



Final Project Summary

Your final project summary is an important contribution to the Virginia Coastal Zone Management Program's communication efforts and will be used to produce accomplishment reports, fact sheets and **Virginia Coastal Zone Management Web Site** information.

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NOAA Grant #:	NA08NOS4190466	Grant Year:	FY08	Task #:	2.03
Agency/Locality:	VA Institute of Marine Science, Center for Coastal Resources Management				
Project Title:	A Critique of Existing Methodologies for Developing Shoreline Recommendations for Local Governments				
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PROJECT SUMMARY: Please confine your summary to the space provided below. Remember to:

- write for the public
- do not use first person
- include an abstract of project results
- provide a brief description, and titles, of publication(s) and/or dataset(s) produced
- describe how products will be distributed and if available on-line, please give the **Web address!**

The purpose of this study is to define a methodology for making shoreline management recommendations to local governments. Two methods were intensely reviewed for consideration as a state-wide preferred approach to delivering information to assist local governments. A study approach developed by the Shoreline Studies Program (SPP) at the Virginia Institute of Marine Science (VIMS) relies on field data, field reconnaissance and laboratory reviews to map the recommended shoreline strategies for erosion control. The SPP approach includes a historical analysis of shoreline trends, detailed design schematics for structural control, and other ancillary parameters. The approach developed by the Center for Coastal Resources Management (CCRM) uses GIS to map recommended shoreline strategies for erosion control based on a geospatial decision support tool they developed known as the Shoreline Management Model (SMM). Three pilot areas were selected to conduct comparisons of accuracies, both independent and combined, time and effort, content and product output. Further input was gathered from a large audience of stakeholders who participated in a number of voting and prioritization exercises to arrive at 1) content material held most valuable, and 2) the format for product delivery.

Following a review of all results it was determined that both methodologies contribute important elements to a county-wide Shoreline Management Plan. Therefore a hybrid has been recommended. The CCRM geospatial model (SMM) provides comparable output for recommended erosion control strategies at significantly less time and effort than the SSP approach and should be the accepted method for delivering recommended erosion control strategies to local governments on a site by site basis. The CCRM model, however, does not develop cross sectional structure design and estimates. This information should continue to be provided for areas where the model recommends structural control. Shoreline Evolution Reports, developed by SPP and report on trends in shoreline change over time should also be included in a Shoreline Management Plan. The analysis of shoreline trends can include a wave climate assessment and characterization of underlying geology and geomorphology where available.

Shoreline Management Plans should be delivered to localities via an internet accessible website. Reported information in both map and digital data is recommended at this time. Depicting data within the framework of an interactive "Google" type interface should be considered for the future.