VIMS Shoreline Permit Application Report # 02-0116

APPLICANT: GARY BRYANT, ET AL
Immediate Waterway: Pretty Lake
Locality: CITY OF NORFOLK
Purpose: Improve Navigation, Water Access
Application Type: Subaqueous
Site Inspection: 6/24/02
Report Date: 2/25/03

Type of Activity

New Dredging (yd3) 5200
Impact Subaqueous Bottom (ft2) 36950

Total Impacts (ft2) 36950
Total Impacts (Wetlands) 0
Total Impacts (Subaqueous) 36950
Total Impacts (Beach/Dune) 0
Total Fill (ft2) 0

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
ANNOUNCEMENT

Information provided in this report is only the environmental and marine resources input into the decision making process and 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.

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.

Comments:

We have reviewed this proposal from a marine environmental perspective and it is our opinion that the individual and cumulative adverse impacts resulting from this activity can be reduced. The following report summarizes these impacts and, where appropriate, suggests alternatives to minimize environmental effects.

The applicants propose to clamshell dredge approximately 5,200 cubic yards of material from approximately 1,341 linear ft. of ancillary channels, henceforth referred to as ancillaries C-1 and C-1A, that connect to the main Pretty Lake channel located in the City of Norfolk, Virginia. The project includes dredging mooring basins and a 20 ft. wide channel from the main Pretty Lake channel to the project terminus where it connects with Pretty Lake ancillary channel C-2 (VMRC #02-1906). The proposed project depth of –4.5 ft. MLW reduces to –4.0 ft. MLW at Station 9+66.70 and continues to the limits of the project. As proposed, clamshell dredging will result in direct impacts to approximately 36,950 sq.ft. (0.85 acres) of subaqueous bottom and potential secondary impacts to nonvegetated and vegetated wetlands.

The dredged material will likely consist of predominantly fine silt and sand. Therefore, resuspension of sediment in the water column during clamshell dredging will result in temporary impacts to water quality. In addition, dredging will result in the removal of the existing benthic community although a new community will likely become established within the area over time with organisms adapted to the new depth, sediment composition, and available food supply. Reestablishment of the benthic community will also be a function of boating activity.

From a marine environmental perspective, dredging is generally consider undesirable in shallow, narrow water bodies where the 4X buffer recommendations cannot be maintained to protect vegetated wetlands. Secondary impacts to wetlands can result due to slumping of channel sides and erosion due to boat wakes. Therefore, we recommend reducing either the channel width or depth between Station 9+66.70 and Station 11.84.52 to reduce potential secondary impacts to vegetated and nonvegetated wetlands. In addition, we suggest eliminating the turning basins proposed for the Bryant (8101 Ridgefield) and Fentress (8137 Ridgefield) properties and dredging only the area necessary for navigation and mooring by directly accessing the channel. This modification provides the applicants with access to navigable water while reducing unnecessary impacts to the marine environment.
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

City of Norfolk
SOUTHERN BAYSHORE
Pretty Lake

- Open water
- Intertidal flat
- Roads
  - Primary
  - Secondary
  - Tertiary
- 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
- Southern Bayshore watershed
- Locality boundaries
- Project site
To Wetlands Board: Please indicate Wetlands Board action on this sheet and return to VIMS

Application Number: 02-0116
Name: Gary Bryant, et al
Locality: City of Norfolk
Waterway: Pretty Lake

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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Comments: __________________________________________________________________________________
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Certified by: __________________________________________