



Framework for Implementing Sustainable Shorelines

Summary of Social Science Investigations: Locality Waterfront Parcel Data

Project Activity: Locality Specific Waterfront Parcel Data

Objective: Collect spatial and tabular data to create a GIS waterfront parcel layer for each locality of interest (Gloucester, Norfolk, Mathews and portions of Lancaster) to support various aspects of this NSF project, such as social and natural system surveys and analyses, web viewing, living shoreline decision analyses, etc.

Methods: Data were obtained from multiple sources to create a geospatial waterfront parcel database for each locality (i.e. local government, FEMA, CCRM, VMRC, etc.).

Data collected included:

- Basic Information: Parcel boundary, Parcel Identifier, Parcel address, Acreage
- Property Owner: Name and mailing address
- Buildings: Location, use, elevation, distance to nearest shoreline
- Land Use/Zoning
- Shoreline Structures (CCRM Shoreline Inventory and CCRM Permit Database)
- CCRMP Shoreline Recommendations
- Shoreline Conditions (Bank height, beach, marsh, fetch, etc.)
- Flood Zones
- Shoreline Permit Information: VMRC Number, Project Type, Linear Feet, Decision, Location, Waterway, etc.
- Marsh connectivity values derived under this project.

Progress to date: Data have been collected and assembled for Gloucester County, the City of Norfolk and Mathews County. Lancaster County data collection has stopped due to significant data deficiencies in county parcel layers.

Visuals:



Preliminary findings (what we have learned): There are no standards for parcel or other data among Virginia localities. GIS layers require substantial “fixing”, even in localities with established GIS departments, to remove gaps and overlaps in polygons and other issues before being used in analyses. This represents a significant data need in the state that will require dedicated resources to remedy.