

FINAL

Cumulative and Secondary Impacts: Strategy STRATEGY: *Shoreline Management*

Summary

Waterfront development is rapidly altering Virginia's shoreline, often in ways that can be detrimental to habitats and water quality. In particular, many low energy shorelines are being hardened with revetments and bulkheads where less damaging techniques for managing shoreline erosion could be employed. According to the Virginia Institute of Marine Science, 229.2 miles of new bulkheads and rock revetments were approved between 1993 and 2004 and shoreline hardening is continuing at a rapid pace. In many of these cases shoreline erosion could be managed through a "living shoreline" approach that maintains, or even expands, the habitat and water quality protection benefits of natural shorelines.

This strategy will build on progress made during the last 309 Strategy to integrate riparian and near-shore management objectives and improve shoreline management practices. As a result of this strategy, the various agencies involved in shoreline management will be better able to promote living shoreline techniques and reduce the cumulative and secondary environmental impacts of waterfront development on shorelines. The strategy will include a number of components: a living shoreline summit, revisions to the current Wetlands Guidelines and Coastal Primary Sand Dunes and Beaches Guidelines, research on living shorelines, a local shoreline planning guidance document, data on shoreline conditions, and outreach and training projects. Other potential policy changes that will be considered in conjunction with these components include: a fast track or general permit for living shorelines, a strategy for increasing the availability of plants for living shoreline projects, a marketing campaign to promote living shorelines, and a comprehensive, internet based source of information and data on living shorelines.

The living shoreline summit, which will be held in conjunction with Maryland, will bring together scientists, state and federal regulatory staff, local wetlands board members and staff, private contractors, educators and private environmental interests to review the current status of living shorelines and to develop a plan for advancing the use of this technique. Revising the Wetlands Guidelines, which are used by state agencies and local governments to guide shoreline management decisions, would provide an opportunity for: 1) including new guidance on living shorelines, and 2) consensus building among the many agencies and organizations involved in shoreline management. Shoreline research would focus on documenting the habitat value of living shoreline components vs. the habitats they would replace, and on improving the design of living shoreline components. In order to better inform local shoreline management decisions, additional shoreline situation reports and shoreline evolution studies would be developed. Recommendations for shoreline stabilization on a reach basis would be included to the extent practicable. A shoreline planning guidance document would be developed to help localities to proactively address shoreline management issues and meet the comprehensive planning requirements of the Chesapeake Bay Preservation Act. Outreach activities would include a living shoreline brochure and website for landowners, as well as a design manual and training program for contractors.

In addition to promoting the use living shorelines, this strategy will also improve shoreline management by addressing the management of dunes and beaches. The importance of these natural features for protecting life and property against the destructive forces of coastal storms

was proven by Hurricane Isabel. These areas also offer important habitats and can help protect water quality. The various projects undertaken during the last 309 Strategy for Enhanced Dune Management resulted in a much more comprehensive understanding of these dune and beach resources in Virginia. Through the research and inventory work of this strategy, coastal primary sand dunes and secondary dune systems were documented. The Virginia Coastal Policy Team, however, decided to delay a proposal to expand the Dunes/Beaches Act to cover all coastal zone localities until an assessment of the extent of supratidal (above mean high water) beaches could be completed.

In order to determine the best option for improved dune and beach management, a roundtable of scientists and stakeholders will be convened. The roundtable will consider the research conducted on dunes and beaches, as well as the potential impact on stakeholders, and make recommendations for improved management, including revisions to the Dunes/Beaches Act. In order to better convey the importance of, and reasoning for, these changes, a report will be developed which will be used to explain the proposed changes to the Act to legislators, members of the Virginia Marine Resources Commission and local governments that would be affected by the changes. The report will include a summary of findings from the various dune and beach studies already conducted through the Virginia CZM program, as well as an overview of the value of these resources and the potential effect on the localities that would be affected by changes in the legislation. In order to help explain the findings and recommendations of the report, presentations will be given to the VMRC, interested local governments and wetlands boards, and to the Virginia General Assembly. The expected outcome will be revisions to the Dune/Beach Act by the General Assembly.

The Coastal Primary Sand Dunes / Beaches Guidelines, which are used by state agencies and local governments to guide management decisions in these areas, are currently in need of revision. This need would be heightened if revisions are made to the Dunes / Beaches Act. In order to address this need, the guidelines would be updated and improved. The guidelines would then be reviewed for approval by the Virginia Marine Resources Commission. Training on the new guidelines, as well as on dune / beach management in general, would be offered to wetland board members and staff as well as other interested local officials.

The primary new enforceable policies of this strategy are the revisions to the Wetlands Guidelines, the Coastal Primary Sand Dunes and Beaches Act, and the Coastal Primary Sand Dunes / Beaches Guidelines. The Virginia Marine Resources Commission is required by the Tidal Wetlands Act and the Coastal Primary Sand Dunes and Beaches Act to periodically update these guidelines. Both of these laws are approved components of Virginia's Coastal Zone Management Program. Other tasks under this strategy will advance implementation of these new enforceable policies.

Enforceable Policies/Outcomes

- A "Living Shoreline Summit," in December of 2006 with peer reviewed proceedings, to advance the use of this management technique.
- Revised "Wetlands Guidelines" to be used by VMRC, VIMS and local wetlands boards and others to guide decisions about shoreline and tidal wetlands management.
- Improved data on shoreline conditions to support more informed shoreline management decisions.
- Research to document the habitat value of living shorelines and to improve their design.
- A guidance document for local governments to use in shoreline management planning
- Outreach materials for land use decision-makers, landowners and contractors on living shoreline advantages and design principles.

