

Implementation of the Alabama Living Shorelines General Permit

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Shoreline Armoring

- The current trend in the Gulf of Mexico to control coastal erosion is to install hard structures; such as, bulkheads, seawalls, or place rip-rap on the shoreline to protect eroding waterfront coastal property.
- In Mobile Bay, more than 38% of property owners have built some sort of hard structure for shoreline protection (Jones, et. al. 2012).
- Data from the coastal Alabama shoreline mapping survey determined that 226 miles or 27% of the shoreline has been armored using hard structures, 34 miles or 4% has used living shorelines*, and 566 miles or 69% is still natural (Jones, et. al. 2012).

*This estimate includes beach nourishment projects. If not taking into account beach nourishment projects approximately 1% of coastal Alabama has used living shorelines to protect property from erosion



S. Jones, AL Geological Survey



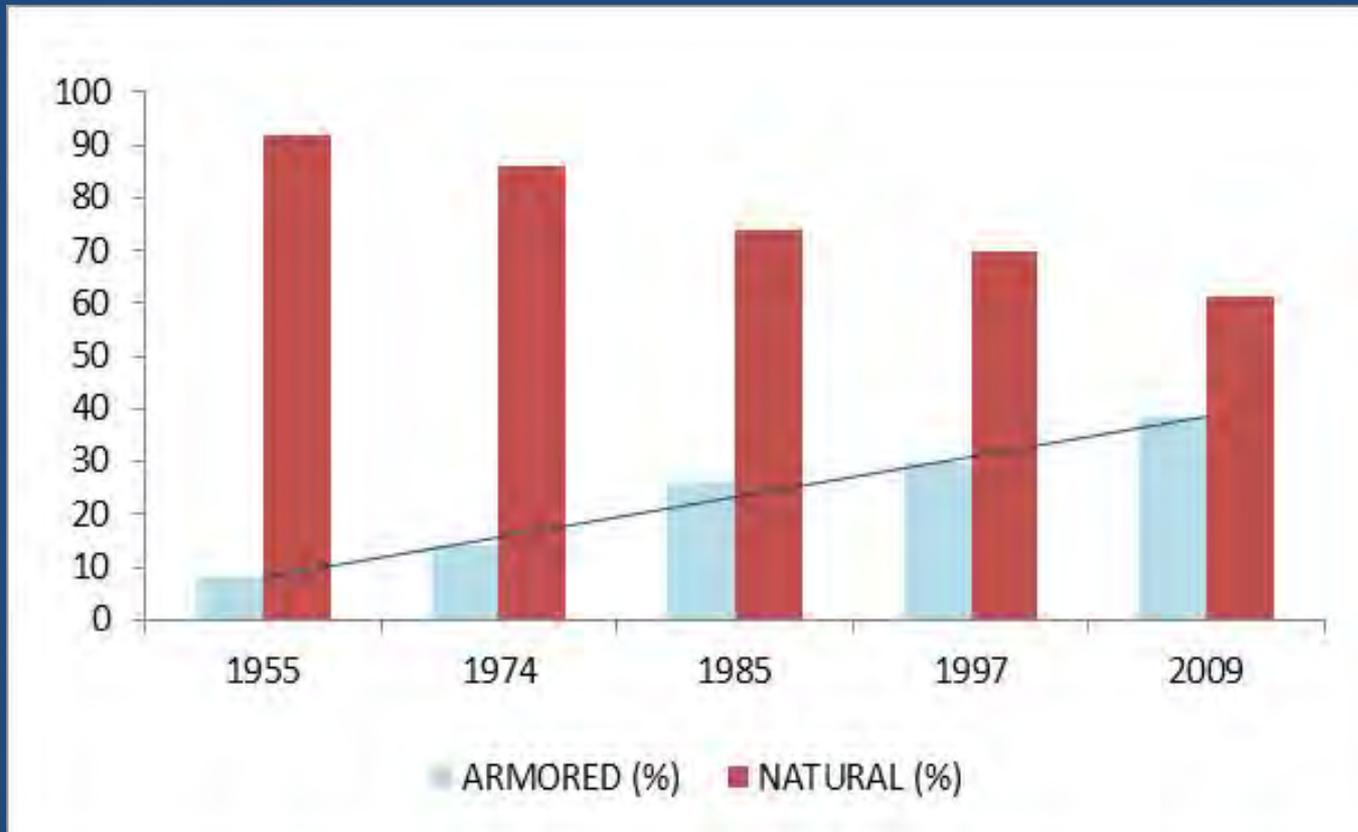
S. L. Douglass, Univ. of South Alabama



NOAA

Shoreline Armoring Trend for Mobile, Alabama

- The rate of shoreline armoring is proportional to population growth.
- Since 1974, the population of Mobile County has increased by 25%.
- During this same time period 33 miles of hard armoring has occurred .



[Data source from Douglass and Pickel, 1999 and Jones and Tidwell, 2012]

Development of the Living Shorelines General Permit

- Living Shorelines need permitting but there was no applicable general permit available for the region.
- 15 years ago the USACOE Mobile District wanted to make it easier for homeowners to permit natural ways to stop beach front erosion without having to file an Individual Permit Application
- A Living Shoreline Workshop was conducted in Alabama in 2007 and in Mississippi in 2010 that discussed the needs to install living shorelines and addressed the need to create a streamlined permitting process

Development of the Living Shorelines General Permit (cont.)

- Multiple meetings with regulatory agencies and other stakeholders were conducted to discuss obstacles for approving living shorelines projects
- In 2011 the Mobile District of the USACOE adopted a general permit for Living Shorelines for use in Alabama waters after 2 iterations of the GP program
- Natural disasters such as Hurricane Katrina and technological disasters such as the BP Deepwater Horizon Oil Spill helped to drive the need to approve the general permit to facilitate preserving our natural shorelines

U.S. Army Corps of Engineers Mobile District General Permit ALG10-2011

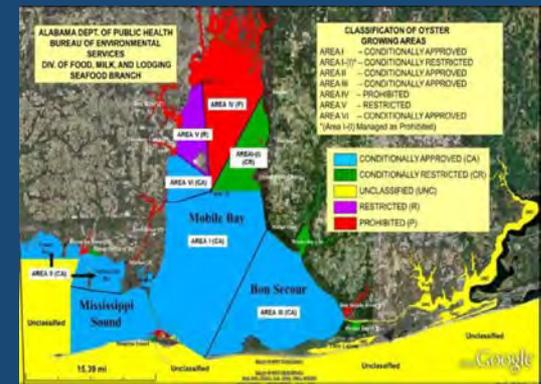
- This general permit allows for the installation of native wetland plants and breakwaters composed of approved construction material if wave attenuation is needed for project success.
- Approval by the Alabama Department of Conservation and Natural Resources State Lands Division is needed
- Oyster shells may only be used in classified “Conditionally Approved” waters by the Alabama Department of Public Health.



S. L. Douglass



J. Cebrian, DISL



Additional Information about ALG10-2011

- No fill is to be placed in wetland areas
- The shore protection device must be designed to allow the normal hydrologic regime to be maintained in wetland areas
- If scarping has occurred due to scour or scalloping, fill material can be used to achieve adjacent wetland elevation and to support natural vegetation

Additional Information about ALG10-2011 (cont.)

- Detached breakwaters should contain an appropriate number of gaps to ensure adequate tidal flushing and shoreline habitat access for marine and terrestrial animals
- Approved materials could include oyster shell and oyster shell support structures, concrete, natural materials, rip rap, or other material authorized on a case by case basis



Amy Baldwin, FL DEP



J. Cebrian, DISL



C. Ferraro, ADCNR-SLD

Additional Information about ALG10-2011 (continued)

- This general permit can not be used for land reclamation projects
- Project will not be approved if it creates a navigational hazard
- Alabama Department of Conservation and Natural Resources State Lands Division may require a separate permit, riparian easement, affidavit, mean high tide survey, and fees for the proposed activity.
- The affidavit will confirm that if State submerged lands are lost due to shoreline accretion created from the project, the new dry land will stay in ownership of the State.

Benefits of the Alabama Living Shorelines General Permit

- Expedites the approval process
- Waived permit fee
- Encourages homeowners and businesses to use alternative shoreline protection strategies

State Actions: Federal Consistency

- CZMA Federal Consistency Review
 - Alabama objected the use of Nationwide Permit 13 in coastal Alabama
- Nationwide Permit 13 – Bank Stabilization
 - Had been used for federal permitting of bulkheads
- Federal Bulkhead Permitting
 - Now must undergo individual permitting whereas living shorelines can apply the LSL Regional General Permit

State Actions: Policy Review

- Coastal Alabama Living Shorelines Policies, Rules, and Model Ordinance Manual (2013)
 - Report prepared for Alabama Department of Conservation and Natural Resources
 - Available at: masglp.olemiss.edu



State Actions – Modified Regulations

- “Shoreline restoration, including the use of “living shorelines” techniques for shoreline stabilization, may be permitted....
- Such techniques may include ... the planting of native vegetation, the placement of wave attenuation structures, the placement of fill materials, and/or other techniques.
- Fill material placed and/or sediments accreted below the ...the mean high tide line of tidal water through the implementation of shoreline restoration shall not be construed as reclamation nor cause a change in the title to state owned submerged lands. – Ala. Admin. Code r. 220-4-.09

Continuing Challenges

- Shoreline Accretion and Waterbottom Ownership
 - Role of the Public Trust Doctrine
- Monitoring
 - Sediment Transport
- Design Standards

Next Steps to Promote Living Shorelines in Alabama

- Educate homeowners, municipalities, and water front businesses about the Living Shoreline General Permit and shoreline stabilization alternatives
 - Sea Grant and partners conducting workshops, outreach
- Design workshops for contractors
 - NERRs and partners working on contractor bulletins
- Create shoreline erosion structure design tools that can be used by homeowners and contractors

For More Information

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