

Task 2

Project Activity: CCRM Tidal Shoreline Permit Database

Objective: Develop a comprehensive CCRM Shoreline Permit Database that will integrate Virginia tidal shoreline erosion control project and permit information from a variety of existing database sources into one master, searchable database. Continue to populate database with new information collected on shoreline erosion control projects from Joint Permit Applications (JPAs) submitted to the Virginia Marine Resources Commission (VMRC), as well as project shoreline site characteristics, preferred shoreline management recommendations from CCRM's Comprehensive Coastal Resource Management Portal (CCRMP), and additional information as needed to support various aspects of the NSF project, such as field site selection, comparative assessments, and a variety of surveys and analyses of social and natural systems.

Methods: Using Microsoft Access, develop a comprehensive shoreline erosion control permit database utilizing fillable forms to house Virginia tidal shoreline erosion control permit and associated project information.

Review Joint Permit Applications (JPAs) submitted to the Virginia Marine Resources Commission (VMRC) for proposed shoreline erosion control projects and associated information. Categorize projects into CCRM-defined types. Determine project location and identify coordinates. Collect the following project information such as VMRC Number; applicant name and contact information; property owner information; contractor; project type, length, impacts, wetlands board decision, board minutes, project location (site address, locality, parcel ID, and lat., long.); fetch, waterway, year built; compliance; preferred shoreline management approach and consistency with BMP recommendations.

Shoreline permit and associated project information is obtained from VMRC permit database, locality CCRMPs, local government websites, Google Earth and Bing maps.

Progress to date: CCRM Shoreline Permit Database was created in Access.

Data are continually collected on proposed shoreline erosion control projects and fields added for research needs. Older project information is updated as necessary. Living shoreline projects were the initial focus for new information to the database, however, all erosion control project types are now being tracked and their data inputted.

Data have been collected on 15,695 shoreline erosion control projects to date.

Sites for field investigation of multiple ecosystem functions of living shorelines were identified querying selected project criteria.

Gloucester, Norfolk, and Lancaster Shoreline permit and property owner data for 2013-2018 was compiled for waterfront property owner social survey and property owner shoreline modification decision making analysis.

Oyster (shell, bag, and structure) shoreline project data (2000-2018) was compiled for use in conducting comparative assessments of wave attenuation of oyster structures, stone sills, and control shorelines.