW) line of the submerged land and upland boundary being surveyed. The MHW/MHHW line will be located on the ground using one of the following methods. A CBS plat/exhibit will then be generated to meet the 33.136 rules and filed in the County the property is located and the Archives of the Texas General Land Office.

Method one - by direct use of existing/established Tide Gauges (NOAA has 36 Active Stations along the Texas Coast listed on their website).



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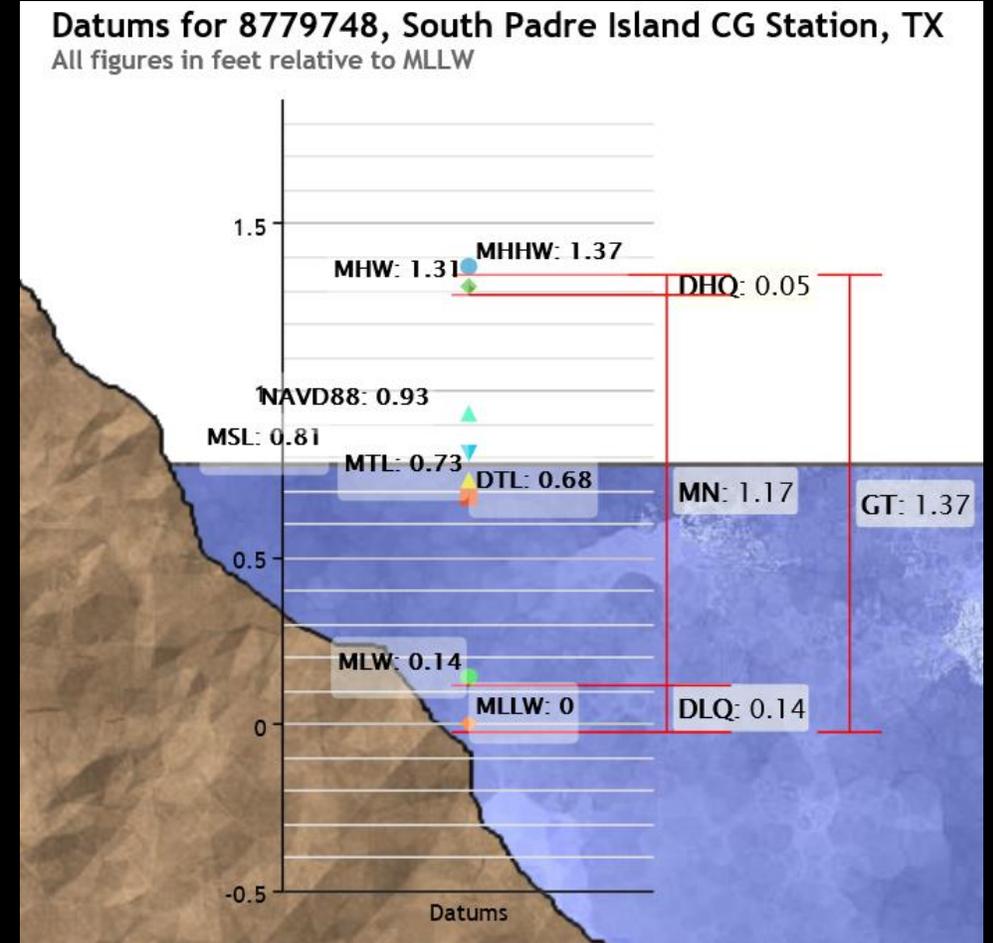
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The process (continued)

Method two - establishing a “Short-term” Tide Station (GLO uses a HOBO water level logger). These additional stations are established by tidal observations between the short-term station and an existing/established NOAA tide station. These “Short-term” studies will be conducted for multiple days to secure multiple tidal cycles of data.



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The process (continued)

Old School method - Before using portable water level loggers Tide Staffs or Tide Boards were used. In some rare instances we may have to use this method to establish a MHW/MHHW.

This method involved sitting at the location and taking/logging a reading on the staff every 6 minutes starting on the even hour. This would then be compared/calculated to the existing NOAA Tide Gauge which also gets a reading every 6 minutes.



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Timeline and Cost

Each site will be different, and Time and Cost will be determined by Field Operation and Office/Administration Operations.

Field operations will depend on:

- existing tide station;
- short-term tide station;
- tide staff or tide board;
- mobilization and access to site;
- locale terrain; and
- weather and storm events.

Office/Administration operations will involve:

- field data analysis;
- creating the Coastal Boundary Survey plat/exhibit;
- Quality Assurance/Quality Control (QAQC);
- recording in County Clerk/County Surveys records; and
- Filing at the GLO Archives and Records

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Finding a Licensed State Land Surveyor (LSLS)

per Texas Administrative Code (TAC) Title 31, Part 1, Chapter 7, Rule 7.2(b)(1) - The survey work must be done by or under the direct control and supervision of a Licensed State Land Surveyor (LSLS) or the County Surveyor of the county in which the land is located.

LSLS Roster – Texas Board of Professional Engineers and Land Surveyor's (TBPELS)

<http://txls.texas.gov/roster/>

Texas General Land Office (GLO) – Contact the GLO Surveying Services Division @ 512/463-3494. We cannot recommend a particular LSLS over another, but we can give you a grouping of the LSLS's that are in your area.

County Surveyor – Contact the county offices in the county in which the work is to be done. Ask if the county has an elected County Surveyor and get their contact information.

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