

# VIRGINIA MARINE RESOURCES COMMISSION

## Permit Program Activity Report



CZM Grant # NA17NOS4190152  
Task #4 November 2018

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The views expressed herein are those of the author and do not reflect the views of NOAA or any of the subagencies.



## **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.

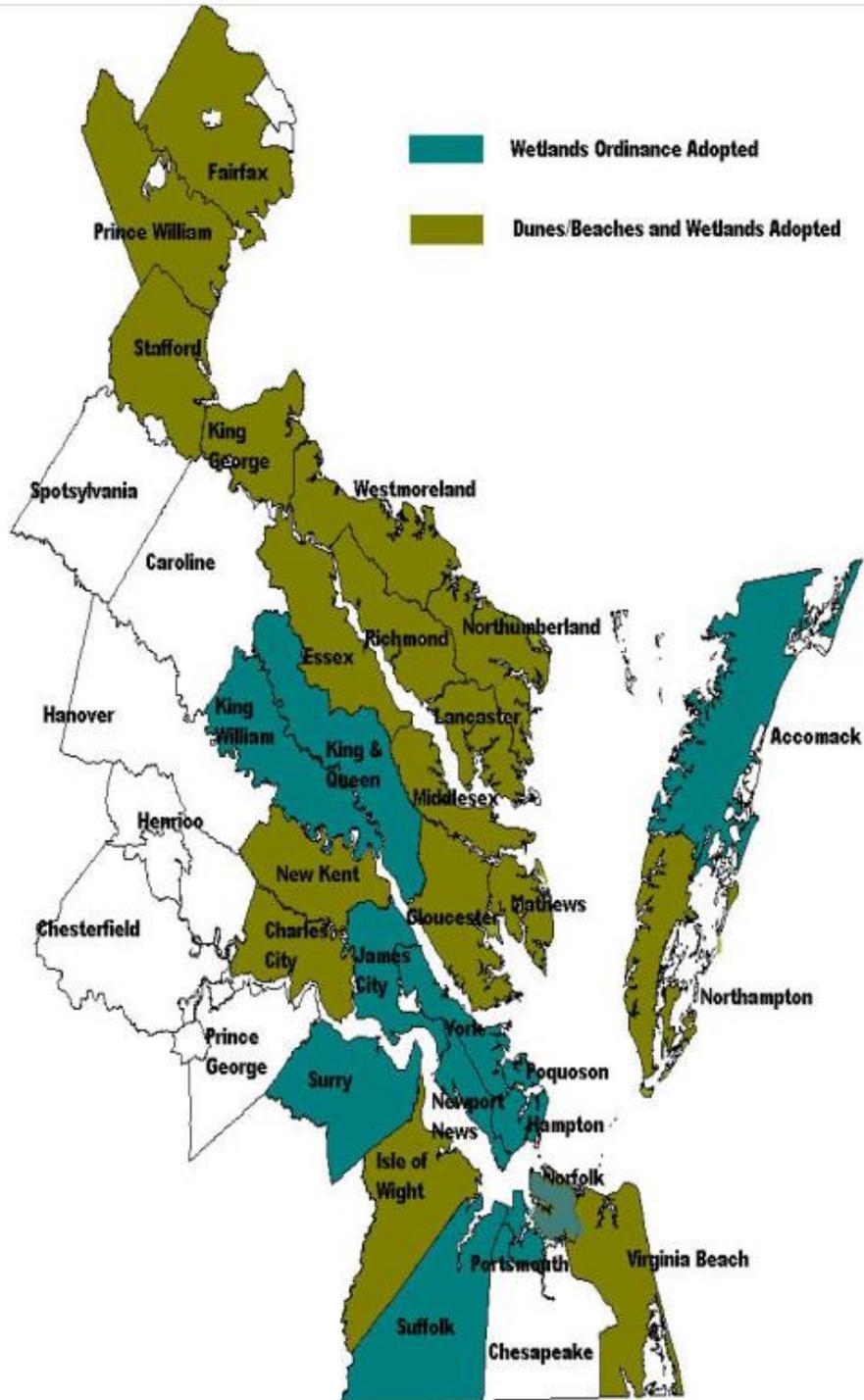
The purpose of this grant project is, in part, to support the Commission’s permit review program. The goal of this effort is to eliminate unnecessary impacts to submerged lands through a permit review process based on public interest review procedures consistent with the public trust doctrine that fairly 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 Commission 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.

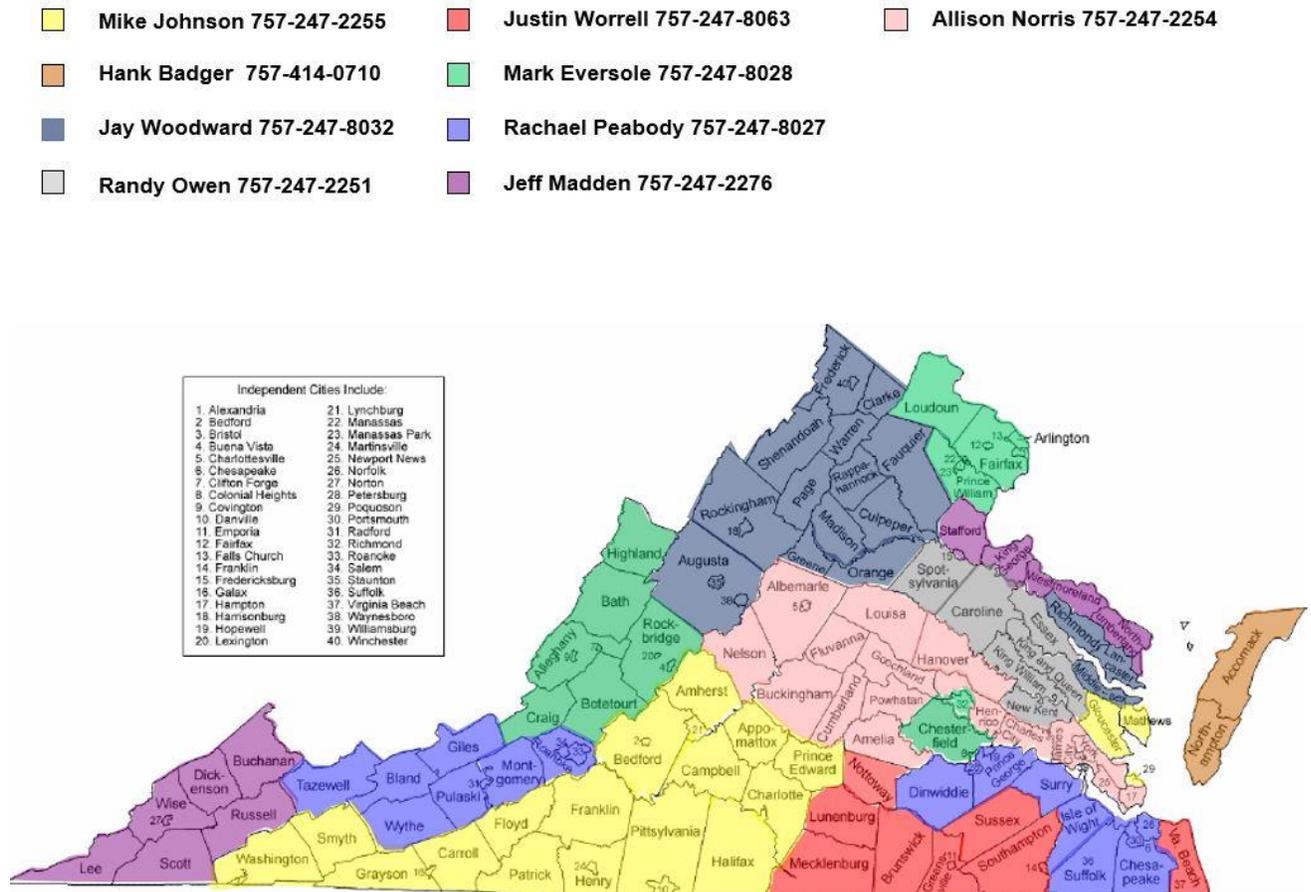
The environmental engineers also document losses and conversions of submerged land, wetlands and dunes/beaches associated with all proposed shoreline stabilization projects. Proposed and permitted losses, as well as habitat conversions, are recorded in the existing VMRC permit tracking database. This 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. NA17NOS4190152 and provides an overview of the permit data gathered.

**Figure 1.** Localities within Tidewater that have adopted the model wetlands or beach and dune ordinances, effective during the grant year period (10-2017 through 9-2018).



**Figure 2.** Geographic Territories and Environmental Engineer Assignments



**Permit Overview**

During the grant year the Habitat Management Division received 1955 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 1938 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 74 projects. During the reporting period the Commission considered 37 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 that is specified in the Virginia Code.

During the reporting period, local wetland boards, or the Commission in localities without a board, acted on 397 shoreline projects involving tidal wetlands and dunes/beaches. The Commission, while serving as the wetlands board, issued 12 permits for projects involving tidal wetlands and 4 permit involving a sand dune or beach during the same time period.

### **Submerged Land Permit Results**

During the reporting period, VMRC issued 646 permits for encroachments over state owned submerged land. Another 1289 applications were reviewed for projects that were determined to be authorized by statute 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, 10/1/2017 to 9/30/2018

<b>Conversion of Submerged Land</b>	<b>Square Footage</b>
To Beach	185,242
To Intertidal Riprap	199,459
To Vegetated Wetlands	43,347
To Reef Habitat	87,762
To Non-Vegetated Wetlands	450
To Intertidal Biogenic Structure	12,099
Submerged Land Filled (loss)	28,136
Submerged Land From Upland (gain)	156

**Wetlands and Dune/Beach Permit Results**

During the grant year wetlands boards and the Marine Resources Commission acted on 397 projects that required a permit for use and development of tidal wetlands in Tidewater Virginia. Of this total, 345 were approved as proposed, 45 were modified in some manner, generally to reduce wetlands impacts, and 2 projects were denied (Table 2.).

**Table 2.** Local Wetland Board & VMRC permits (Wetland or Beaches & Dunes) 10/1/17 - 9/30/18

<b>Wetland Hearings</b>	<b>Actions</b>
Tidal Projects Considered at Public Hearing	397
Approved as Proposed	345
Approved as Modified	45
Denied	2
Pending	2
Inactivated	0
No Permit Required	3

Some form of wetlands compensation was required for 77 cases where wetlands impacts were unavoidable. For 21 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 11 projects and the payment of an in-lieu was used as compensation for 45 projects (Table 3). The total compensation accounted for 51,546 square feet of tidal wetland impacts.

**Table 3.** Projects requiring Wetland Compensation 10/1/17 – 9/30/18

Compensation for Wetland Permits	Cases
Total Projects Requiring Compensation	77
Required On or Off Site Compensation	21
Purchased Mitigation Bank Credits	11
Paid In-Lieu Fee	45

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, 10/1/2017 to 9/30/2018

Conversion of Intertidal Land	Square Footage
Beach to Intertidal Biogenic Structure	252
Beach to Intertidal Riprap	11,546
Beach to Submerged Land	0
Beach to Vegetated Wetland	0
Beach Created from Upland	1,344
Beach Loss	3,088
Non-Vegetated Wetland to Intertidal Biogenic Structure	13,984
Non-Vegetated Wetland to Beach	12,158
Non-Vegetated Wetland to Intertidal Riprap	143,642
Non-Vegetated Wetland to Reef	1,775
Non-Vegetated Wetland to Vegetated Wetland	225,343
Non-Vegetated Wetland to Submerged Land	20
Non-Vegetated Wetland Created From Upland	3,355
Non-Vegetated Wetland Loss	19,167
Vegetated Wetland to Beach	414
Vegetated Wetland to Another Vegetated Wetland	96,292
Vegetated Wetland to Submerged Land	0
Vegetated Wetland to Intertidal Biogenic Structure	0
Vegetated Wetland to Intertidal Riprap	1,747
Vegetated Wetland Created From Upland	9,221
Vegetated Wetland Loss	2,316

## 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 along a total of 39,632 linear feet (7.5 miles) of shoreline. During the same period 35,371 linear feet of riprap revetment and 25,497 linear feet of bulkhead were approved (Table 5.).

**Table 5.** Permitted Shoreline Erosion Control Structures, 10/1/2017 to 9/30/2018

Type of Erosion Control	Linear Footage
Riprap Revetment	35,371
Bulkhead	25,497
Living Shoreline* (total)	39,632
Biogenic Structures	11,624
Sill	13,226
Breakwater	6,173
Marsh Toe Sill	7,874
Fiber Core Log	735
*Living shoreline techniques include biogenic structures, sills, breakwaters, marsh toe sills 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 provide 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.