VIRGINIA MARINE RESOURCES COMMISSION

Permit Program Activity Report

CZM Grant # **NA19NOS4190163**
Task #4 November 2020

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Introduction

The Virginia Marine Resources Commission, hereafter the Commission or VMRC, as provided in Chapter 12 of Title 28.2 of the Code of Virginia, is the State agency responsible for issuing permits for encroachments in, on, or over State-owned submerged lands throughout the Commonwealth. Virginia is one of six "low water states" and, as such, maintains ownership of all submerged lands channelward of the mean low water mark in tidal waters and regulatory authority channelward of the ordinary high water mark on most naturally occurring non-tidal perennial streams, creeks and rivers.

In addition to managing the Commonwealth's 1,472,000 acres of submerged lands, the Commission also regulates the use or development of 213,000 acres of vegetated tidal wetlands, as well as non-vegetated wetlands and coastal primary sand dunes/beaches along 10,120 miles of tidal shoreline pursuant to the provisions of Chapters 13 and 14 of Title 28.2 of the Code of Virginia. Local governments in Tidewater Virginia are provided the option of adopting and locally administering the wetlands and dune/beaches zoning ordinances. However, VMRC maintains original jurisdiction in localities that have not adopted the ordinances. Even if locally adopted and implemented, the Commission retains certain oversight responsibilities and reviews all decisions made by those local boards. Figure 1 shows the localities within Tidewater Virginia that have adopted the wetlands ordinance and the dune/beach ordinance.

The regulatory activities conducted by the Commission and the 35 local wetlands boards are integral components of Virginia's approved Coastal Zone Management Program. The permit review processes used by the Commission and these local wetlands boards ensures that necessary economic development is permitted in a manner that minimizes adverse impacts to the valuable natural resources within our coastal zone.

The purpose of this grant project is, in part, to support the Commission's permit review program. The goal of this effort is to eliminate unnecessary impacts to submerged lands through a permit review process based on public interest review procedures consistent with the public trust doctrine that fairly balances private use of State-owned submerged lands while minimizing impacts to other uses, and preserving habitat for sustainable fisheries. Likewise, it is the goal of the tidal wetlands and dunes/beaches permit review process to preserve these valuable natural resources. Program goals include project modification to reduce project impacts and to require compensation for all unavoidable permitted vegetated tidal wetland losses.

The Commission's permit review program is conducted by 8 environmental engineers. Each is assigned a specific geographic territory (Figure 2). They conduct application reviews, correspond with applicants and concerned citizens, conduct site inspections, coordinate application reviews with other agencies, prepare project briefings, present contested cases to the full Commisison at public hearings and draft permit documents. In addition, they assist local wetlands boards with their wetland management responsibilities and attend all wetland board meetings in order to conduct the required review of wetland board actions.

The environmental engineers also document losses and conversions of submerged land, wetlands, and dunes/beaches associated with all proposed shoreline stabilization projects. Proposed and permitted losses, as well as habitat conversions, are recorded in the existing VMRC permit-tracking database. This intends to track impacts associated with traditional shoreline projects, as well as proposals utilizing living shoreline techniques.

This document serves as the final report for Task # 4 of Grant No. NA19NOS4190163 and provides an overview of the permit data gathered.

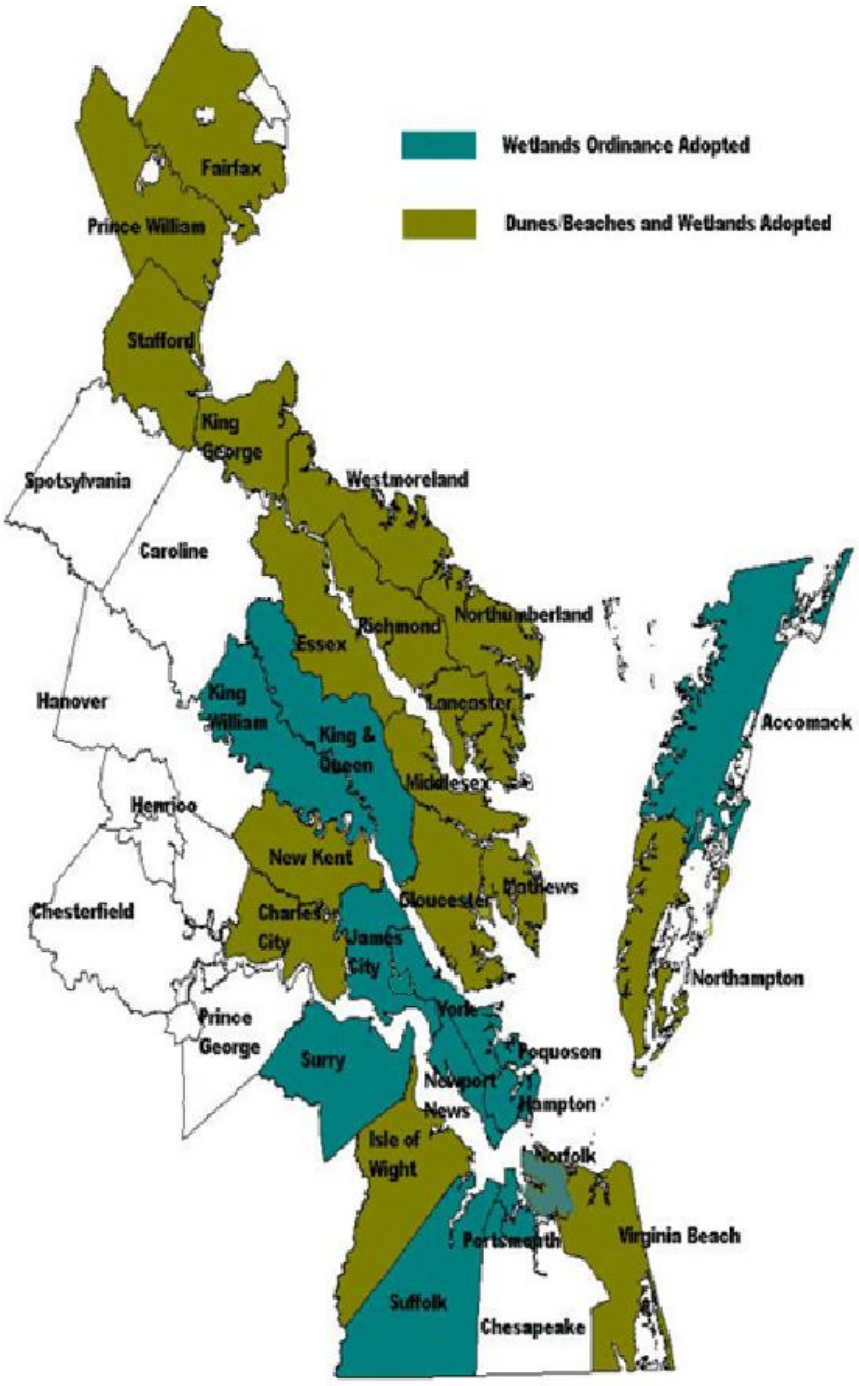

Figure 1. Tidewater Localities that have Adopted the Model Wetlands or Beach/Dune Ordinances (10/1/2019 – 9/30/2020)

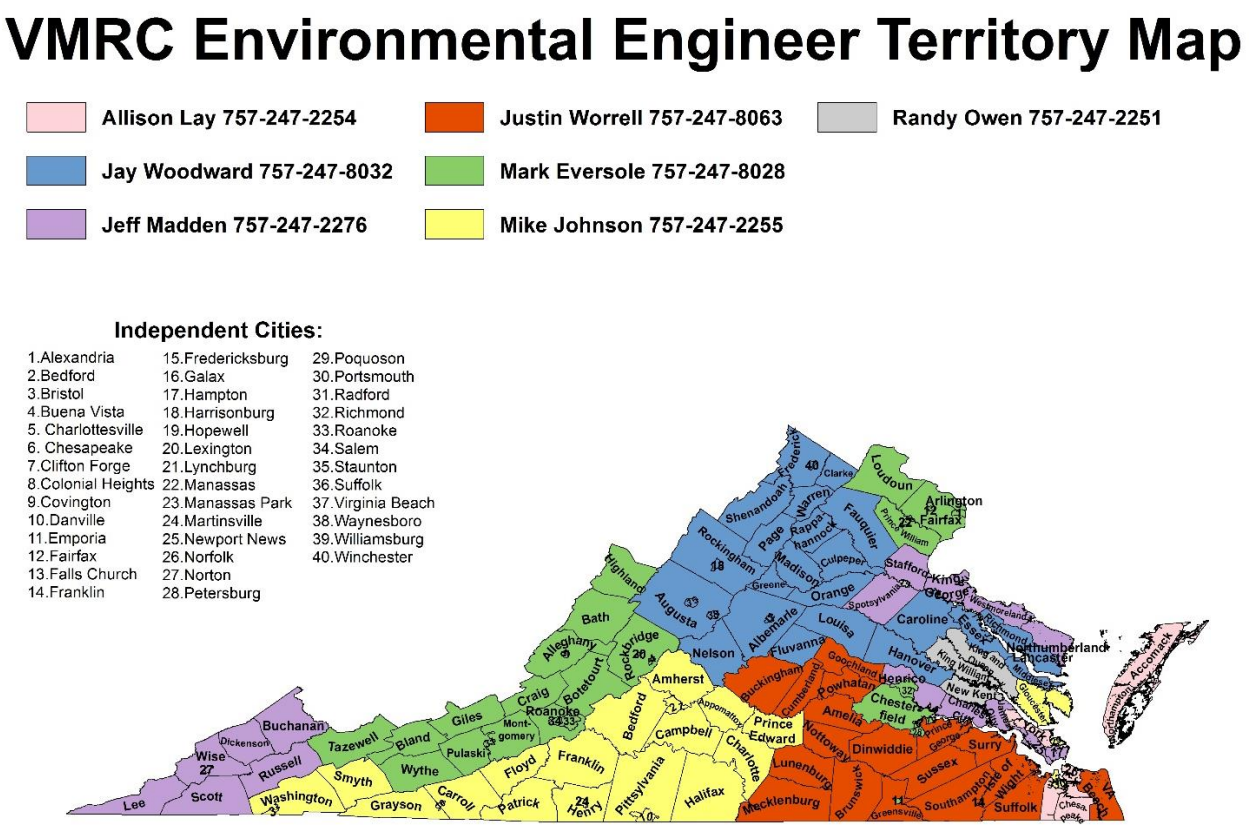

Figure 2. Geographic Territories and Environmental Engineer Assignments (10/1/2019 – 9/30/2020)

Permit Overview

During the grant year, the Habitat Management Division received 2,237 applications for projects involving State-owned submerged lands, wetlands, or beaches/dunes. These applications were for projects such as piers, boathouses, boat ramps, marinas, dredging and shoreline stabilization. As the clearinghouse for the Joint Permit Application, all applications were assigned a processing number by the Habitat Management Division and forwarded to the appropriate agencies including local wetlands boards, the Norfolk District of the U.S. Army Corps of Engineers, the Department of Environmental Quality, Virginia Institute of Marine Science, and others as necessary.

A public interest review was initiated and site inspections were conducted for those projects requiring a permit from VMRC. Likewise, Habitat Management staff also conducted site inspections for all projects requiring a local wetlands board permit and evaluated each local board decision for Commissioner review. Habitat Management staff also conducted compliance inspections on permits issued by VMRC and local wetlands boards.

The Habitat Management staff completed actions on 2,094 applications received during the reporting period. Action on most applications was completed within 90 days following receipt of a complete application. As such, a number of the actions taken during the period were for applications received prior to the grant year. Similarly, those applications received near the end of the current reporting period are still under review. Habitat Management staff also participated in the inter-agency review process involving general permits for Virginia Department of Transportation projects. In addition to staff actions, the full Commission considered 64 projects. During the reporting period, the Commission considered 33 protested projects or projects requiring a staff briefing. The Commission also approved 31 projects, which exceeded the $500,000 project cost threshold for administrative approval specified in the Virginia Code.

During the reporting period, local wetlands boards, or the Commission in localities without a board, acted on 375 shoreline projects involving tidal wetlands and dunes/beaches. The Commission, while serving as the wetlands board, issued 8 permits for projects involving tidal wetlands. During the reporting period, no requests were considered by the Commission for projects involving dunes or beaches.

Submerged Land Permit Results

During the reporting period, VMRC issued 689 permits for encroachments in, on or over State-owned submerged lands. Another 1,386 applications were reviewed for projects that were determined to be authorized by statue or outside the jurisdiction of VMRC. Many of these projects involved private piers, which met the requirements for statutory authorization established by law.

Many of the subaqueous permits involve structures that encroach in, on or over the bottom, including open-pile structures or overhead and submerged utility crossings. Other subaqueous permits involve structures or activities that result in filling or conversion of the submerged land to a different habitat. Table 1 summarizes the authorized filling and conversion of State-owned submerged lands.

Bioengineered structures are now recorded with shoreline changes. These are manmade projects such as modular concrete reef structures and fiber logs intended to create habitat often in conjunction with shoreline stabilization.

Table 1. Permitted Conversion of Submerged Land (10/1/2019 – 9/30/2020)

Conversion of Submerged Lands	Square Footage
Submerged land gained from uplands	993
Submerged land loss	856,934
Submerged land to beach	83,949
Submerged land to intertidal biogenic structure	2,480
Submerged land to intertidal riprap	243,917
Submerged land to non-vegetated wetland	4,676
Submerged land to vegetated wetland	11,102

Wetlands and Dune/Beach Permit Results

During the grant year, wetlands boards and the Commission acted on 375 projects that required a permit for use and development of tidal wetlands in Tidewater Virginia. Of this total, 321 were approved as proposed, 49 were modified in some manner, generally to reduce wetlands impacts, and 5 projects were denied (Table 2).

Table 2. Local Wetlands Board & VMRC permits – Wetlands or Beaches/Dunes (10/1/2019 – 9/30/2020)

Wetland Hearings	Actions
Tidal projects considered at public hearing	375
Approved as proposed	321
Approved as modified	49
Denied	5

Some form of wetlands compensation was required for 69 cases where wetlands impacts were unavoidable. For 16 of the projects, replacement wetlands were created either at the project site or nearby. The purchase of credits from a mitigation bank was utilized for 7 projects and the payment of an in-lieu fee was used as compensation for 46 projects (Table 3). The total compensation accounted for 19,102 square feet of tidal wetland impacts (vegetated and non-vegetated).

Table 3. Projects Requiring Wetland Compensation (10/1/2019 – 9/30/2020)

Compensation for Wetland Permits	Cases
Total projects requiring compensation	69
Required on or off site compensation	16
Purchased mitigation bank credits	7
Paid in-lieu fee	46

The authorized intertidal projects resulted in a variety of habitat conversions and losses, which are tracked by Habitat Management Division staff. Table 4 summarizes those habitat conversions and losses for wetlands and beach/dunes.

Table 4. Permitted Conversion of Jurisdictional Wetlands and Beach/Dunes (10/1/2019 – 9/30/2020)

Conversion of Intertidal Land	Square Footage
Beach loss	25,321
Beach to intertidal riprap	24,406
Beach to vegetated wetland	41,202
Non-vegetated to intertidal bioengineered structure	12,651
Non-vegetated wetland loss	117,389
Non-vegetated wetland to beach	15,642
Non-vegetated wetland to intertidal riprap	152,016
Non-vegetated wetland to vegetated wetland	147,878
Non-vegetated wetlands gained from uplands	796
Non-vegetated wetlands to submerged land	11,810
Vegetated to intertidal biogenic structure	180
Vegetated wetland loss	3,923
Vegetated wetland to another vegetated wetland	15,086
Vegetated wetland to intertidal riprap	4,416
Vegetated wetlands created from uplands	8,278
Vegetated wetlands to non-vegetated wetlands	90,044
Vegetated wetlands to submerged land	65

Tidal Shoreline Erosion Control

The Code of Virginia now stipulates that it is the policy of the Commonwealth to support living shorelines as the preferred alternative for stabilizing tidal shorelines. During the grant year, the VMRC and/or the local wetlands boards acted on projects that included a living shoreline component request along a total of 40,559 linear feet (7.68 miles) of shoreline. During the same period, 41,832 linear feet (7.92 miles) of riprap revetment and 29,137 linear feet (5.52 miles) of bulkhead were requested by applications (Table 5).

Table 5. Application Requests for Shoreline Erosion Control Structures (10/1/2019 – 9/30/2020)

Type of Erosion Control	**Linear Footage**
Bulkhead	6,736
Bulkhead Replacement	22,401
Riprap Revetment	28,959
Riprap Revetment Replacement	12,873
Living Shoreline * (total)	40,559
Marsh Toe Structure	7,169
Coir Log	1,018
Sill	15,679
Bioengineered	7,139
Breakwater	4,095
*Living shorelines include marsh toe structures, coir logs, sills, bioengineered structures, and breakwaters.	

Conclusion

The data in this report provides an overview of the permit activity involving State-owned submerged lands, tidal wetlands, and dunes/beaches within the Commonwealth. The data was generated from the Habitat Management Division permit-tracking database originally developed to record permit processing information, such as project type and various dates associated with application receipt and notices, as well as final permit actions. While the dimensions for structures like bulkheads, riprap and piers were recorded previously, the conversion of habitat types was not added until 2013. This latter information now allows for a more complete assessment of project impacts from year to year and

provides data to evaluate the permit program actions. As part of the effort to better assess project impact and permit actions, application information and permit decisions are also now made available to the general public. This information can be accessed at https://webapps.mrc.virginia.gov/public/habitat/index.php. Anyone with internet access can view permit applications, the project status, and a project description, including dimensions, site photos, and aerial photographs of the project site. This information is relatively complete for recent permit applications. Older project information does not include photos or applications submitted before the Habitat Management Division began digitally recording files in the database. However, efforts are underway to digitally record older files and update database files with more complete information. This initiative, along with efforts to record project impacts and habitat conversions will better inform project managers and the public regarding permit actions and outcomes, and improved management of submerged land, tidal wetlands and dune/beach resources.