

WHAT IS A LIVING SHORELINE?

A “living shoreline” describes a natural approach to shoreline stabilization that reduces erosion while restoring, preserving, or creating valuable habitat along the shore. Instead of drowning the shoreline habitats and hardening shoreline landscapes as seen with the use of hardened structures, living shorelines encourage preservation and growth while improving water quality. By installing living shorelines where appropriate, property owners can make a significant cumulative impact on the restoration and preservation of Mississippi’s shorelines and habitats.

BENEFITS OF LIVING SHORELINES

- Increased fish/wildlife habitat
- Increased property value
- Erosion reduction
- Pollution reduction
- Aesthetically pleasing
- Improved water quality
- Cost savings for installation and maintenance



STEPS TO SUCCESSFUL SHORELINE MANAGEMENT

- Understand your neighbors' shoreline plans.
- Request pre-application meeting with MDMR.
- Conduct a site assessment to determine the amount of shoreline to be protected, feasibility of the project, and type of shoreline stabilization practice to be implemented.
- Hire contractor/consultant to consult on the project.
- Obtain a project design and cost estimate.
- Apply for and receive permit(s) if necessary.

For more details on the permitting process see: <http://www.dmr.ms.gov/index.php/coastal-resources-management/wetland-permitting>

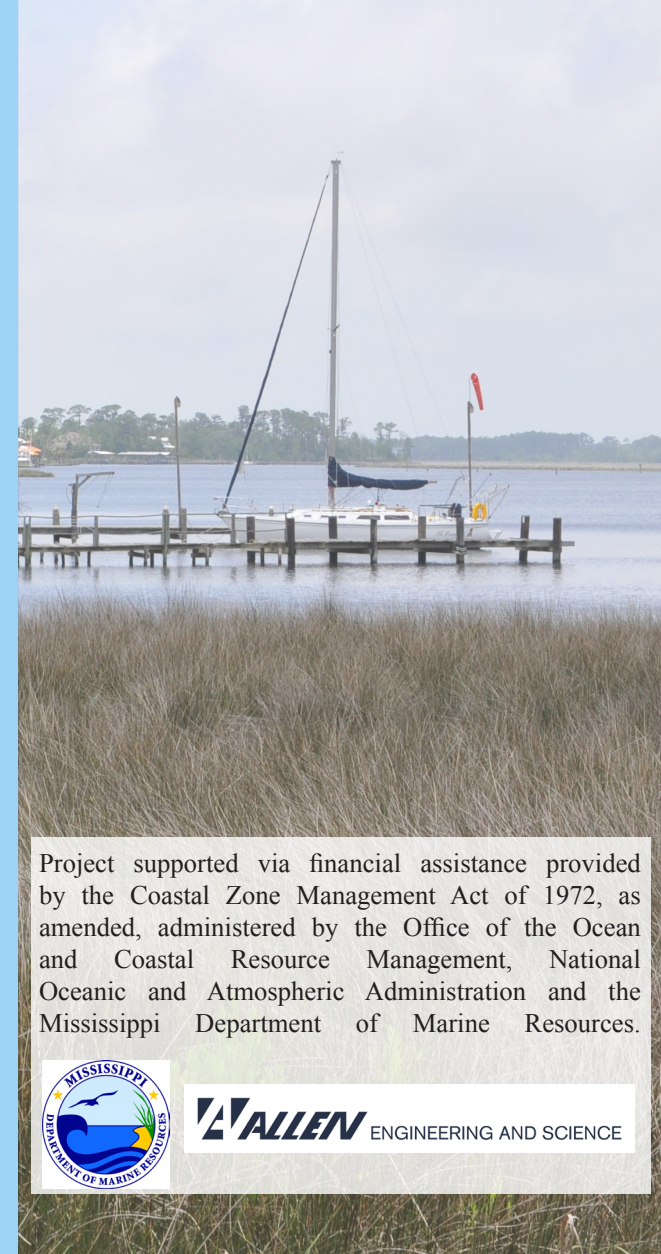
WHO TO CONTACT

Bureau of Wetlands Permitting
Mississippi Department of Marine Resources
1141 Bayview Avenue
Biloxi, MS 39530
Phone: (228) 523-4144
DMR Switchboard: (228) 374-5000
Website: <http://www.dmr.ms.gov>

U.S. Army Corps of Engineers
Mobile District
Regulatory Division
Mobile, AL 36602
Phone: (251) 690-2658
Website: <http://www.sam.usace.army.mil/>
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Phone: (228) 523-4116

SHORELINE MANAGEMENT OVERVIEW **DMR**

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES



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ALLEN ENGINEERING AND SCIENCE

OVERVIEW

The *Alternative Shoreline Management Guidebook (Guidebook)* is a Mississippi Department of Marine Resources (MDMR) project. Mississippi's shorelines are key to the ecological and economic health of the coast; therefore, the Guidebook was developed to offer property owners a range of alternative shoreline management strategies to better balance shoreline protection and ecological restoration. The alternative management strategies promoted in this guidebook focus on vegetation restoration and erosion prevention with minimal use of hard structures.



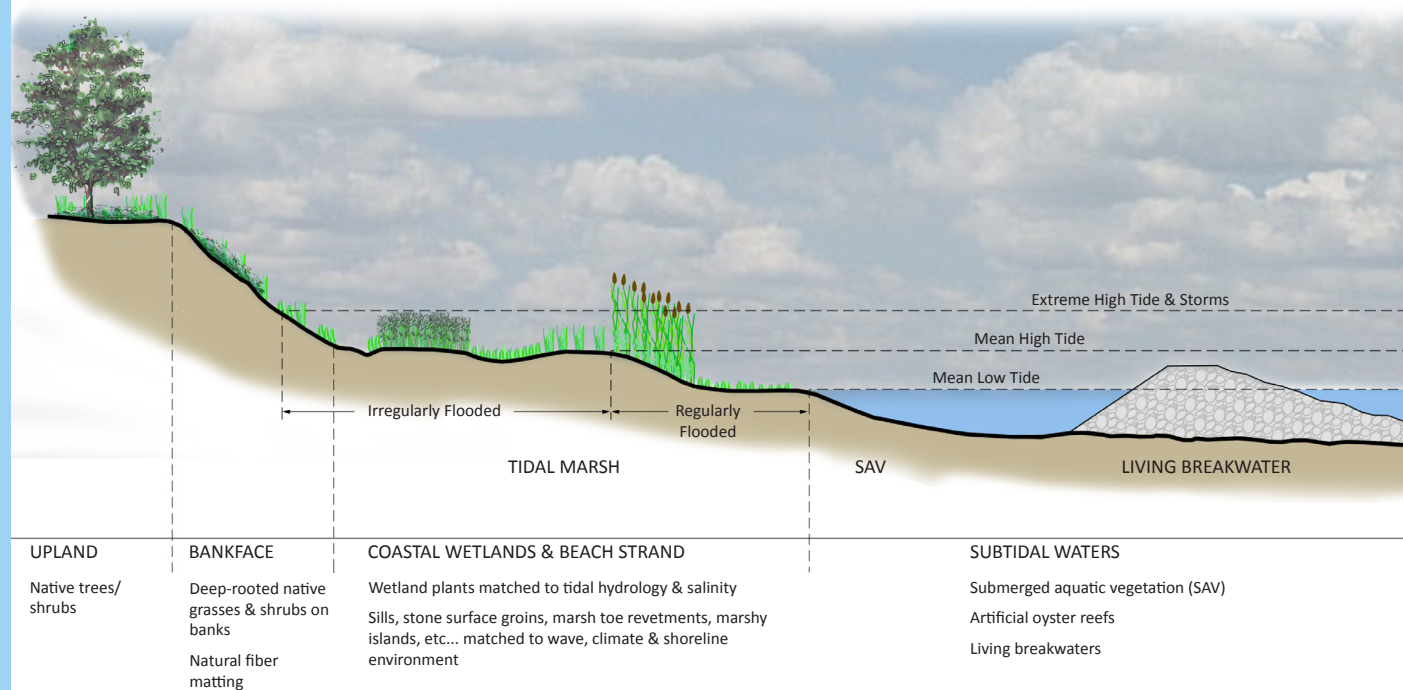
TYPES OF SHORELINE MANAGEMENT PRACTICES

- **Hard Structures** - Armoring practices including bulkheads, seawalls, riprap, jetties, groins, and breakwaters.
- **Living Shorelines** - Habitat restoration through plantings and erosion control measures to provide nourishment for coastal wetlands, marshes, and beaches.
- **Hybrid Methods** - Combined structural and natural approaches for medium wave energy environments requiring some structural protection.

FACTORS TO CONSIDER WHEN SELECTING SHORELINE PRACTICES

- Type of Shoreline
- Rate of Erosion
- Slope
- Erosional Forces
- Wave Energy
- Water Depth
- Offshore Ground Surface
- Salinity
- Fetch
- Longshore Sediment Transport

SHORELINE HABITAT AND RECOMMENDED PRACTICES



SOFT OR LIVING SHORELINE PRACTICES AND HYBRIDS

- Clean Fill/Dredge Materials
- Upland Planting Vegetation
- Wetland Planting Vegetation
- Natural Fiber Logs and Matting with Vegetation
- Sediment-Filled Geotextile Tubes
- Living Breakwaters
- Native Oyster Reefs and Oyster Balls
- Sill with Planted Marsh
- Marsh Toe Revetment with Vegetation
- Breakwater with Transitional Wetland