VIMS Shoreline Permit Application Report # 03-0081

APPLICANT: CARY P. HARWOOD
Immediate Waterway: Chesapeake Bay
Locality: LANCASTER COUNTY
Purpose: Shoreline Stabilization
Application Type: Wetlands, Subaqueous, Beach/Dune
Site Inspection: 1/30/03
Report Date: 2/7/03

CARY P. HARWOOD
Chesapeake Bay
LANCASTER COUNTY
Shoreline Stabilization
Wetlands, Subaqueous, Beach/Dune
1/30/03
2/7/03

Type of Activity Proposed Extent
Groins (ft) 388
Groins 6 Unit(s)
Impact Intertidal Beach Community (Type XIII) (ft2) 60
Fill Intertidal Beach Community (Type XIII) (ft2) 60
Impact Beach/Dune (ft2) 147
Fill Beach/Dune (ft2) 147
Impact Subaqueous Bottom (ft2) 181
Fill Subaqueous Bottom (ft2) 181

Total Impacts (ft2) 388
Total Impacts (Wetlands) 60
Total Impacts (Subaqueous) 181
Total Impacts (Beach/Dune) 147
Total Fill (ft2) 388

Project Location

Virginia Institute of Marine Science
School of Marine Science
P.O. Box 1346, Route 1208 Greate Road
Gloucester Point, Virginia 23062-1346
phone: (804)684-7380, fax: (804)684-7179, e-mail: wetlands@vims.edu
NOTICE

The Virginia Institute of Marine Science (VIMS) is aware that regulatory or administrative bodies who weigh the overall potential public and private benefits and detriments in arriving at decisions must also consider other factors such as economics, aesthetics, zoning, or community desires. INFORMATION PROVIDED IN THIS REPORT IS, THEREFORE, ONLY THE ENVIRONMENTAL AND MARINE RESOURCES INPUT INTO THE DECISION MAKING PROCESS.

This assessment is based on biological, chemical, geological, and physical factors affecting the marine environment at and in the vicinity of the proposed activity. Parameters of the marine environment which may influence recreational, commercial, or industrial activities which are dependent on the marine environment are also considered where applicable.

Comments:

We have reviewed this proposal from a marine environmental viewpoint. Six low-profile groins are proposed along a Chesapeake Bay beach with evidence of shoreline erosion and retreat. It is difficult to predict if groins will be effective at this location. Installing groins where they do not already exist is not the environmentally preferred alternative because of the potential to interrupt sand movement patterns and increase erosion on adjacent shorelines.

However, the proposed groins are located in between existing revetments which reduces, but does not eliminate, the potential for adverse downdrift effects. Precautions to further reduce this potential should be considered, including the order of groin construction and placing clean sand fill in between the groins at the time of construction.

Karen A. Duhring
Marine Scientist
Hydrologic units represent smaller, isolated watersheds defined by topography and flow direction. These units can be thought of as insulated ecosystems or landscapes within which resources can be managed at a larger scale. The cumulative impact of a project to resources within a hydrologic unit may be significantly greater than the impact to the larger watershed above.
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Permit Site Study Area

Lancaster County
NORTHERN NECK BAYSHORE
Chesapeake Bay

Project site

Northern Neck Bayshore watershed

Tidal Marsh Inventory - TMI
- Arrow Arum-Pickerelweed
- Big Cordgrass
- Black Needlerush
- Brackish Water Mixed
- Cattail
- Freshwater Mixed
- Reed Grass
- Saltbush
- Saltmarsh Cordgrass
- Yellow Pond Lily

Roads
- Primary
- Secondary
- Tertiary

Intertidal flat
- Open water

0 0.5 1 Miles
To Wetlands Board:  Please indicate Wetlands Board action on this sheet and return to VIMS

Application Number:  03-0081  
Name:  Cary P. Harwood  
Locality:  Lancaster County  
Waterway:  Chesapeake Bay

Please check here if this application was approved as proposed ____  
Complete the form below if the application was modified.

ACTIVITIES

<table>
<thead>
<tr>
<th>PROPOSED</th>
<th>PERMITTED</th>
</tr>
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<tbody>
<tr>
<td>Groins (ft)</td>
<td>388</td>
</tr>
<tr>
<td>Groins</td>
<td>6 Units</td>
</tr>
<tr>
<td>Impact Intertidal Beach Community (Type XIII) (ft2)</td>
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</tr>
<tr>
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Comments: __________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Certified by:  __________________________________________