



Framework for Implementing Sustainable Shorelines

Summary of Social Science Investigations: Marine Contractor and Shoreline Modification Database and Viewer

Project Activity: Marine Contractor and Shoreline Modification Database and Viewer

Objective: Create GIS layers of approved bulkhead, revetment, living shoreline and living shorelineNot shoreline modifications in all Tidewater Virginia localities (as defined by the Commonwealth of Virginia) for the years 2014 – 2018, including the following attributes: Latitude, Longitude, VMRC_No, Application Date, Project Type, Linear Feet of project, Marine Contractor, Agent, Site Address, Waterway, Locality, Replacement Structure, and Oyster Structure obtained from the CCRM Tidal Shoreline Permit Database. Generate GIS Project database with resultant marine contractor and shoreline attribute data for use in:

- Identifying regions where each marine contractor works.
- Analyzing shoreline modification decisions and marine contractor attributes to potentially determine how a contractor may influence shoreline modification decisions on a regional, local and/or broader scale.
- Identifying relationship patterns between contractor and shoreline modification type.
- Generating annual data for the 5-year period, by contractor, showing the number of each project type permitted in each year.

Methods: Using ArcGIS Pro 2.8.1 geographic information system software, data from the CCRM Tidal Shoreline Permit Database was imported and GIS layers were created and analyzed using geoprocessing tools.

Visuals:

