Living Shorelines and the Homeowner

Examples of Design Options
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Considerations Regarding Design

- Homeowner goals
  - Shoreline protection, appearance, cost, water access
- Landscape considerations
  - Site assessment, physical constraints
- Plant selection and optimizing success
  - Selection of appropriate species, long term maintenance
- Implementation of design
  - Constructability
Options for Living Shorelines

- Marsh creation
- Rock groins with marsh plantings
- Biolog based designs
- Rock sill with marsh plantings
Marsh Creation

VIMS Center for Coastal Resources Management
Marsh Creation
Marsh Creation
Marsh Creation

NOAA Restoration Center
Benefits of Marshes in Erosion Control

- Inexpensive
- Effective - ~50% of wave energy absorbed in first 8 feet of marsh
- Increase needed habitat in estuaries
- Improvement of water quality
Groins with Marsh Plantings
Groins with Marsh Plantings
Groins with Marsh Plantings
Biolog Based Designs
Biolog Based Designs

NOAA Restoration Center
Biolog Based Designs
Biologs Integrated into Designs
S. alterniflora is planted from mean low water to mean high water

S. patens is planted above mean high water
Sills with Marsh Plantings

Gwen Shaughnessy - DNR
Sills with Marsh Plantings

D. Burke and Associates
Major Factors in Selecting Design

- Energy absorbed by shoreline
  - Fetch – distance wind travels over surface of water
  - Fetch directly correlates to wave size
- Depth of water
- Existing shoreline
- Cost