VIMS Shoreline Permit Application Report # 02-0015

APPLICANT: GARFIELD J. FRICKE
Immediate Waterway: Myer Creek
Locality: LANCASTER COUNTY
Purpose: Erosion Control
Application Type: Wetlands
Site Inspection: 1/25/02
Report Date: 2/6/02

Type of Activity Proposed Extent

Mitigated Wetlands (ft²) 192
    Built Saltmarsh Cordgrass Community (Type I) (ft²) 192
    Built Subaqueous Bottom (ft²) 0
Riprap (ft) 395
    Impact Saltmeadow Community (Type II) (ft²) 192
    Fill Saltmeadow Community (Type II) (ft²) 96
    Impact Saltbush Community (Type IV) (ft²) 132
    Fill Saltbush Community (Type IV) (ft²) 66
    Impact Sand/Mud Mixed Flat Community (Type XV) (ft²) 780
    Fill Sand/Mud Mixed Flat Community (Type XV) (ft²) 390
Marsh Toe (ft) 32
    Impact Sand/Mud Mixed Flat Community (Type XV) (ft²) 32
    Fill Sand/Mud Mixed Flat Community (Type XV) (ft²) 16
    Impact Intertidal Rubble/Riprap (ft²) 160
    Fill Intertidal Rubble/Riprap (ft²) 80

Project Location

Lancaster 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

Wetlands Program

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
### Shoreline Permit Application Report VMRC # 02-0015

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Total Impacts (ft²)</td>
<td>1296</td>
</tr>
<tr>
<td>Total Impacts (Wetlands)</td>
<td>1296</td>
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<tr>
<td>Total Impacts (Subaqueous)</td>
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<tr>
<td>Total Impacts (Beach/Dune)</td>
<td>0</td>
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<tr>
<td><strong>Total Built (ft²)</strong></td>
<td>192</td>
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<tr>
<td>Total Built (Wetlands)</td>
<td>192</td>
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<tr>
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</tr>
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<td>0</td>
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<tr>
<td><strong>Total Fill (ft²)</strong></td>
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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. Three separate riprap revetments are proposed along a forested shoreline. The applicant may want to carefully consider with the contractor how vegetation will be removed from the bank. Removal of trees and vegetation should be limited to the amount necessary to install the revetments. Excessive disturbance may actually destabilize and increase the erosion rate of this shoreline.

The proposed marsh toe revetment (between benchmark points 10 & 11) is located where existing rubble has not provided effective erosion control. A revetment alignment following the upland bank would have less impact on the intertidal area than the current proposal tying into the line of existing rubble. However, a properly designed marsh toe revetment, with saltmarsh cordgrass planted on the landward side, is an acceptable stabilization alternative for this section of shoreline already impacted by the existing rubble.

If the planted marsh grass does not become established and start spreading after one growing season, the extent of shading may need to be evaluated. The planted area may also need to be amended with a base of clean sand fill and slow release fertilizer in order for marsh vegetation to become established in this area. Removing as much of the scattered and stacked rubble and gravel fill as possible would also contribute to restoration of this shoreline.

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
RAPPAHANNOCK RIVER
Myer Creek

Project site
Rappahannock River watershed
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
Open water

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

Application Number: 02-0015
Name: Garfield J. Fricke
Locality: Lancaster County
Waterway: Myer Creek

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>
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<td>Impact Intertidal Rubble/Riprap (ft²)</td>
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Comments: __________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

Certified by: __________________________________________