Tide Station Recovery and Maintenance

Credit to: Rod Maddox Professional Land Surveyor II

Division of State Lands/Survey and Mapping Florida Department of Environmental Protection



Benefit and/or Impact:

- -Fulfill the statutory obligations of Florida Statutes Chapter 177, Part II.
- -Provide for continual maintenance of the tide station and benchmark networks.
- -Prevent time delays and increased costs for new tide studies for surveying and mapping services due to the loss of existing tide stations.
- -Assist with providing for protection of the state's critically eroded beaches and the preservation of sovereign lands.
- -In 1975 the Coastal Mapping Act codified the MHWL process into Chapter 177, Part II.



Benefit and/or Impact:

First agreement between the state and the federal government, the National Ocean Service (NOS) were signed on April 18, 1969. This was halted around 2010.

- 1. Develop uniform standards and procedures to establish mean high water or mean low water lines (Fla. Stat. §§177.26 & 177.39). This includes creating procedures to:
- a. Preserve local tidal datums (Fla. Stat. §177.38(4)).
- b. Interpolate between two tidal stations (Fla. Stat. § 177.38(5)).
- 2. Receive copies of results from surveyors and mappers establishing a local tidal datum and mean high water line. (Fla. Stat. §177.37)



The Department is authorized to:

- 1. Coordinate with public and private agencies to make tidal surveys and maps of coastal areas. (Fla. Stat. §177.29(2)(a)).
- 2. Serve as the coordinating agency for tidal surveys and mapping performed by the federal government. (Fla. Stat. §177.29(2)(b)).
- 3. Assist any court, tribunal, agency, and political subdivision and make available information in regard to tidal surveys and determining coastal boundaries. (Fla. Stat. §179.29(2)(c)).
- 4. Contract with federal, state, or local agencies or private parties to perform surveys, studies, investigation, or mapping activities. (Fla. Stat. §177.29(2)(d)).
- 5. Develop permanent records of coastal areas. (Fla. Stat. §177.29(2)(e)).
- 6. Develop uniform specifications and regulations for tidal surveying and coastal mapping. (Fla. Stat. §179.29(2)(f)).
- 7. Collect and preserve survey data for coastal areas. (Fla. Stat. §177.29(2)(g)).
- 8. Act as a public repository for coastal maps and establish a library of coastal maps. (Fla. Stat. §177.29(2)(h)).



Installed DEP Gauges (7/2022)

DEP Existing Long-Term Stations:

- Tolomato River (Ponte Vedra)
- Bings Landing (Palm Coast)
- Ponce Inlet (New Smyrna)
- Melbourne Causeway
- Binney Dock (Ft. Pierce)
- St. Lucie Inlet (Stuart)
- Shell Point
- Maintain 5 Gauges in Apalachicola NERR

DEP Short Term Stations:

- Currently 85 Stations Installed
- Cape Coral Additional 6 New Stations

