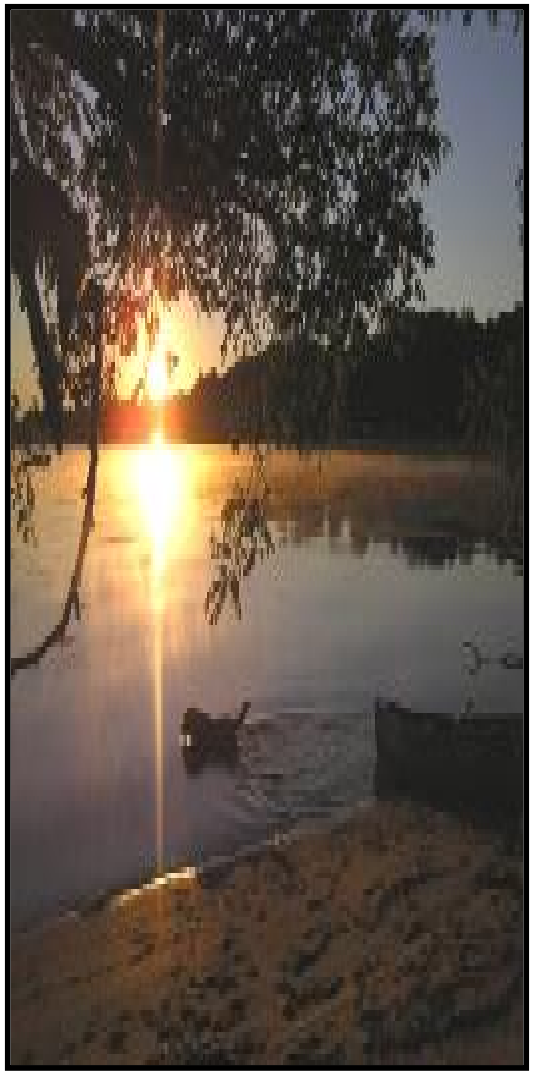
Kent County Land Use Ordinance: Article VI, Section 3

3.10 SHORE EROSION PROTECTION WORKS

The purpose of this section is to encourage the protection of rapidly eroding portions of the shoreline in the County by public and private landowners. When such measures can effectively and practically reduce or prevent shoreline erosion, the use of nonstructural shore protection measures shall be encouraged to conserve and protect plant, fish and wildlife habitat. The following criteria shall be followed when selecting shore erosion protection practices:

1. **Nonstructural practices shall be used whenever possible.**
2. **Structural measures shall be used only in areas where nonstructural practices are impractical or ineffective.**
3. **Where structural measures are required, the measure that best provides for the conservation of fish and plant habitat and which is practical and effective shall be used.**
4. **If significant alteration of the characteristics of a shoreline occurs, the measure that best fits the change may be used for sites in that area.**

Kent County Comprehensive Plan: Section D, Environment



GOAL: ENCOURAGE STEWARDSHIP OF THE CHESAPEAKE BAY, ITS TRIBUTARIES AND THEIR WATERSHEDS THROUGH BEST MANAGEMENT PRACTICES

Strategy: Encourage shore erosion control and promote living shorelines as the preferred method of shoreline stabilization

The County will encourage stabilization of eroding shoreline. Kent County will encourage waterfront property owners to consider living shorelines as the preferred treatment to restore eroding shorelines. In many areas, living shorelines have proven effective at stabilizing shorelines while maintaining more of the vital fish and wildlife habitat at the water's edge. Where living shorelines are not appropriate, rip rap and stone revetments protect shorelines by the dispersal of wave energy. Technical assistance is available from the State and Federal government.

Kent County Comprehensive Plan: Section D, Environment

- ***Strategy: Promote the use of "BayScapes"***
  - The county will encourage homeowners and businesses use **native plants in their landscaping**. Native plants tend to require less maintenance and flourish under normal weather conditions.

- ***Strategy: Promote the use of bio-retention as a means of water quality improvement and stormwater management where appropriate***
  - Bio-retention provides stormwater treatment that enhances the quality of downstream water bodies by using soil and both woody and herbaceous plants to remove pollutants from stormwater runoff. Also known as a rain garden, a disorientation facility consists of a porous soil covered by a thin layer of mulch and planted with grasses, shrubs, and small trees. These facilities are designed to promote evapotranspiration, maintain soil porosity, encourage biological activity, and promote uptake of some pollutants. Bio-retention systems function similarly to infiltration/filtration practices with the added advantage of attractive landscaping.

Upper Chester River Watershed Restoration Action Strategy

Goal One: Improve Water Quality

Strategy: Improve sediment conservation

Kent and Queen Anne's Counties will **promote living shorelines for shoreline stabilization projects.** The Counties will encourage waterfront property owners to consider living shorelines as the preferred treatment to restore eroding shorelines. In many areas, living shorelines have proven effective at stabilizing shorelines while maintaining more of the vital fish and wildlife habitat at the water's edge. Counties will make homeowners aware of technical assistance available from the State and Federal government.

Middle Chester River Watershed Restoration Action Strategy

Development and Homeowner Strategies

- Promote Stormwater Retrofits

  Kent County and its partners will review existing stormwater management facilities and practices and investigate innovative methods to retrofit these facilities to include enhanced water quality benefits.

- Monitor Impervious Surfaces & Develop Mitigation Strategies

  Development and homeowner best management practices such as infill, conservation subdivision, septic maintenance, limited clearing and grading, homeowner education concerning fertilizer use, smaller parking lots, enhanced stormwater treatment practices, and increased vegetated buffers help to mitigate the impact in the increase in impervious surfaces.

- Continue Landowner Outreach

  Kent County will develop an information packet concerning bayscapes and planting of native species; calculation of fertilizer use; septic system maintenance; water leakage test kits, and soil test kits. These information packets will be distributed with building permits in the watershed.

Kent County Permitting Process

1. Joint MDE/USACE permit
2. Letter of notification from contractor
3. Staff site visit
4. Contact RC&D, second staff site visit
5. Requirements for local building permit:
    1. Nonstructural project design (if applicable)
    2. Site plan
    3. Formal sediment control plan
    4. Buffer Management Plan (if applicable)

Shore Erosion Control Methods

Nonstructural

- **Habitat Restoration/ Creation Achieved w/o Structures**
- **Limited Erosion Control**

Marsh Plantings on:
- **Existing Substrate or**
- **Fill**

Beach Nourishment
Coir Log Edging

Hybrid

- **Habitat Restoration/Creation Assisted w/ Structures**
- **Erosion Control & Habitat Benefits Variable**

Continuous Sills
Low Profile & Segmented Sills
Marshy Islands (Irregular Sill)*
Stone Containment Groins*

*** Often categorized as "nonstructural" due to small size**

Structural

- **Structural Controls Primarily Address Erosion concerns**
- **Habitat Benefits Limited – Can Be Achieved Through Careful Design**

Bulkheads & Seawalls
Groins & Jetties
Breakwaters (best opportunity)
Revetments

Outreach and Education

- Realtor education
- Chester River Association: *Currents*
- Sassafras River Association: Newsletter, monthly meeting