VIRGINIA MARINE RESOURCES COMMISSION

Permit Program Activity Report

CZM Grant # NA16NOS4190171
Task #4 November 2017

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Virginia Coastal Zone
MANAGEMENT PROGRAM

Introduction

The Virginia Marine Resources Commission ("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. VMRC, however, 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 that can now be adopted by local governments throughout tidewater Virginia.

The regulatory activities conducted by the Commission and the 34 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 which 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 and 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 nine environmental engineers. Each is assigned a specific geographic territory (Figure 2). They conduct application reviews, correspond with applicants and other 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 is intended to track impacts associated with traditional shoreline projects, as well as proposals utilizing living shoreline techniques.

This document is intended to serve as the final report for Task 4 of Grant No. NA16NOS4190171 and provides an overview of the permit data gathered.

Figure 1.

Localities with-in Tidewater that have Adopted the Model Wetlands or Beach and Dune Ordinances, effective during the grant year period (10-2016 through 9-2017).

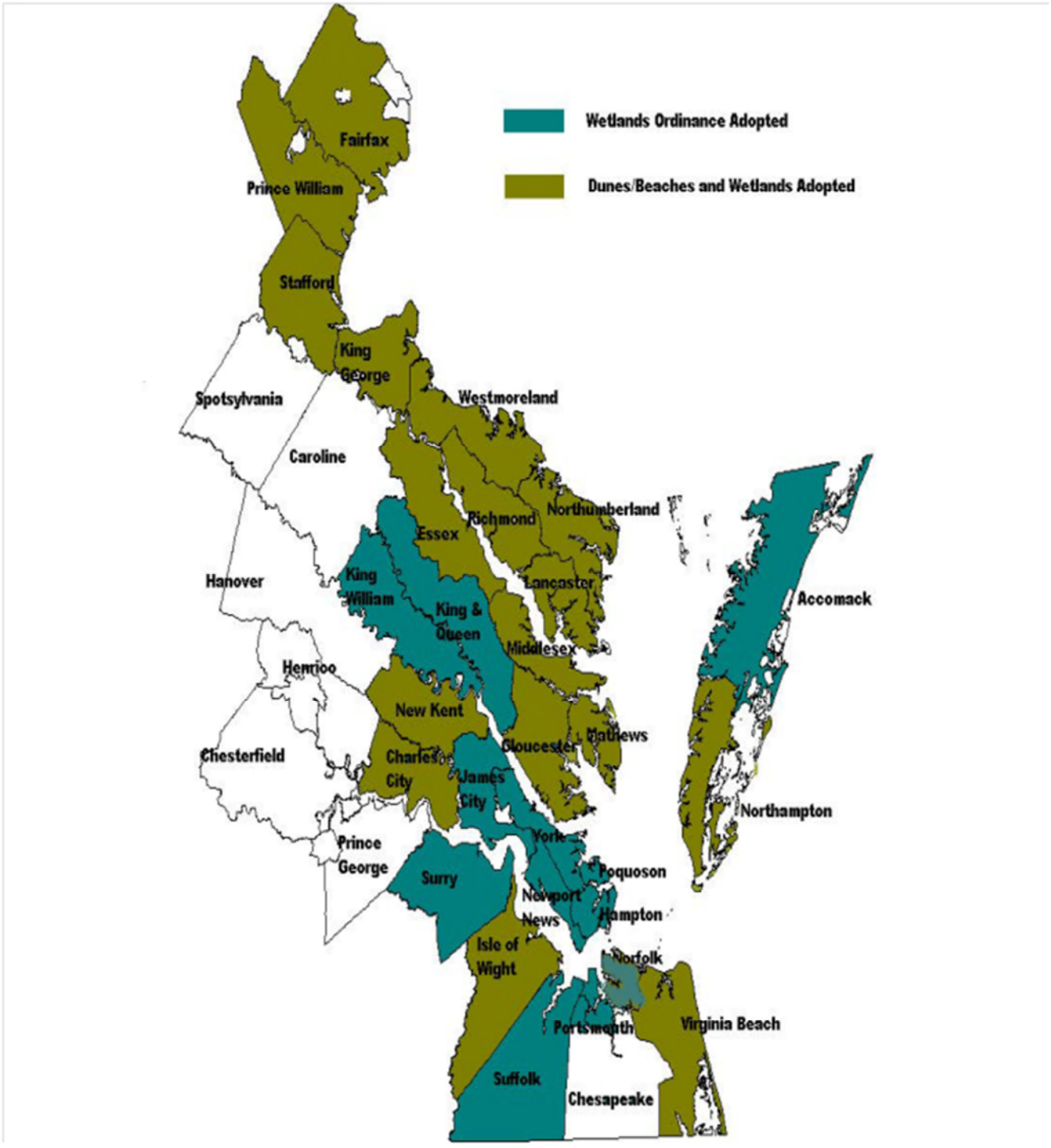
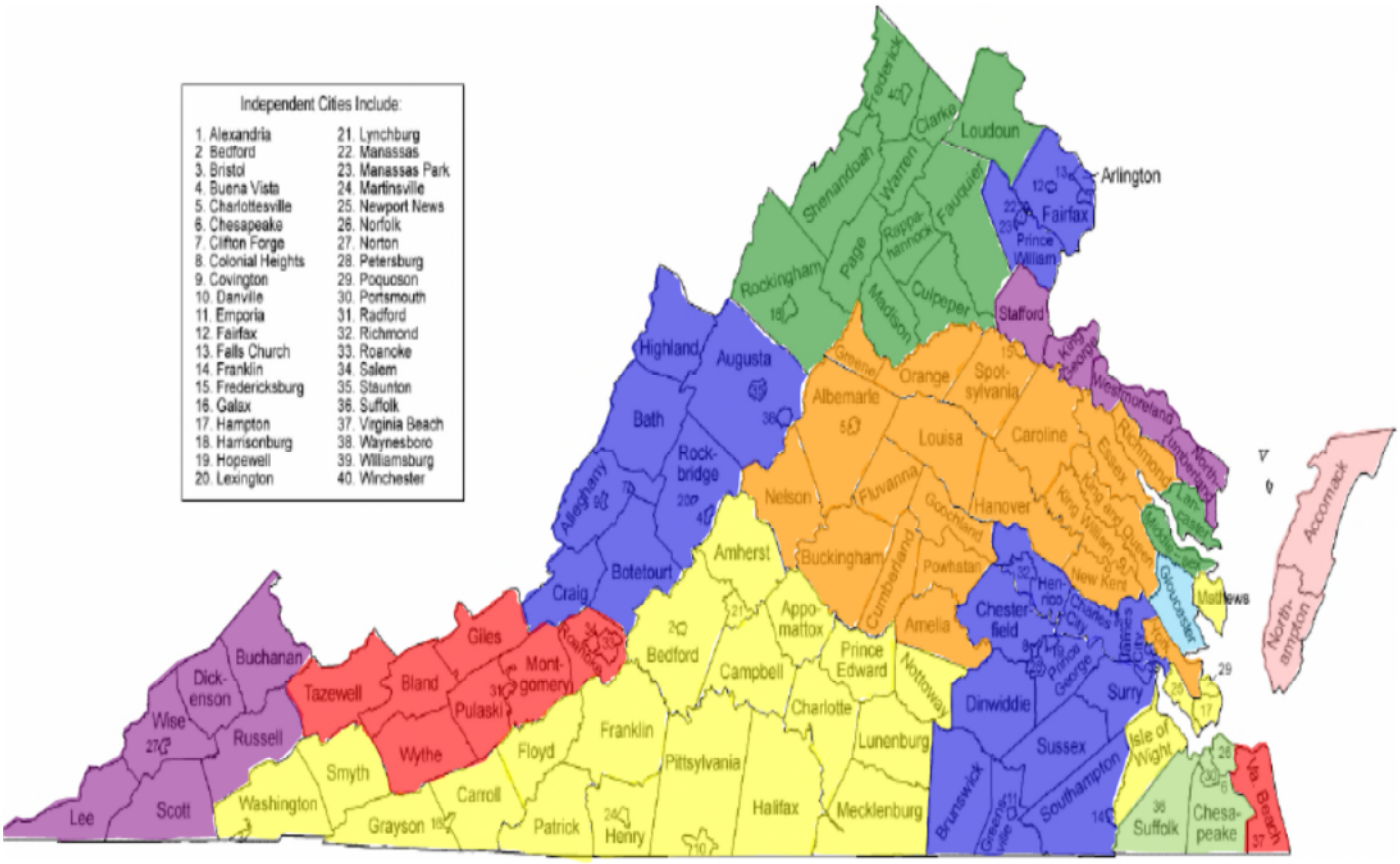


Figure 2.

Geographic Territories and Environmental Engineer Assignments.

- Chip Neikirk 757-247-2254
- Justin Worrell 757-247-8063
- Hank Badger 757-414-0710
- Rachael Maulorico 757-247-8027
- Jeff Madden 757-247-2276
- Mike Johnson 757-247-2255
- Jay Woodward 757-247-8032
- Mark Eversole 757-247-8028
- Randy Owen 757-247-2251



Permit Overview

During the grant year the Habitat Management Division received 2145 applications for projects involving State-owned submerged lands, wetlands or 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 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 the Marine Resources Commission. 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 2011 applications received during the 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 69 projects. During the reporting period the Commission considered 43 protested projects or projects requiring a staff briefing. The Commission also approved 26 projects which exceeded the $500,000 project cost threshold for administrative approval that is specified in the Virginia Code.

During the reporting period, local wetland boards, or the Commission in localities without a board, acted on 512 shoreline projects involving tidal wetlands and dunes/beaches. The Commission, while serving as the wetlands board, issued 8 permits for projects involving tidal wetlands and one permit involving a sand dune or beach during the same time period.

Submerged Land Permit Results

During the reporting period, VMRC issued 605 permits for encroachments over state owned submerged land. Another 1406 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 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. The authorized filling and conversion of submerged land is summarized in Table 1.

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

Table 1.

Permitted Conversion of Submerged Land, 10/1/2016 to 9/30/2017

Conversion of Submerged Land	Square Footage
To Beach	19,750
To Intertidal Riprap	130,595
To Vegetated Wetlands	17,549
To Reef Habitat	866
To non-vegetated wetlands	5,230
To intertidal Biogenic structure	595
Submerged Land Filled (loss)	28,893
Submerged Land From Upland (gain)	0

Wetlands and Dune/Beach Permit Results

During the grant year wetlands boards and the Marine Resources Commission acted on 512 projects that required a permit for use and development of tidal wetlands in Tidewater Virginia. Of this total, 383 were approved as proposed, 111 were modified in some manner, generally to reduce wetlands impacts, and two (2) projects were denied (Table 2.).

Table 2.

Local Wetland Board & VMRC permits (Wetland or Beaches & Dunes) 10/1/16 - 9/30/17

Wetland Hearings	Actions
Tidal Projects Considered at Public Hearing	512
Approved as Proposed	383
Approved as Modified	111
Denied	2
Pending	10
Inactivated	2
No Permit Required	6

Some form of wetlands compensation was required for 80 cases where wetlands impacts were unavoidable. For 38 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 five (8) projects and the payment of an in-lieu was used as compensation for 42 projects (Table 3). The total compensation accounted for 93,800 square feet of tidal wetland impacts.

Table 3:

Projects requiring Wetland Compensation 10/1/16 – 9/30/17

Compensation for Wetland Permits	Cases
Total Projects Requiring Compensation	80
Required On or Off site Compensation	38
Purchased Mitigation Bank Credits	8
Paid In-Lieu Fee	42

The authorized intertidal projects resulted in a variety of habitat conversions and losses which are tracked by Habitat 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, 10/1/2016 to 9/30/2017

Conversion of Intertidal Land	Square Footage
Beach to Intertidal Biogenic Structure	252
Beach to Intertidal Riprap	11,663
Beach to Submerged Land	2,000
Beach to Vegetated Wetland	3,700
Beach Created from Upland	0
Beach Loss	20,311
Non-vegetated Wetland to Intertidal Biogenic Structure	5,502
Non-vegetated Wetland to Beach	6,683
Non-vegetated Wetland to Intertidal Riprap	118,390
Non-vegetated Wetland to Reef	1,361
Non-vegetated Wetland to Vegetated Wetland	106,040
Non-vegetated Wetland to Submerged Land	20,479
Non-vegetated Wetland Created From Upland	4,365
Non-vegetated Wetland Loss	42,431
Vegetated Wetland to Beach	950
Vegetated Wetland to Another Vegetated Wetland	19,286
Vegetated Wetland to Submerged Land	1,642
Vegetated Wetland to Intertidal Biogenic Structure	19
Vegetated Wetland to Intertidal Riprap	2,197
Vegetated Wetland Created from Upland	9,718
Vegetated Wetland Loss*	43,786

*(note: Langley AFB #17-0458 project included 40,495 square feet of vegetated wetland loss. Compensation was required by Corps of Engineers and DEQ, via in-lieu fee payment to Aquatic Resources Trust fund and deemed appropriate by the board.)

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, 140 projects acted on by VMRC and/or the wetlands boards included a living shoreline component along a total of 29,040 linear feet of shoreline. During the same period 34,785 linear feet of riprap revetment and 26,423 linear feet of bulkhead were approved (Table 5.).

Table 5.

Permitted Shoreline Erosion Control Structures, 10/1/2016 to 9/30/2017

Type of Erosion Control	Linear Footage
Riprap Revetment	34,785
Bulkhead	26,423
Living Shoreline*	29,040
- Biogenic Structures	7,139
- Sill	16,776
- Breakwater	2,620
- Fiber Core Log	2,505

*living shoreline techniques include biogenic structures, sill, breakwaters, and fiber logs.

Conclusion

The data in this report provides an overview of the permit activity involving submerged land, tidal wetlands, and dunes/beaches within the Commonwealth. The data was selected from the Habitat Management Division permit tracking database that was originally developed to record permit processing information, such as project type and the 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, 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 also are 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, a project description including dimensions, site photos and see an aerial photograph 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. Efforts are, however, underway to digitally record older files and ultimately updated 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 wetland and dune/beach resources.