VIMS Shoreline Permit Application Report # 03-0288

APPLICANT: DAVID RODAK
Immediate Waterway: Great Wicomico River
Locality: NORTHUMBERLAND COUNTY
Purpose: Shoreline Stabilization
Application Type: Wetlands
Site Inspection: 3/25/03
Report Date: 3/30/03

Type of Activity

<table>
<thead>
<tr>
<th>Proposed Extent</th>
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</thead>
<tbody>
<tr>
<td>Riprap (ft)</td>
</tr>
<tr>
<td>Impact Saltmarsh Cordgrass Community (Type I) (ft2)</td>
</tr>
<tr>
<td>Fill Saltmarsh Cordgrass Community (Type I) (ft2)</td>
</tr>
<tr>
<td>Impact Sand/Mud Mixed Flat Community (Type XV) (ft2)</td>
</tr>
<tr>
<td>Fill Sand/Mud Mixed Flat Community (Type XV) (ft2)</td>
</tr>
<tr>
<td>Marsh Toe (ft)</td>
</tr>
<tr>
<td>Impact Sand/Mud Mixed Flat Community (Type XV) (ft2)</td>
</tr>
<tr>
<td>Fill Sand/Mud Mixed Flat Community (Type XV) (ft2)</td>
</tr>
<tr>
<td>Total Impacts (ft2)</td>
</tr>
<tr>
<td>Total Impacts (Wetlands)</td>
</tr>
<tr>
<td>Total Impacts (Subaqueous)</td>
</tr>
<tr>
<td>Total Impacts (Beach/Dune)</td>
</tr>
<tr>
<td>Total Fill (ft2)</td>
</tr>
</tbody>
</table>

Project Location

Northumberland County

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:

Three sections of revetment are proposed along 2 different upland shorelines and around a marsh spit. Stabilization of a high, unstable bluff is proposed with bank grading and a 400-foot revetment. There is a failed bulkhead that is no longer functioning and the shoreline has retreated landward away from the old structure. The flagged alignment for the new revetment follows the inside line of pilings of the old bulkhead, even though this may be further channelward than necessary at the east (down river) end of the structure. The proposed stone size should be considered (Class A1), because it seems small for a major tributary. Both temporary and long-term erosion control measures will be needed along the graded bluff until a cover of vegetation is restored.

A 220-foot revetment is also proposed along a more stable, forested slope with noticeable bank undercutting. This revetment should be carefully placed with land disturbance and tree removal on the slope limited to the minimum necessary to install the revetment. The existing marsh vegetation on the spit should also be left undisturbed as much as possible.

A 130-foot marsh toe revetment is also proposed to partially enclose a tidal marsh spit. It should be noted, however, that this marsh may eventually be completely submerged as a result of rising sea levels, even if the marsh toe revetment is installed. The proposed grading and stabilization of the adjacent bluff will further reduce the sand supply feeding this spit.

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.
Permit Site Study Area

Northumberland County
NORTHERN NECK BAYSHORE
Great Wicomico River

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

Rocks
- Primary
- Secondary
- Tertiary

Intertidal flat
- Open water
To Wetlands Board: Please indicate Wetlands Board action on this sheet and return to VIMS

Application Number: 03-0288
Name: David Rodak
Locality: Northumberland County
Waterway: Great Wicomico River

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

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>PROPOSED</th>
<th>PERMITTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riprap (ft)</td>
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</tr>
<tr>
<td>Impact Saltmarsh Cordgrass Community (Type I) (ft2)</td>
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<tr>
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<tr>
<td>Marsh Toe (ft)</td>
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Comments: __________________________________________________________________________________
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Certified by: __________________________________________