## FLORIDA STATUTES CHAPTER 177, PART II COASTAL MAPPING ACT

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**177.25 Short title.**--This part shall be cited as the "Florida Coastal Mapping Act of 1974." **History.**--s. 1, ch. 74-56.

**177.26 Declaration of policy.**--The Legislature recognizes the desirability of confirmation of the mean high-water line, as recognized in the State Constitution and defined in s. 177.27(15) as the boundary between state sovereignty land and uplands subject to private ownership, as well as the necessity for uniform standards and procedures with respect to the establishment of local tidal datums and the determination of the mean high-water and mean low-water lines, and therefore directs that uniform standards and procedures be developed.

History.--s. 2, ch. 74-56; s. 2, ch. 91-56.

- **177.27 Definitions.**--The following words, phrases, or terms used herein, unless the context otherwise indicates, shall have the following meanings:
- (1) "Apparent shoreline" means the line drawn on a map or chart in lieu of the mean high-water line or mean low-water line in areas where either or both may be obscured by marsh or mangrove, cypress, or other types of marine vegetation. This line represents the intersection of the mean high-water datum with the outer limits of vegetation and appears to the navigator as the shoreline.
- (2) "Comparison of simultaneous observations" means a method of determining mean values by comparison of short-period observations at a station with simultaneous observations made at a station for which mean values, based on long-period observations, are available.
- (3) "Control tide station" means a place so designated by the department or the National Ocean Service at which continuous tidal observations have been taken or are to be taken over a minimum of 19 years to obtain basic tidal data for the locality.
- (4) "Datum" means a reference point, line, or plane used as a basis for measurements.
- (5) "Datum plane" means a surface used as reference from which heights or depths are reckoned. The plane is called a tidal datum when defined by a phase of the tide--for example, high water or low water.
- (6) "Demarcation" means the act of setting and marking limits or boundaries on the ground.
- (7) "Department" means the Department of Environmental Protection.
- (8) "Diurnal tides" means tides having a period or cycle of approximately one tidal day.
- (9) "Foreshore" means the strip of land between the mean high-water and mean low-water lines that is alternately covered and uncovered by the flow of the tide.
- (10) "Geodetic bench mark" means a permanently monumented and precisely referenced and described mark, usually a bronze tablet or copper or bronze bolt leaded or cemented into a masonry structure, which is established to give a definite high point on the monument to which geodetic elevations are referred.
- (11) "Interpolated water elevation" means a point between two adjacent tide stations where the water elevation has been determined by interpolation from established datums at the two tide stations.

- (12) "Leveling" means the operation of determining differences of elevation between points on the surface of the earth or of determining the elevations of points relative to some arbitrary or natural level surface called a datum.
- (13) "Local tidal datum" means the datum established for a specific tide station through use of tidal observations made at that station.
- (14) "Mean high water" means the average height of the high waters over a 19-year period. For shorter periods of observation, "mean high water" means the average height of the high waters after corrections are applied to eliminate known variations and to reduce the result to the equivalent of a mean 19-year value.
- (15) "Mean high-water line" means the intersection of the tidal plane of mean high water with the shore.
- (16) "Mean low water" means the average height of the low waters over a 19-year period. For shorter periods of observation, "mean low water" means the average height of low waters after corrections are applied to eliminate known variations and to reduce the result to the equivalent of mean 19-year value.
- (17) "Mean low-water line" means the intersection of the tidal plane of mean low water with the shore.
- (18) "Mean range difference" means the variation of the mean range of the tide at two different tide stations
- (19) "Mixed tide" means the type of tide in which the presence of a diurnal wave is conspicuous by a large inequality in either the high or low water heights, with two high waters and two low waters usually occurring each tidal day. The name is usually applied to the tides intermediate to those predominantly diurnal and those predominantly semidiurnal.
- (20) "National map accuracy standards" means a set of guidelines published by the Office of Management and Budget of the United States, to which maps produced by the United States Government usually adhere.
- (21) "Nineteen-year tidal cycle" means the period of time generally reckoned as constituting a full tidal cycle.
- (22) "Nonperiodic forces" means those forces that occur without regard to a fixed cycle.
- (23) "Photogrammetry" means the science of making precise measurements from photographs.
- (24) "Semidiurnal tides" means tides having a period of approximately one-half of a tidal day.
- (25) "Tidal bench mark" means a standard disk or other acceptable fixed point in the general vicinity of a tide station, used for the purpose of preserving tidal information, to which the tide staff at the tide station and the tidal datums determined from the observations at the tide station are originally referred.
- (26) "Tidal datum" means a plane of reference for elevations determined from the rise and fall of the tides.
- (27) "Tidal day" means the time of the rotation of the earth with respect to the moon, or the interval between two successive upper transits of the moon over the meridian of a place.
- (28) "Tide" means the periodic rising and falling of the waters of the earth that result from the gravitational attraction of the moon and the sun acting upon the rotating earth.
- (29) "Tide station" means a place at which continuous tide observations have been taken or are to be taken to obtain tidal data for the locality.
- (30) "Time difference" means the variation in time between the occurrences of the same phase of the tide at two tide stations.

**History.**--s. 3, ch. 74-56; s. 3, ch. 91-56; s. 35, ch. 94-356; s. 15, ch. 98-20.

## 177.28 Legal significance of the mean high-water line.--

- (1) Mean high-water line along the shores of land immediately bordering on navigable waters is recognized and declared to be the boundary between the foreshore owned by the state in its sovereign capacity and upland subject to private ownership. However, no provision of this part shall be deemed to constitute a waiver of state ownership of sovereignty submerged lands, nor shall any provision of this part be deemed to impair the title to privately owned submerged lands validly alienated by the State of Florida or its legal predecessors.
- (2) No provision of this part shall be deemed to modify the common law of this state with respect to the legal effects of accretion, reliction, erosion, or avulsion. **History.**--s. 4, ch. 74-56.

## 177.29 Powers and duties of the department.--

- (1) The provisions of this part shall be administered by the department.
- (2) In addition to such powers as may be specifically delegated to it under the provisions of this part, the department is authorized to perform the following functions:
- (a) To coordinate the efforts of all public and private agencies and organizations engaged in the making of tidal surveys and maps of the coastal areas of this state, with the object of avoiding unnecessary duplication and overlapping;
- (b) To serve as a coordinating state agency for any program of tidal surveying and mapping conducted by the Federal Government:
- (c) To assist any court, tribunal, administrative agency, or political subdivision, and to make available to them information, regarding tidal surveying and coastal boundary determinations;
- (d) To contract with federal, state, or local agencies or with private parties for the performance of any surveys, studies, investigations, or mapping activities, for preparation and publication of the results thereof, or for other authorized functions relating to the objectives of this part;
- (e) To develop permanent records of tidal surveys and maps of the state's coastal areas;
- (f) To develop uniform specifications and regulations for tidal surveying and mapping coastal areas of the state:
- (g) To collect and preserve appropriate survey data from coastal areas; and
- (h) To act as a public repository for copies of coastal area maps and to establish a library of such maps and charts.

**History.**--s. 5, ch. 74-56; s. 36, ch. 94-356.

**177.35 Standards and procedures; applicability.**--The establishment of local tidal datums and the determination of the location of the mean high-water line or the mean low-water line, whether by federal, state, or local agencies or private parties, shall be made in accordance with the standards and procedures set forth in ss. 177.37-177.39 and in accordance with supplementary regulations promulgated by the department.

History.--s. 11, ch. 74-56.

**177.36 Work to be performed only by authorized personnel.**--The establishment of local tidal datums and the determination of the location of the mean high-water line or the mean low-water line must be performed by qualified personnel licensed by the Board of Professional Surveyors and Mappers or by representatives of the United States Government when approved by the department. **History.**--s. 12, ch. 74-56; s. 50, ch. 83-217; s. 21, ch. 85-80; s. 107, ch. 94-119.

**177.37 Notification to department.**--Any surveyor undertaking to establish a local tidal datum and to determine the location of the mean high-water line or the mean low-water line shall submit a copy of the results thereof to the department within 90 days after the completion of such work, if the same is to be recorded or submitted to any court or agency of state or local government. **History.**--s. 13, ch. 74-56.

## 177.38 Standards for establishment of local tidal datums.--

- (1) Unless otherwise allowed by this part or regulations promulgated hereunder, a local tidal datum shall be established from a series of tide observations taken at a tide station established in accordance with procedures approved by the department. In establishing such procedures, full consideration will be given to the national standards and procedures established by the National Ocean Service.
- (2) Records acquired at control tide stations, which are based on mean 19-year values, comprise the basic data from which tidal datums are determined.
- (3) Observations at a tide station other than a control tide station shall be reduced to mean 19-year values through comparison with simultaneous observations at the appropriate control tide stations. The observations shall be made continuously and shall extend over such period as shall be provided for in departmental regulations.
- (4) When a local tidal datum has been established, it shall be preserved by referring it to tidal bench marks in the manner prescribed by the department.

- (5) A local tidal datum may be established between two tide stations by interpolation when the time and mean range differences of the tide between the two tide stations are within acceptable standards as determined by the department. The methods for establishing the local tidal datum by interpolation shall be prescribed by regulations of the department. Local tidal datums established in this manner shall be recorded with the department.
- (6) A local tidal datum properly established through the use of continuous tide observations meeting the standards described in this section shall be presumptively correct when it differs from a local tidal datum established by interpolation.
- (7) The department may approve the use of tide observations made prior to July 1, 1974, for use in establishing local tidal datums.

History.--s. 14, ch. 74-56; s. 16, ch. 98-20.

**177.39 Determination of mean high-water line or mean low-water line.**--The location of the mean high-water line or the mean low-water line shall be determined by methods which are approved by the department for the area concerned. Geodetic bench marks shall not be used unless approved by the department.

**History.**--s. 15, ch. 74-56.

**177.40 Admissibility of maps and surveys.**--No map or survey prepared after July 1, 1974, and purporting to establish local tidal datums or to determine the location of the mean high-water line or the mean low-water line shall be admissible as evidence in any court, administrative agency, political subdivision, or tribunal in this state unless made in accordance with the provisions of this part by persons described in s. 177.36.

History.--s. 16, ch. 74-56.