

April 30, 2019

**Virginia Coastal Zone Management Program
Semiannual Section B.2-4 Report
For the Period from October 1, 2018 – March 31, 2019**

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SECTION B.2 PERMIT ADMINISTRATION, MONITORING AND ENFORCEMENT

1) DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

a) DEQ – Virginia Coastal Zone Management Program

Virginia CZM Program staff continued to work with our partner agencies to implement the Program over the last 6 months. For a full description of staff activities, please refer to the Section A report for Task 1.01.

b) DEQ – Water Permitting Programs

DEQ- Virginia Water Protection Permit (VWPP) Program

No Report for this time period.

DEQ – Virginia Pollution Abatement (VPA) Water Permitting Program

The Virginia Pollution Abatement permit (VPA) is required for facilities that manage wastewater, animal waste, biosolids or industrial sludges in such a manner that they do not have a discharge from the site. For example, an agricultural facility that temporarily stores wastewater to be land applied as part of an irrigation/fertilization program.

During the period between October 1, 2018 and March 31, 2019, one application was received for modification of a VPA Individual Permit that authorizes the land application of biosolids, it remains pending. Five VPA permit applications for reissuance were received during that period – four for permits that authorize the land application of biosolids and one for a permit that authorizes non-biosolids activities; those applications are also pending. Two permit applications for major modifications of Biosolids permits that were submitted prior to the reporting period were both signed during this period

During the period between October 1, 2018 and March 31, 2019, two applications were received for coverage under the VPA General Permit for Poultry Waste Management; both of the applicants received coverage during the same period. One application for ownership change was received, as well as one application for change in animal type/name; both modifications were completed during the period. No applications were received for farms, located in the Coastal Zone Management area, seeking coverage under the VPA General Permit for Animal Feeding Operations, during this period.

DEQ – Virginia Pollution Discharge Elimination System (VPDES) Water Permitting Program

There are a total of 296 individual municipal and industrial CZM area VPDES permits. This number and the numbers in the table represent typical activity in the program.

There are also numerous facilities registered under general permits in CZM areas including 56 car wash, 102 concrete products, 12 cooling water, 301 domestic sewage \leq 1,000 GPD, 60 nonmetallic mineral mining, 25 petroleum, 13 potable water treatment, 50 seafood processors, and 535 industrial stormwater. These represent typical numbers for permit registrants in CZM areas in Virginia. There are a number of general permit coverages that are automatically covered under a permit (e.g., pesticide applications and hydrostatic testing) and are not entered into the CEDS database.

VPDES/VPA - October 1, 2017 – March 31, 2018*										
	Permits Issued / Avg Proc. Days ⁽¹⁾		Permits Reissued / Avg Proc. Days		Permits Modified** / Avg Proc. Days		Denied / Avg Proc. Days		Permits Reissue Pending / Avg Proc. Days	
	VPDES	0	NA	29	349	1	47	0	NA	36***
VPA	0	NA	0	NA	2	952	0	NA	5	142
VPA GP	2	13	NA	NA	2	9	0	NA	NA	NA

Processing day is the amount of time between receiving a complete application and making the final case decision (issuance, reissuance, modification, etc.).

* Information from CEDS (Comprehensive Environmental Data System) database

** Major modifications

***This represents existing VPDES individual permits expired but pending through March 31, 2019.

c) DEQ – Water Program Enforcement and Compliance

DEQ continues to apply both informal and formal enforcement measures in the enforcement program. Reference Table 1, below.

Informal measures, such as Warning Letters and Letters of Agreement, are used in those cases where non-compliance is not significant in nature and where compliance can be achieved in a short period of time. For the period October 1, 2018 through March 31, 2019, DEQ issued 178 Warning Letters and zero Letters of Agreement for violations of VPDES, VPA, VWPP, and Ground Water program requirements.

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation followed by a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Administrative Orders or court orders may be sought. Between October 1, 2018 and March 31, 2019, DEQ issued 13 Notices of Violation for violations of VPDES, VPA, VWPP, and Ground Water program requirements. During the same period, the agency concluded enforcement cases with the issuance of twenty-one Consent Orders that assessed a total of \$171,191 in civil charges.

Table 1

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Warning Letters	197	N/A
Informal	Letters of Agreement	1	N/A
Formal	Notices of Violation	13	N/A
Formal	Consent Order	10	\$171,190.50
Total		221	\$171,191

d) DEQ – Air Permitting Program

**OFFICE OF AIR PERMIT PROGRAMS
PERMITS ISSUED REPORT FOR
VIRGINIA’S COASTAL RESOURCES MANAGEMENT PROGRAM**

Period: October 1, 2018 – March 31, 2019

PERMIT TYPE	NUMBER OF PERMITS ISSUED	AVERAGE PROCESSING TIME (Days)
PSD & NA	0	NA
Major	0	NA
Minor	41	33
Administrative Amendment	4	17
Exemptions	5	34
State Operating	3	403
Federal Operating (Title V) Initial Issuance	2	162
Federal Operating (Title V) Renewal	2	115
Acid Rain (Title IV)	0	NA
Total Number Permits Issued	<u>57</u>	

* The average processing time is determined by computing the difference between when the application was deemed administratively complete and when the permit was issued.

Note: The information provided for this report includes data from the Northern Virginia Regional Office, Portions of the Piedmont Regional Office and the Tidewater Regional Office only.

Definitions:

Prevention of Significant Deterioration (PSD) = A source which emits **250 tons or more** per year of any regulated pollutant or is one of 28 specific industries listed in the state regulations and will emit 100 tons per year of a regulated pollutant.

Major = A source which emits, or has the potential to emit, **100 tons or more** per year of any air pollutant.

Minor = A source which emits, or has the potential to emit, **less than 100 tons** per year of any air pollutant.

State Operating= Permit written pursuant to 9 VAC 5-80-800 et al.

Administrative Consent Agreement = An agreement that the owner or any other person will perform specific actions to diminish or abate the causes of air pollution for the purpose of coming into compliance with regulations, by mutual agreement of the owner or any other person and the Board.

Administrative Amendment = Administrative changes made to the permit to clarify or correct an issued permit. For example, typographical errors, name changes, etc.

Exemption = Facilities are exempted from permitting requirements by exemption levels defined in 9 VAC 5-80-1105.

Federal Operating (Title V) = a source that emits **10 tons or more** per year of any hazardous air pollutant, **or 25 tons** per year of any combination of hazardous air pollutants or emits any criteria pollutant above 100 tons per year.

Acid Rain (Title IV) = Permits issued specifically to address SO₂ and NO_x from electric generating units covered under the Acid Rain regulations.

**OFFICE OF AIR PERMIT PROGRAMS
 PERMITS PENDING REPORT FOR
 VIRGINIA'S COASTAL RESOURCES MANAGEMENT PROGRAM**

Permits pending as of March 31, 2019

PERMIT TYPE	NUMBER OF PERMITS PENDING
PSD & NA	1
Major	3
Minor	65
Administrative Amendment	2
Exemptions	3
State Operating	5
Federal Operating (Title V) Initial Issuance	8
Federal Operating (Title V) Renewal	62
Acid Rain (Title IV)	1
Total Permits Pending	<u>150</u>

Note: The information provided for this report includes data from the Northern Virginia Regional Office, Piedmont Regional Office and Tidewater Regional Office only.

**OFFICE OF AIR PERMIT PROGRAMS
PERMITS WITHDRAWN AND APPLICATIONS DENIED REPORT FOR
VIRGINIA’S COASTAL RESOURCES MANAGEMENT PROGRAM**

Period: October 1, 2018 – March 31, 2019

PERMIT TYPE	NUMBER OF PERMITS WITHDRAWN	NUMBER OF APPLICATIONS DENIED
PSD	0	0
Major	0	0
Minor	5	0
Administrative Amendment	1	0
Exemptions	0	0
State Operating	0	0
Federal Operating (Title V)	2	0
Acid Rain (Title IV)	0	0
Total Permits Rescinded	<u>8</u>	<u>0</u>

Note: The information provided for this report includes data from the Northern Virginia Regional Office, Piedmont Regional Office and Tidewater Regional Office only.

e) DEQ – Air Program Enforcement and Compliance

DEQ continues to apply both informal and formal enforcement measures in its air enforcement program. Reference Table 1, on the following page.

Informal measures include Requests for Corrective Action, Informal Correction Letters, Warning Letters, and Letters of Agreement. These actions are used in those cases where non-compliance is not significant in nature and where compliance can be achieved in a short period of time. During the six-month period beginning October 1, 2018 through March 31, 2019, DEQ issued 30 Requests for Corrective Action, and 33 Warning Letters.

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation and negotiation of a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Orders or court orders may be pursued. Between October 1, 2018 and March 31, 2019, DEQ initiated three new formal enforcement actions via issuance of Notices of Violation. Additionally, the Agency issued 10 Consent Orders; assessing \$238,791 in civil charges.

Table 1

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Requests for Corrective Action	30	N/A
Informal	Informal Correction Letter	0	N/A
Informal	Warning Letters	33	N/A
Formal	Notices of Violation	26	N/A
Formal	Consent Orders	10	\$238,791
Total		99	\$238,791

f) DEQ – Erosion and Sediment Control

Summary of Specific Outputs:

Specific Outputs	Progress / Status
3 CZM Chesapeake Bay Land Disturbing Activities Permitted - Projects less than 1 acre found within Chesapeake Bay Designated Areas.	Permit coverage has been issued and projects are under construction. Compliance is achieved through ongoing permit review, technical assistance, and project inspection.
203 CZM Small Construction Activities Permitted- Land Disturbing Activities greater than or equal to 1 acre and less than 5 acres.	Permit coverage has been issued and projects are under construction. Compliance is achieved through ongoing permit review, technical assistance, and project inspection.
65 CZM Large Construction Activities Permitted- Land Disturbing Activities greater than or equal to 5 acres and less than 10 acres.	Permit coverage has been issued and projects are under construction. Compliance is achieved through ongoing permit review, technical assistance, and project inspection.
92 CZM Large Construction Activities Permitted- Land Disturbing Activities greater than or equal to 10 acres and less than 50 acres.	Permit coverage has been issued and projects are under construction. Compliance is achieved thru ongoing permit review, technical assistance, and project inspection.
9 CZM Large Construction Activities Permitted- Land Disturbing Activities greater than or equal to 50 acres and less than 100 acres.	Permit coverage has been issued and projects are under construction. Compliance is achieved thru ongoing permit review, technical assistance, and project inspection.
5 CZM Large Construction Activities Permitted- Land Disturbing Activities greater than or equal to 100 acres.	Permit coverage has been issued and projects are under construction. Compliance is achieved thru ongoing permit review, technical assistance, and project inspection.
377 Total CZM Land Disturbing Activities Permitted thru coverage under the Construction General Permit.	Coastal Zone Management resources are conserved and restored through permit compliance.

Supplemental Narrative:

Considerable erosion and sediment control and stormwater management progress occurred during the performance period. New and improved requirements for project stabilization during construction and recently enhanced post construction requirements will result in further improvements to coastal zone resources. The new post construction requirements have been developed to more closely mimic predevelopment hydrology found in a naturally wooded site condition. The implementation of these new requirements will result in less downstream sediment export and fewer nutrient export impacts from land development.

Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Laws and Regulations are designed to help reduce pollutants in the Chesapeake Bay, and require localities, developers, and consultants to be certified in various knowledge and practices. The law requires DEQ to offer two certification tracks, one for ESC and another for SWM.

Each track includes training courses to assist people to become certified as: Program Administrators, Inspectors, Plan Reviewers and Combined Administrators, and requires individuals to pass a professionally administered certification exam. Each certification type is valid for 3 years and individuals can recertify by completing continuing education throughout the certification period.

As of March 31, 2019 total certified individuals in Virginia are as follows:

- 1,368 total people Dual Certified (both ESC/SWM). (1,236 people as of September 30, 2018)
- 888 total additional people certified in SWM only. (791 people as of September 30, 2018)
- 2,194 total additional people certified in ESC only. (2,184 people as of September 30, 2018).

g) DEQ- Office of Stormwater Management – Local Government Assistance Programs- Chesapeake Bay Preservation Act

Summary

Program Description

The Chesapeake Bay Preservation Act program is designed to improve water quality in the Chesapeake Bay and other waters of the State by requiring the use of effective land management and land use planning. Specifically, these requirements fall into three implementation phases. Phase I consists of local governments designating and mapping Chesapeake Bay Preservation Areas (CBPAs) and adopting land use and development performance criteria to protect those features. CBPAs include Resource Protections Areas (RPAs) and Resource Management Areas (RMAs). RPAs are made up of tidal wetlands, tidal shores, nontidal wetlands connected and contiguous to tidal wetlands or perennial streams and a 100-foot fully vegetated buffer. RMAs include lands adjacent to RPAs that are made up of land features such as highly erodible soils, steep slopes, and floodplains. Sixty of the 84 Tidewater localities have identified their entire jurisdiction as RMA. Phase II consists of the incorporation of water quality protection measures into local comprehensive plans. Phase III involves the review and revision of local land use codes to include specific standards that implement water quality performance criteria.

Technical Assistance & Training

During the reporting period, October 1, 2018 – March 31, 2019, staff continued to provide assistance and training to Bay Act localities. For this period, 1 formal training and 6 outreach events were conducted and 54 instances of technical assistance, including site plan review, were documented.

Environmental Impact Reviews

Through the Environmental Impact Review process, staff continued to review plans for State and Federal projects to ensure those projects were consistent with the Bay Act. During the reporting period, 37 environmental impact reviews were conducted.

Compliance Reviews

During this reporting period, Local Government Assistance Programs (LGAP) staff were needed to assist in the Phase III WIP process; therefore, Compliance Reviews were mostly deferred. Two new compliance reviews were initiated and 0 have been completed; however, Condition Reviews are ongoing. Since the Compliance Review process was reinitiated in 2015 (after having been suspended for a period of three years to allow LGAP staff to work on local stormwater program development), 44 reviews have been initiated and 14 have been completed.

During these reviews, staff assess how well local governments are ensuring that impervious cover is minimized, indigenous vegetation is maintained, and land disturbance is minimized on approved development projects, whether or not the locality is requiring soil & water quality conservation assessments for agricultural lands, the status of water quality provisions within local comprehensive plans, and if other Bay Act general performance criteria are being applied to the use and development of land.

2) VIRGINIA MARINE RESOURCES COMMISSION (VMRC)

a) VMRC – Habitat Management Division

During the period October 1, 2018 through March 31, 2019, the Habitat Management Division received 991 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, VIMS 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. Five notices to comply were issued during the period.

The Habitat Management Staff completed actions on 902 applications received during the period. Action on most applications was completed within 90 days after they were received. As such, a number of the actions taken during the period were for applications received prior to October 2018. 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 23 projects. During the reporting period, the Commission considered 14 protested projects or projects requiring a staff briefing. The Commission also approved 9 projects over \$500,000.00 in value.

During the reporting period, local wetland boards throughout Tidewater Virginia acted on 211 projects involving tidal wetlands. Of this total, 188 were approved as proposed, 18 were approved as modified, 1 was denied, 1 is pending, 3 no permit was required, and 48 required compensation either on or off site (23), or through payment of an in lieu fee (25) accounting for 47,050 square feet of tidal wetland impacts.

b) VMRC – Fisheries Management Division

At the October 2018 meeting, the agency established an increase to the trip limit for scup, from 18,000 pounds to 28,500 pounds for the commercial Winter II period fishery of October 1 through December 31.

At the January 2019 meeting, the agency adopted amendments to the black sea bass regulation that established a February 2019 recreational black sea bass fishery. This February season would mean any harvest from February would lessen the number of fishing days during the May 15 through December 31 period.

At the February 2019 meeting, the agency established amendments to summer flounder that increased the trip landing limit to 8,500 pounds for period one and a season change to March 1 through April 19, 2019.

At the March 2019 meeting, the agency established amendments to the channeled whelk regulation that removed the use of a culling ring in the measurement of channeled whelk; redefines the container used by law enforcement; and allows harvest and landings of any whelk species by channeled whelk pots. At the same March 2019 meeting, the commission amended the snagging regulation that included a prohibition on the towing of striped bass and cobia.

c) VMRC – Law Enforcement Division

Enforcement under "Other Agency" refers to summons issued for other agencies' laws, code or regulation sections. The majority of the summons in this category are for DGIF regulations on boating safety laws, expired boat registration, no life jackets, flares, etc.

Summons under "Police Powers" are all criminal vs fisheries. These are the reckless driving, drunk driving, driving without a license/suspended license, shoplifting, possession of controlled substances.

**VIRGINIA MARINE POLICE
ARRESTS/CONVICTIONS SUMMARY BY CATEGORY**

REPORT FORMAT: FEDERAL FISCAL YEAR AREA: ALL AREAS
START PERIOD: 10/01/2014
END PERIOD: 09/30/2019



Category	2014/2015		2015/2016		2016/2017		2017/2018		2018/2019	
	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests
Buyers	5	6	2	2	1	4	1	1	0	0
Casting Garbage/Trash	1	1	3	3	2	2	0	0	0	0
Clams	2	3	3	3	1	1	1	1	0	0
Commercial Fishing License	7	10	21	30	13	16	10	13	1	1
Conchs	1	1	3	3	0	0	0	1	0	0
Crabs	121	138	70	102	68	89	26	34	7	10
Federal Violation	0	0	0	0	0	0	0	0	0	0
FIP Violations	76	81	47	48	41	42	36	37	4	5
Fish	150	163	168	197	193	216	127	145	26	32
Freshwater Fishing without a license	20	22	24	34	19	20	9	10	2	2
Gill Nets	17	24	13	27	20	34	2	5	0	0
Habitat/Wetlands	0	0	0	0	0	0	0	0	0	0
License Tags	1	1	4	9	0	2	0	0	0	0
Mandatory Reporting	9	18	10	20	2	11	0	0	0	0
Misc	0	0	0	0	0	0	0	0	0	0
Non-residents	0	0	0	0	1	1	0	0	0	0
NSSP	0	0	0	0	0	0	0	0	0	0
Other Agencies	383	462	285	343	364	440	476	587	93	118
Oysters	177	299	111	222	75	100	76	99	24	41
Piers	0	0	0	0	0	0	0	0	0	0
Police Powers	95	114	118	129	87	103	0	0	0	0
Removal of Obstructions	1	1	3	3	1	12	0	0	0	0
Resisting officer	0	0	0	0	1	1	0	0	0	0
Shellfish	14	25	7	8	10	16	0	0	0	0
SW Recreational Licenses	205	234	232	254	191	200	132	141	16	18
TOTALS:	1285	1603	1124	1437	1090	1310	896	1074	173	227
PERCENT OF CONVICTIONS:	80.16%		78.22%		83.21%		83.43%		76.21%	

3) VIRGINIA DEPARTMENT OF HEALTH (VDH) – DIVISION OF SHORELINE SANITATION

From October 1, 2018 through March 31, 2019, the VDH Division of Shellfish Sanitation had:
 331 acres of shellfish grounds closed year-round to harvesting,
 1,509 acres of shellfish grounds seasonally closed,
 271 acres of shellfish grounds closed year-round from seasonally
 332 acres of shellfish grounds opened year-round,
 1,824 acres of shellfish grounds seasonally opened, and
 144 acres of shellfish grounds opened year-round from seasonally.

Activities of the Virginia Department of Health for the Virginia Coastal Resources Management Report are summarized below. This includes statistics on applications for sanitary facilities at marinas and other places where boats are moored.

The Department received and reviewed a total of fourteen (14) VMRC Permit Applications, and processed as follows:

Two (2) Permit Applications needed action in the Marina Program.

Fourteen (14) applications were approved based on meeting the requirements of providing adequate facilities of the Marina Regulations if applicable.

Zero (0) applications were denied because of inadequate facilities.

4) Department of Conservation and Recreation (DCR)

a) DCR - Division of Soil and Water Conservation

Nutrient Management

DCR Nutrient Management Staff have been active in developing, reviewing nutrient management plans, enhancing private sector plan development, and other nutrient reduction activities to achieve the Commonwealth's nutrient reduction commitments of Chesapeake Bay TMDLs. In the coastal zones of Virginia, DCR staff have overseen the development of nutrient management plans covering 4,411.27 acres during the reporting period (10/1/2018 – 3/31/2019). Many plans are active for up to three years, all new or revised acreage developed in the coastal zones during the reporting period are summarized in the following table:

Table 1: Planned nutrient management acreage by land use and coastal management zones. Plans started between 10/1/2018 – 3/31/2019.

CZM Basin	Number Of Plans	CZM Crop Acres	CZM Hay Acres	CZM Pasture Acres	CZM Specialty Acres	Total
Albemarle Sound	3	477.33	-	8.36	-	485.69
Atlantic Ocean	5	223.00	-	-	-	223.00
Chesapeake Bay Coastal	6	590.88	-	-	-	590.88
Chowan	2	136.57	-	-	-	136.57
James	4	250.01	10.99	-	-	261.00
Potomac	-	-	-	-	-	-
Rappahannock	6	1,110.79	72.12	-	-	1,182.91
York	3	1,531.22	-	-	-	1,531.22
Total:	29	4,319.80	83.11	8.36	0.00	4,411.27

Shoreline Erosion Advisory Service

DCR's Shoreline Erosion Advisory Service (SEAS) was created in 1980 by the Virginia General Assembly. The program provides technical assistance to private landowners and local, state, and federal agencies owning property that are experiencing shoreline or streambank erosion in Virginia. The SEAS services include site investigations, written reports, plan reviews, construction inspections, permitting assistance, and education. Since its inception, SEAS has evaluated hundreds of miles of shoreline and provided invaluable technical assistance to thousands of Virginia property owners experiencing shoreline erosion.

For this reporting period, SEAS staff conducted 69 site visits, wrote 45 advisory reports, evaluated 29,087 feet of shoreline, and reviewed and provided comments on four joint permit applications. SEAS provides advisory assistance to tidal shorelines and non-tidal streambanks in Virginia. During a site visit, staff walks the shoreline with the owner and assesses the cause or causes of the erosion problem. The staff then review with the owner, what they believe are the most appropriate shoreline erosion control and protection strategies for that site. The options range from planting vegetation, to bank grading, to large rock structures such as riprap revetments and breakwaters.

The SEAS program is currently working with the Virginia Institute of Marine Science (VIMS), Virginia Marine Resources Commission (VMRC), and DEQ to 1) identify shoreline erosion stabilization projects across tidal Virginia that qualify for Chesapeake Bay TMDL WIP pollutant reduction credits, 2) verify these practices are installed and meet specifications set out by EPA's Chesapeake Bay Program, and 3) report these load reductions as part of the Commonwealth's efforts to meet WIP goals. The first round of these reductions was reported to DEQ in October 2017. An additional 507 sites have been verified and the associated sediment and nutrient reductions were reported to DEQ in November 2018.

Protected Shoreline Length (ft.)	Protected Shoreline Length (miles)	Number of Sites
106,567	20.18	507

Pollutant	Total Reduction (lbs./year)	Total Reduction (tons/year)
TP	3,243.40	1.62
TN	4,761.10	2.38
TSS	15,779,400.00	7,889.70

b) DCR - Division of Natural Heritage

This report lists projects and activities conducted by the Department of Conservation and Recreation, Division of Natural Heritage (DCR-NH) during this period that were not funded by or otherwise reported to the VCZMP.

Inventory

While conducting surveys in the Cherry Orchard Bog State Natural Area Preserve on October 16, 2018, DNH ecologist Gary Fleming discovered a small population of the state-rare Southern Bog Goldenrod (*Solidago stricta*, G4?/S1). Located on the Sussex/Prince George county line in southeastern Virginia, this preserve is well known for hosting populations of 13 other state-rare plants, many of them associated with open, boggy habitats that have largely been destroyed in the region. The addition of Southern Bog Goldenrod, one of Virginia's rarest Coastal Plain species, is significant in being the first occurrence located on land protected and managed for biodiversity. The few populations previously known are all located on roadside powerlines that

are threatened by development, herbicide use, and use as staging areas for logging in adjacent pine plantations. Southern Bog Goldenrod is native to the Pine Barrens of New Jersey, with a spotty distribution southward in southeastern Virginia and disjunct areas of the Carolinas and Florida.



Southern Bog Goldenrod (Solidago stricta Ait.)

Among the additions to the 2019 list, are some newly discovered or rediscovered species, including two panic grasses (genus *Dichanthelium*) that are in the process of being described. These plants are known thus far only from Bath and Halifax counties. Another significant addition is the Millboro Aster (*Symphyotrichum schistosum*), an enigmatic and localized species of the Virginia mountains. This attractive plant was first described in 1911 but has been overlooked, “lost”, or dismissed by many botanists due to its intermediate morphology and restriction to a single site. Recent fieldwork has uncovered three additional populations in Bath and Augusta counties, an area well known for globally rare species.



Millboro Aster (Symphyotrichum schistosum)

Prescribed Burning

On November 1, 2018, staff from both DCR Natural Heritage and State Parks, plus their partners in fire management, attended an all-day Eastern Virginia Interagency Fall Fire Refresher at Pocahontas State Park. Over 50 wildland fire fighters participated in this required annual training session, in order to remain fire crew qualifications. Participants completed a work capacity test (“pack test”) consisting of walking three miles carrying 45 pounds (arduous certification) or two miles carrying 25 pounds (moderate certification). Chesterfield County Fire Department (CCFD) provided an ambulance for medical standby. Afterward, a classroom session was held with presenters from the U.S. Fish and Wildlife Service (USFWS) and The Nature Conservancy (TNC) introducing changes to the Incident Response Pocket Guide, reviewing the 10 Standard Firefighting Orders and the 18 Watch-Out Situations, and discussing lessons learned from the previous year. After lunch, the group rotated through four field practical stations: fire shelter deployment, patient transport using a rescue basket, UTV preparation, and firing techniques. Participating agencies and organizations included DCR, Department of Game & Inland Fisheries, DOF, TNC, USFWS and CCFD.



Adam Wilson (CCFD and DCR) instructs the group on using a rescue basket with a UTV at The annual Eastern Fire Refresher at Pocahontas State Park.

After months of planning, preparation, and delays due to incessant rainy weather, on December 4, 2018 DCR Natural Heritage staff led by Rebecca Wilson with support of key partners conducted a 120-acre site preparation prescribed burn on the Cheroenhaka Tract at Cypress Bridge Swamp Natural Area Preserve in Southampton County near the town of Courtland. Completion of this burn opened the door to plant 65,000 Virginia native longleaf pine seedlings – accomplished during the period December 29-31. This project was and will continue to be a challenge due to its location between busy U.S. 58 and a 65-unit mobile home neighborhood. This is the 6th longleaf pine restoration project initiated on lands of the state natural area preserve system and may be the most complex and significant. Virginia-source longleaf seedlings were established on land now owned by the Cheroenhaka (Nottoway) Indians, beginning restoration of historic fire-maintained natural communities similar to those inhabited by their ancestors. Many persons and organizations contributed, with DCR’s Public Communications and Marketing Office staff playing a pivotal role to communicate DCR’s intentions and actions at this highly visible site. VDOT provided Portable Message Boards to warn motorists of smoke along U.S. 58. Other key players included the Town of Courtland; Southampton County Sheriff’s Department; Courtland Volunteer Fire Department; Virginia Department of Forestry (DOF); Natural Resources Conservation Service; Curtis Contracting; TransCanada Corp.; Davis Logging; Jerry Rose Logging; Massie Contracting; Superior Forestry Services; and Cheroenhaka (Nottoway) Tribal Indian Heritage Foundation. As always, extensive interagency cooperation made the burn possible, with a burn crew from DCR Natural Heritage and State Parks, The Nature Conservancy, U.S. Fish and Wildlife Service, DGIF and DOF.



Longleaf pine restoration at Cypress Bridge Swamp NAP – Cheronhaka (Nottoway) Tract near Courtland.

On February 7, 2019 DCR’s Longleaf Pine Restoration Specialist, Southeast Region Steward and Chesapeake Bay Region Steward met with fire management partner staff at the Department of Game and Inland Fisheries, Department of Forestry and The Nature Conservancy to plan for upcoming 2019 prescribed fire operations. The meeting focused on collaboration and training opportunities, fire staffing, funding opportunities, potential impacts of federal government shutdowns, and upcoming projects to be completed during the spring burning season. This group of interagency partners meets several times a year to maintain communication, ensure positive partnership opportunities and coordinate resource sharing. The meeting was held in the conference room of the Petersburg Public Library.

During the week of March 11-14, 2019, DCR’s Natural Heritage staff and their eastern fire partners took advantage of the first dry weather days in months to burn over 1,000 acres, including a critical longleaf pine restoration burn at Chub Sandhill Natural Area Preserve. The following prescribed burn projects were completed during this week: 176 acres (grasslands) at Rappahannock River National Wildlife Refuge (USFWS lead); 14 acres (grasslands) at Lands End Wildlife Management Area (DGIF lead); 550 acres (longleaf pine restoration) at Raccoon Creek Easement (TNC lead); 30 acres (longleaf pine restoration) at Isle of Wight County Easement (DOF lead); 205 acres (longleaf pine restoration/endangered species habitat maintenance) Piney Grove Preserve (TNC lead); 107 acres (longleaf pine restoration) at Chub Sandhill Natural Area Preserve (DCR-DNH lead).



DCR Natural Heritage staff and their interagency fire partners completed over 1,000 acres of prescribed burns during the week of March 11 to maintain open grasslands and young, restored stands of longleaf pine.

Natural Area Preserve Stewardship

On October 18, 2018, DCR Natural Heritage staff and partners from DOF, DGIF, ODU, NRCS, USFWS, TNC, plus private landowners, met at DOF's Garland Gray Forestry Center in Sussex County for a meeting of the Virginia Longleaf Pine Cooperators. This group meets annually to discuss and coordinate longleaf pine restoration projects in Virginia, sharing success stories and tracking grant project progress and accomplishments. Highlights for 2018 include the first large scale production of native Virginia longleaf pine seedlings grown at DOF's Garland Gray Forestry Center from seed collected at DCR's South Quay Sandhills Natural Area Preserve. Over 70,000 containerized longleaf pine seedlings were grown during the summer. After the meeting, the group toured the seedling production site, then traveled to DCR's nearby Cherry Orchard Bog Natural Area Preserve to see progress at one of many southeastern Virginia longleaf pine restoration sites.



The Virginia Longleaf Pine Cooperators met on October 18, 2018 - the same day that the first production crop of longleaf pine seedlings grown in Virginia was brought in for packaging at DOF's Garland Gray Forestry Center.

On March 14, 2019, DCR Eastern Shore Region stewardship staff completed a migratory songbird habitat restoration project on the recently acquired Medlin tract at Magothy Bay Natural Area Preserve (MBNAP). Staff, with the assistance of volunteers from the Virginia Master Naturalist Eastern Shore Chapter, planted 1,153 wax myrtle shrubs and 159 oak saplings on 52 acres of former agricultural fields at MBNAP in Northampton County. The Southern Tip of the Delmarva Peninsula, where the preserve is located, is globally recognized as an important stopover area for neotropical songbirds during the autumn migration period.

Migratory songbirds require appropriate stopover habitat for rest and to replenish fat and nutrients before crossing the Chesapeake Bay and continuing south to their wintering grounds. This newly restored habitat will provide cover and perches in the near term. As birds bring in ingested seeds from their preferred tree and shrub food plants and these species become established, the site will develop into a mixed hardwood/pine coastal forest providing ideal stopover conditions. Funding for this restoration project was provided by NOAA through the Virginia Coastal Zone Management Program.



Both waxmyrtle shrubs (left) and sapling-sized oaks (right) were planted at the Medlin tract of Magothy Bay Natural Area Preserve on the Eastern Shore to begin the process of restoring another 52 acres of migratory bird stopover habitat.

In March of 2009, an “Alternative Spring Break” group from Rochester University (NY) arrived on the Eastern Shore to assist with a public service project. These 24 student volunteers had contacted DCR’s Eastern Shore natural areas stewards, who were gearing up to start work on a habitat restoration project at a newly acquired portion of Magothy Bay Natural Area Preserve (NAP). A crew of strong, enthusiastic workers was exactly what was needed! During their week-long stay on the Shore, these hard-working students helped to plant 4,080 wax myrtle shrubs on 85 acres of former farm fields at Magothy Bay NAP, plus another 1,680 shrubs at Mutton Hunk Fen NAP. The following year, the group returned to plant an additional 1,920 shrubs. On March 15, 2019, two of the students contacted Eastern Shore Region Steward, Dot Field, to arrange a visit to Magothy Bay NAP, in order to view the fruits of their labor from 10 years ago. On March 23, 2019 they were able to see how their labors from a long ago spring break experience had restored habitat and benefited countless migratory songbirds.



In 2009, 24 student volunteers from Rochester University (left) helped DCR staff plant wax myrtle shrubs at Magothy Bay Natural Area Preserve. Now 10 years old, planted shrubs and other native plants are providing habitat for migratory songbirds on the Eastern Shore. Two students (right) returned in 2019 to see the results.

Invasive Species

In early October 2018, the Natural Heritage Southeast Region Steward, Darren Loomis, worked closely with staff from DCR State Parks to treat 90 acres of the invasive *Phragmites australis* (common reed) at North Landing River Natural Area Preserve in the City of Virginia Beach. This invasive form of *Phragmites*, introduced from Europe, has become the dominant plant species in many marshes along the U.S. east coast where it crowds out native vegetation and reduces plant community diversity and wildlife habitat quality. Using a helicopter, a contracted aerial applicator treated portions of the Preserve taken over by *Phragmites* using a wetland-approved herbicide. Natural Heritage worked closely with State Parks to procure services of a single contractor who treated both park and preserve lands in southeast Virginia.





DCR's aerial contractor treated invasive Phragmites in marshes at North Landing River Natural Area Preserve during Oct. 2018.

Information Management

On Thursday, December 6, 2018, Natural Heritage Data and GIS Specialist Danielle Kulas gave a webinar to NatureServe Network data managers. The webinar featured the Virginia Natural Heritage Program's Field Data Entry Access Database and bulk upload of data into Biotics, a web-based information management system that maintains data related to biological diversity used by Natural Heritage Programs. Access database function and structure was discussed, followed by a demonstration of the Access Database itself (interface pictured). A workflow for the bulk importing into Biotics process was outlined and then demonstrated using real field data. Limitations of the database were outlined, in addition to desired improvements, and potential for further efficiencies were identified which will be explored through the help of NatureServe and other webinar attendees. Integration of these data organization and preparation methods to the access database have produced time-saving efficiencies when working with data for bulk upload, which can be tedious and time consuming. Over 40 people attended the webinar, and materials will be posted for the use of NatureServe Network programs. Similar subsequent webinars in the coming months will feature efficiencies unique to other Natural Heritage Programs across the network. This collaborative endeavor aims to result in cross-pollination among programs of ideas and data processing tricks related to ever-evolving Biotics functionality.

Field Data Access Database for Biotics

Version 1.7 Copyright © 2014, 2016

User:

NEW <small>(Not previously entered in Access, may exist in Biotics)</small>	VIEW/EDIT <small>(Previously entered in Access and/or Biotics)</small>	REPORTS	ADMIN TOOLS	DM TOOLS
SITE		SITES	DELETE RECORDS	DM ENTRY
EO		EO - w/ SF by Site	BIOTICS READY	Export Data for Bulk Create/Replace
SRC FEAT			Open User Guide	
REF CODE			Update EO_ID and EST Lookup Tables	
Import Tools			Last Update: <input type="text" value="11/15/2018 4:27:47 PM"/>	
Import Route Taken data to Reference DB			CLOSE DATABASE	








Developed by Red Thompson and Megan Rollins

Outreach and Education

In October 2018, a Healthy Waters Program (HWPP) presentation was provided to the VCU graduate level Scenic Resources Policy and Assessment class at the VCU Rice Rivers Center during the class's in-field assessment of the Chickahominy River. The presentation outlined the HWPP, our partnership based approach to implementation, our assessment methods, the ranking of data and how those data inform activities at the DCR Natural Heritage Program and guide Scenic Rivers identification. The course is co-taught by Lynn Crump from DCR Planning and Recreation Resources, and VCU's Dr. James Vonesh.



Healthy Waters program manager Todd Janeski presents to VCU graduate students at VCU's Rice Rivers Center

On the weekend of October 6-7 2018, Natural Heritage staff assisted the Virginia Native Plant Society with their annual meeting in Williamsburg, hosting field trips to nearby sites of botanical interest. On Saturday morning, Chesapeake Bay Region Steward Zach Bradford gave a tour of Grafton Ponds Natural Area Preserve in York County, Virginia. The 375-acre preserve is owned by Newport News Waterworks and protects some of Virginia's finest seasonal depression ponds as well as the rare plants, animals, and natural communities that occur there. The following morning, Vegetation Ecologist Gary Fleming led a trip along a one-mile nature trail at the New Kent Forestry Center. The site, owned by the Virginia Department of Forestry, features the diverse bottomlands of the Chickahominy River, containing excellent examples of bald cypress – tupelo swamp, Coastal Plain bottomland hardwoods, a “swamp island” upland hardwood forest, and a fluvial terrace sandhill woodland, along with several state-rare plants.



Swamp forest at New Kent Forestry Center

DCR-Natural Heritage' Natural Area Protection Manager, Rob Evans, gave a presentation to the Fairfax County Park Authority on October 24, 2018. The talk focused on the legislative mandate of the Natural Heritage Program and how Natural Heritage staff applies scientific methods and data standards to documenting, tracking, sharing data on, and seeking protection for natural heritage resources across the Commonwealth. In addition, the presentation highlighted several natural heritage resources with statewide or even global significance.



Fairfax County Treasures!

 <p>Rough Hedge-nettle (<i>Stachys aspera</i>) 1 of only 3 viable pops</p>	 <p>Field Chickweed (<i>Cerastium velutinum</i> var. <i>velutinum</i>) – VA best pop; only 6 documented</p>	 <p>Ostrich Fern (<i>Matteuccia struthiopteris</i> var. <i>noveboracensis</i>) – only 2 extant VA populations</p>	 <p>Torrey's Mountain-Mint (<i>Pycnanthemum torreyi</i>) <i>Globally rare & in real trouble!</i></p>
 <p>Purple Milkweed (<i>Asclepias purpurascens</i>) – VA's best population</p>	 <p>Piedmont Mafic Barren – Imperiled Globally (10 documented examples)</p>		 <p>Pink valerian (<i>Valeriana pauciflora</i>) VA only extant population</p>

Examples of natural heritage resources documented in Fairfax County, with a note on their statewide or global significance

During September and October 2018, DCR-Natural Heritage Project Review Coordinator, Rene’ Hypes, participated in four different training sessions (Farmville, Charlottesville, Wytheville and Prince George) for 30 different Soil and Water Conservation Districts (SWCDs). The training was conducted with other resource agencies including the Virginia Department of Game and Inland Fisheries and the Department of Historic Resources focusing on the use of the DCR Conservation Planner, a preliminary environmental screening tool developed by the DCR Soil and Water Division. The SWCDs will use the resource data tool to determine if there are any potential impacts from proposed agriculture water quality improvement projects on rare species populations and natural communities. If potential resource conflicts are identified, SWCD staff will coordinate with the resource agency to resolve any issues. For potential impacts to the subset of natural heritage resources included in the DCR Conservation Planner Tool, projects will be coordinated through the Natural Heritage Data Explorer for further review.



Resource Training for SWCDs

On November 3, 2018, DCR’s Longleaf Pine Restoration Specialist (Rebecca Wilson) and Eastern Shore Stewardship Technician (Brooke Rodgers) teamed up with partners from USFWS, DOF, TNC and ODU to represent the Virginia Longleaf Pine Cooperators (VLPC) at an outreach event at Norfolk Botanical Garden (NBG). This event was part of a one-day symposium at NBG called "*Shifting Landscapes: Tradition & Trends*" which celebrated 80 years of horticulture in Virginia. Longleaf pine brochures, rack cards, flyers, posters, booklets, cones, and seedlings were all on display. In addition, a longleaf pine stem section containing an abandoned red-cockaded woodpecker nest cavity, plus a living 10-year old longleaf pine, were on hand to help interpret the history of longleaf pine in Virginia. Longleaf pine cones and seedlings from native Virginia trees were given to interested participants. VLPC members answered questions and promoted the many conservation

values of longleaf pine. The VLPC are dedicated to restoring the ecological, economic, cultural, historical and recreational values of the native longleaf pine forests of southeastern Virginia, and to providing technical expertise to help landowners achieve success with their longleaf pine restoration efforts.



Participants, both young and old, learned about the history of longleaf pine in Virginia at an outreach event at the Norfolk Botanical Garden.

On November 7, 2018, DCR's Northern Regional Supervisor, Michael Lott, led a hike at Crow's Nest Natural Area Preserve for members of the Potomac Appalachian Trail Club (PATC). After a brief introduction about the Natural Heritage Program and Crow's Nest, the group hiked the Accokeek Loop, Crow's Nest Point and Boykin's Landing trails. At various locations, the group stopped to learn about the cultural and natural history of the Crow's Nest Peninsula. Approximately 30 members of the club attended the hike, coming from as far away as Maryland, Washington D.C. and Front Royal. This was the first visit to Crow's Nest for many of the participants, and was also an introduction to the State Natural Area Preserve System and the work of DCR's Natural Heritage Program.



Potomac Appalachian Trail Club members at Boykin's Landing (left) and on the Crow's Nest Point Trail (right).

On November 13, 2018, Northern Regional Supervisor, Michael Lott, gave presentations on the ecology of Crow's Nest Natural Area Preserve to two Ecology classes and the Science Club at Mountain View High School in Stafford County. After a brief introduction to DCR's Natural Heritage Program, the presentation focused on the cultural history of the Crow's Nest peninsula and the conservation efforts leading to its protection and dedication as the Commonwealth's 54th state natural area preserve. The presentation also highlighted the ecological characteristics of the preserve, its management and recreational opportunities, plus the various on-going conservation efforts at Crow's Nest. Approximately 70 students and faculty attended the three presentations.



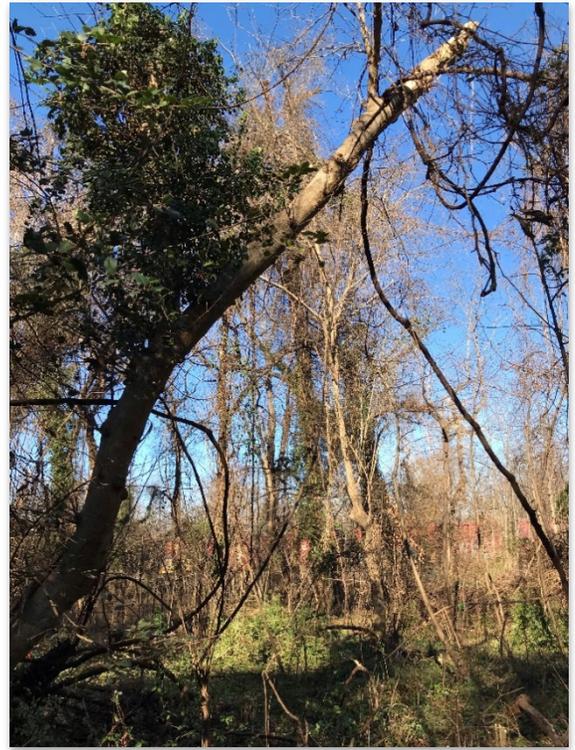
Recent wildlife photos taken at Crow's Nest, including an Eastern Newt (left) and a Cedar Waxwing (right).

On October 23, 2018, DCR's Chesapeake Bay Region Steward, Zach Bradford, gave a talk about Virginia's rare orchids to 40 members of the Chesapeake Bay Garden Club. On November 15, Zach again made the presentation for 20 members of the John Clayton Chapter of the Virginia Native Plant Society. These presentations, entitled "*Virginia's Vanishing Orchids*," introduced attendees to Virginia's 62 native orchid species with an emphasis on the 27 species listed as rare and tracked by DCR's Natural Heritage Program. Threats to orchids, including habitat destruction, fire suppression and invasive species were discussed. The presentation closed with a peek at some of the orchids occurring in neighboring states and that may occur, undetected to date, in Virginia.



Early coralroot (Corallorhiza trifida), a boreal orchid species first found in Virginia in 2015 in Nelson County. Note aphid on upper flower (for scale).

On December 18, 2018, volunteers from Natural Heritage and Public Communication and Marketing Office (PCMO) traveled across the James River to the Heritage Half-Acre to remove invasive species. Removal efforts focused primarily on English ivy and Privet. After two hours of work, the last large section of privet had been removed, and a sizeable rock outcrop had been cleared of ivy. All of the ivy has now been cut on the trees within the half-acre, and the vast majority of privet has been cut; another great volunteer effort at the Heritage Half-Acre.



Before (left) and after invasive removal (right).



DCR Natural Heritage and Public Communications staff at Reedy Creek.

On Tuesday, January 8, 2019, DCR’s Chesapeake Bay Region Steward, Zach Bradford, gave a talk about Virginia’s Natural Heritage Program to over 20 members of the Northern Neck Master Naturalists. The presentation provided a brief history of the program, introduced attendees to Virginia’s Natural Area Preserve system, and discussed various components of natural area stewardship. The natural heritage resources and special management concerns of the four Natural Area Preserves on the Northern Neck, Bush Mill Stream, Dameron Marsh, Hickory Hollow, and Hughlett Point, were discussed in more detail. Virginia’s 63-strong Natural Area Preserve system protects some of Virginia’s most imperiled plants, animals, natural vegetation communities, and geologic features.



Hughlett Point Natural Area Preserve in Northumberland County on Virginia's Northern Neck.

On Saturday, February 2, 2019, Natural Heritage administrative staff member, Morgan Obenchain, set up a table at the local grocery store, Good Foods Grocery, to distribute information cards and answer questions about the Natural Heritage Program. From 11:00-3:00, customers were encouraged to learn and ask questions about this program. Natural Heritage's new information cards were also handed out to many shoppers. These new rack cards alternate featuring 9 unique Natural Area Preserves with a protected species spotlighted. The back of these cards give information about the pictured preserves/species and provides guidance on how to give a tax-deductible donation to the Natural Area Preservation Fund. A big thanks is given to Good Food Grocery for helping to facilitate this event and being a big part of its success.



Morgan Obenchain, giving out information and distributing Natural Heritage rack cards.

On February 5-6, 2019, Eastern Shore Regional Steward and Research Coordinator, Dot Field and Locality Liaison, Tyler Meader attended the Marsh Resilience Summit in Williamsburg. The summit focused on sea level rise and marsh response, with presentations on a wide variety of topics including the role of watershed sediment supply to marsh resilience, legal and policy challenges for marsh protection and migration, beneficial use of dredge spoil in rebuilding marshes, and ecosystem services provided by healthy marshes. While many of the presentations had implications for the natural heritage resources that rely on marsh habitat, two presentations in particular stood out. Dr. Celso Ferriera from George Mason University presented "Storm surge and wave attenuation benefits of marshes in the Chesapeake Bay" which highlighted his research at DCR Magothy Bay Natural Area Preserve (NAP) and DCR Dameron Marsh NAP. The summit proved to be a great

networking opportunity for promoting research at NAPs. In a presentation titled “Human Health Benefits of Coastal Wetlands”, Dr. Ariana Sutton-Grier from the University of Maryland and The Nature Conservancy discussed the evidence of health benefits from human exposure to biodiverse areas. Her powerpoint presentation can be viewed here: <https://f1000research.com/slides/1097461> and two of her recent papers on the topic can be found here: <https://link.springer.com/article/10.1007/s13157-018-1039-0> and https://www.grahamrook.net/resources/Sandifer_ecosystem-services_15.pdf . For anyone whom finds themselves talking to the public and policy makers about the mission of the Natural Heritage Program and the value of conserving biodiversity, this human health research may be another important talking point about the value of biodiversity conservation.

On February 8, 2019, Michael Lott, Northern Regional Supervisor and Blake Gostelow, Northern Region Natural Area Stewardship Technician, completed the annual great blue heron nest count within the Potomac Creek Heronry at Crow’s Nest Natural Area Preserve. Stafford County and the Northern Virginia Conservation Trust (NVCT) staff assisted. The heronry is located primarily on a NVCT-owned tract dedicated as a new addition to the preserve in 2018. A total of 220 heron nests were counted this year – a decrease from 258 a year ago. This decrease may reflect impacts from strong storms during summer 2018, plus a high wind event in the fall that blew some nests from their trees. DCR Natural Heritage staff plan a second survey in April using an unmanned aerial vehicle (UAV). Results will be compared with the ground-based count to refine methods for monitoring heron nesting activity.



The heronry nest count team at Crow’s Nest Natural Area Preserve.

On March 8, 9 and 10, 2019, DCR-Natural Heritage Information Manager, Office Manager and Director, hosted a Virginia Natural Heritage display table at the Banff Mountain Film Festival World Tour screening at James River High School in Chesterfield County. The Banff Mountain Film Festival is an international film competition of short films and documentaries about mountain culture, sports, and the environment, which takes place every year in the town of Banff, in Alberta, Canada. Winning films – this year, 36 of them – are taken on a worldwide tour to share. Sellout crowds of over 1,000 each night attend at James River High. Before the films and during intermission, attendees peruse about twenty tables from area conservation- and recreation-focused organizations. Natural Heritage staff spoke with citizens about the work of DCR-Natural Heritage where there was a great deal of interest in, and questions answered about native pollinators.



Virginia Natural Heritage display at the 2019 Banff Mountain Film Festival.

On March 14, 2019, DCR's Northern Regional Supervisor, Michael Lott, presented information on the ecology and management of Crow's Nest Natural Area Preserve to three Ecology classes at Mountain View High School in Stafford County. After a brief introduction to DCR's Natural Heritage Program, the presentation focused on the cultural history of the Crow's Nest peninsula and recent conservation efforts that resulted in the protection and dedication of Crow's Nest as Virginia's 54th state natural area preserve. The presentation included information about ecological characteristics of the preserve, plus invasive species, recreational opportunities and continuing conservation efforts at Crow's Nest. Approximately 70 students and faculty attended the three presentations.



Michael Lott presents about DCR's management of Crow's Nest Natural Area Preserve to Mountain View High School (Stafford) students and faculty.

The annual revision to the list of rare plants of Virginia has been published and can be accessed along with similar lists of animals and plant communities on the DCR-Natural Heritage web page (<http://www.dcr.virginia.gov/natural-heritage/infoservices#lists>). This list is the latest version of a document that has been continually refined since the late 1980s, and includes rarity ranks for nearly 700 species of

vascular plants, mosses, liverworts, and lichens of conservation concern. These ranks are based upon data gathered by Natural Heritage botanists in the field, in museum collections, and during examination of the scientific literature.

On March 28, 2019, seven staff members from the DCR Division of Natural Heritage and one staff member from the Public Communications and Marketing Office participated in an on-going invasive species removal project at the “Heritage Half Acre”. The Heritage Half Acre is a half-acre of land in the James River Park System that has been adopted by the DCR Natural Heritage Program with the goal to clear the space of non-native, invasive plant species and, hopefully, allow the native seed bank to take root and flourish. The group focused their efforts this time on clearing some the remaining Chinese privet and hand pulling the ubiquitous English ivy and winter creeper.



DCR staff working on the “Heritage Half-acre”

On March 23, 2019, DCR’s Northern Regional Supervisor, Michael Lott, led a hike at Crow’s Nest Natural Area Preserve (NAP) for students from Mountain View High School (MVHS) in Stafford County. These students had recently completed a section on Forest Ecology in their Learn and Serve class. After a brief overview about the Natural Heritage Program and Crow’s Nest NAP, the group hiked the 3-mile Accokeek Loop Trail. At various stops along the way, students heard about the natural history of the Crow’s Nest Peninsula including information on soils, plant communities, invasive species, and ecosystem services. Ten students and their teacher attended the hike. For most participants, this was their first visit to Crow’s Nest and first time hearing about the work of DCR’s Natural Heritage Program. In addition to the MVHS students, a local middle school group plus several hiking clubs from northern Virginia visited the preserve during the same weekend. For a short period on both March 23rd and 24th, the Raven Road access parking area reached capacity. As a result, some visitors had to be invited to return later when parking was available.

Land Conservation

Thanks to the efforts of some very important partners, the Virginia Natural Area Preserve system grew to 57,034 acres with recent additions to South Quay Sandhills and Mount Joy Pond. The first was the Somerton Creek tract at South Quay. The Nature Conservancy carried the water from start to finish on this one, securing funding from the North American Wetland Conservation Act Grant Program and the Virginia Land

Conservation Fund to purchase the property from International Paper Company (IP). This 167-acre tract fills a gap in the southeast corner of the preserve, protecting an area of high quality bottomland forest and a patch of sandy-scrubby-piney uplands suitable for restoration to longleaf pine. As part of the deal, which required remarkable finesse and patience, TNC also acquired from IP a large adjoining tract across the state line as an addition to the North Carolina game lands. The Nature Conservancy is currently the owner of the Virginia section with DCR holding a deed of natural area dedication and open space easement.



Somerton Creek. New addition on left and pre-existing protected section of South Quay SandhillsNAP on right.



Upland portion of Somerton Creek tract

The Mount Joy Pond addition was made possible by the conservation-minded couple Sally Anderson and Richard Cooper, who, when alerted to the fact that a key 85-acre tract adjacent to the preserve was on the market, quickly purchased the property with the hope, but no promise, of transferring the tract to the state. The Virginia Native Plant Society (VNPS), using a grant from the DuPont settlement, purchased the property from Anderson and Cooper and dedicated it to the preserve system. VNPS intends to transfer title to DCR.



Latest addition to Mount Joy Pond Natural Area Preserve

Thanks to the collaborative efforts of DCR’s key conservation partners, the Virginia Natural Area Preserve System grew to 57,104 acres with a recent addition to Crow’s Nest Natural Area Preserve. A 70-acre tract adjacent to Crow’s Nest and owned by the Northern Virginia Conservation Trust (NVCT) has been added to the preserve, permanently protecting the majority of the Potomac Creek Heronry – one of the larger Great Blue Heron (*Ardea herodias*) breeding sites in the Chesapeake Bay region. This tract was acquired by NVCT in 1997 as mitigation for wetland impacts associated with the construction of Stafford County Airport. Since 2007, staff from Stafford County, DCR and NVCT have monitored nesting trends at the site. Annual nest counts typically have ranged between 250 and 350, with most nests located in mature American sycamores. In addition to the heronry, this key addition Crow’s Nest also protects important bottomland forest along Potomac Creek plus adjacent uplands. NVCT retains ownership of the tract, while DCR holds a deed of natural areas dedication and open space easement. The two organizations will share on-going stewardship responsibilities, as outlined in a recently completed management plan for the addition tract.



Great Blue Herons nesting at the Potomac Creek Heronry Tract addition to Crow's Nest Natural Area Preserve during the 2018 breeding season.

Natural Heritage Data Management Totals for FY2018:

Activity 10-1-18 – 3-31-19

New Mapped Locations (EOs) – 44
 Updated Mapped Locations (EOs) - 142
 New Conservation Sites – 30
 Updated Conservation Sites – 70

Total Number in Database 3-31-19:

Animal Mapped Locations (EOs) – 622
 Plant Mapped Locations (EOs) – 1260
 Community Mapped Locations – 604
 Conservation Sites – 621

Managed Areas: (Acres added 10-1-18 – 3-31-19) – 7,332.64 Acres
 Mapped Tracts: (total in coastal zone) – 54 Tracts
 Mapped Managed Areas: (total in coastal zone) - 44 Managed Areas

Healthy Waters

For the grant reporting period, the Environmental Scientist/Analyst with the Virginia Commonwealth University, Center for Environmental Studies in the Department of Life Sciences continued to serve as the Program Manager of the Virginia Healthy Waters Program at the Virginia Department of Conservation and Recreation, Division of Natural Heritage.

The Healthy Waters Program (HWP) is supported through funding from several grant sources including the VA CZM Section 306, US EPA Section 319 Nonpoint Source Program, and the Chesapeake Bay Implementation Grant. These sources fund various aspects of the Program including the administration and oversight, Program growth and expansion, improvement in capacity, acquisition and analysis of new data and data integration.

Programmatically, data integration, geographic expansion and data re-sampling continue to be the top focal areas of the analysis with immediate attention addressed to integrate existing INSTAR data into the DNH database and the creation of new Element Occurrences (EOs) and Stream Conservation Units (SCUs).

Challenges to administering the Program are development of new data to complete the statewide coverage, and the resource and staffing needs to conduct field assessments. Due to an intensely wet spring and summer, INSTAR sampling was not conducted to the intensity as the norm. Therefore, the Heritage staff involvement with the VCU field crew to collect INSTAR data was limited. However, this increased capacity in the program advances the program within the Division of Natural Heritage.

The Program Manager continued to advance the vulnerability assessment of the 2014 HWP sites in the Chesapeake Bay. The outcome is an identified list of HWP sites that are most vulnerable to changes and most likely to be lost to future changes to meet the goal of protecting 100% of the 2014 list by 2025. Developing an analysis, prioritizing statewide SCUs and the vulnerability assessment of existing healthy water sites has continued and bridges the DNH Sections of Healthy Waters, Protection and Stewardship. The analysis and prioritization of the SCUs are to result in an identification of those SCUs deemed “most valuable” to guide conservation planning on a watershed scale ensuring ecologically healthy aquatic conditions are maintained. Conservation planning on a watershed basis would be a divergent from the opportunistic approach under which some conservation actions are achieved. Coordination with DCR and VCU has been initiated to develop the justifiable background for advancing conservation actions.

To support programmatic expansion and capacity development, the VDCR HWP developed and submitted a proposal to the US Endowment of Forestry and Communities to support the Healthy Waters Program. That proposal included a field position that would directly work in support of conservation and protection actions to ensure ecologically healthy aquatic conditions are maintained under the Healthy Waters Program and would have established a land trust to manage those protected resources. This project, if funded, will enable significant on-the-ground capacity to assist in land protection strategies to protect ecologically healthy waters. Project partners included APNEP, DEQ, TNC, NCDNR and the private sector.

The HWP Manager met with faculty to discuss integrating the HWP into the Scenic Rivers Course for the Fall, 2018 semester. The results of which included a direct presentation to the course at the VCU Rice Rivers Center communicating the background of the Program and conservation planning fundamentals.

c) DCR – Division of Planning and Recreational Resources

This report lists projects and activities conducted by the Department of Conservation and Recreation, Division of Planning and Recreational Resources during this period that were not funded by or otherwise reported to the VCZMP

In January 2019, the 2018 Virginia Outdoors Plan (VOP) was published. The VOP is the state’s official guide for meeting Virginia’s outdoor recreation and land conservation needs. The plan is produced every 5 years.

Through a task agreement with the National Park Service, DCR has completed scenic evaluations along water trails in the Northern Neck. A story map captures photos from each site along with view importance. The map is available

at <https://vdcr.maps.arcgis.com/apps/MapSeries/index.html?appid=77df940f8928452f9094eae21ab77e1>

Work is underway to finalize the James River Heritage Trail concept plan, which will be presented at the River Management Society's conference in Richmond in May of 2020. Staff is supporting this conference, which will highlight the 50th anniversary of Virginia's Scenic Rivers Program. The conference could highlight management of rivers, water trails and riparian trails within the Chesapeake Bay Watershed.

The Scenic Rivers Program initiated a 50th anniversary celebration effort in preparation for the 50th anniversary of the program in VA in 2020.

5) Department of Game and Inland Fisheries (DGIF)

Environmental Services

Tidal Surface Water Intake Proposals

VDGIF's Environmental Services Section (ESS) is responsible for reviewing permit applications, policy changes, land use changes, NEPA documents, land development projects, water supply or intake projects and other items to ensure avoidance of impacts upon threatened, endangered, and tiered species; designated wildlife resources; and any of the programs or resources over which we have jurisdiction or our constituents have an interest. Notable during this reporting period is that VDGIF's ESS staff has been working closely with VDEQ and VMRC on a number of recently proposed tidal river intakes. Tidal intakes represent a different suite of possible wildlife impacts than their non-tidal, entirely freshwater counterparts, requiring VDGIF ESS and Aquatic staff to stretch their tidal systems understanding. One that recently popped up is from the County of Prince George's proposal for an intake on the lower Appomattox River. ESS also has reviewed a number of private and commercial development projects, energy projects, and road projects within the coastal zone during this reporting period.

Wetlands

Mitigation Banking

VDGIF continues to participate on the Inter-Agency Review Team that oversees stream and wetland mitigation banking and provide input on new banks all over Virginia, including the coastal zone. Numerous proposals have been made for new banks and/or additions to existing banks within the coastal region of Virginia during this reporting cycle.

NonGame Species Monitoring and Research

Spotted turtles

The following is a list of activities for the period of October 1, 2018 through March 31, 2019 for the Spotted Turtle Competitive State Wildlife Grant. Telemetry of 20 spotted turtles (*Clemmys guttata*) was conducted weekly through the end of November until turtle movement slowed due to low air and water temperatures. The capture-mark-recapture (CMR) study commenced mid-October 2018, with five traps being set in 4 plots. The CMR study was delayed until late October because the landscape conditions were too dry to set all traps out in the plots until the vernal pools and roadside ditches began retaining water again. Trapping was conducted for three weeks, with traps being checked daily and rebaited. Within this three-week period, water temperatures were ~13 degrees Celsius, resulting in the capture of only one turtle on the last day of trapping. Traps were removed from the study sites after these three weeks, and telemetry was reduced to locating the turtles once in December 2018, and then every two weeks starting mid-January 2019 until egression from hibernation in March. Trapping began again in the second week of March 2019 with two unmarked spotted turtles being captured by hand and four unmarked turtles being captured via traps during this first week of trapping, along with some previously marked spotted turtles. Trapping will continue for six consecutive weeks ending the second to last week of April.

American Oystercatcher Winter Surveys

The VDGIF, The Nature Conservancy – Virginia Coast Reserve and the USFWS did not conduct an annual winter American Oystercatcher survey in 2017 due to unfavorable weather conditions.

Piping Plover Fall Migration Surveys

From July 16 – October 19, 2018, DGIF and staff from The Nature Conservancy - Virginia Coast Reserve and Chincoteague National Wildlife Refuge conducted piping plover fall migration surveys on 10 sampling plots

along the Virginia barrier island chain. The purpose of this effort was to quantify the number of plovers utilizing the barrier islands during the fall migratory period, look for banded individuals to assist with survival studies and establish length of stay in Virginia, and assess human impacts at critical stopover locations. Fifty-four surveys were completed, which yielded 187 observations of one or more piping plovers. A total of 574 plovers were counted during the survey period. Band codes and color band combinations were accurately recorded for 31 uniquely marked individuals. Only seven of the 31 banded birds were observed more than once this season. The longest length of stay by a banded bird was 56 days (July 31 – September 25, 2018) on Assateague Island. The largest flocks (10 or more birds) were observed on Assateague, Assawoman, Metompkin and Ship Shoal islands primarily in the ocean intertidal zone.

Shorebird BMP Workshop

On March 7, 2019, VDGIF and the CZM helped plan and hosted a shorebird BMP workshop at the Chesapeake Bay Foundation's Brock Environmental Center in Virginia Beach, VA. The workshop was funded by the NFWF and facilitated by Manomet, a non-profit conservation organization, and the Coastal States Organization. The purpose of the workshop was to explore opportunities to restore, enhance and/or create shorebird habitat in coastal Virginia. A broad spectrum of conservation and regulatory agencies and scientists discussed ways to integrate shorebird best management practices into the permitting and planning of shoreline management and coastal engineering projects. Two major action items identified during the workshop were (1) to map key coastal shorebird areas identified by workshop attendees to raise awareness for the need to protect, restore and/or create suitable habitat in these areas; and (2) to piggyback on an effort by VIMS and CZM to develop a database of fully formed shovel ready project proposals that can be submitted as soon as funding becomes available.

Atlantic Slope Freshwater Mussel Propagation

The Virginia Department of Game & Inland Fisheries continues its cooperative Atlantic Slope freshwater mussel propagation facility with the U.S. Fish & Wildlife Services' Harrison Lake National Fish Hatchery in Charles City, marking the 12th year of production and 13th year of operation at the Virginia Fisheries and Aquatic Wildlife Center (VFAWC). Propagation for the 2019 season began with collection of mussel broodstock in March. VDGIF has collected 139 individuals of ten species from six rivers (Table 1).

In mid-March, VFAWC collected gravid Triangle Floater (*Alasmidonta undulata*) and Creeper (*Strophitus undulatus*), from the South River, Augusta County, Alewife Floater (*Utterbackiana implicata*) and Tidewater Mucket (*Leptodea ochracea*) from the Rappahannock River, King George County, and Eastern Pondmussel (*Ligumia nasuta*) from the Nottoway River, Southampton County. VDGIF's partners with the Anacostia Watershed Society collected Eastern Lampmussel (*Lampsilis radiata*), Alewife Floater, and Eastern Pondmussel from the Anacostia River, Washington D.C. The Partnership for the Delaware Estuary collected Alewife Floater and Eastern Pondmussel from the Delaware River, Bucks County, Pennsylvania. In late March, VFAWC returned to the Nottoway River to collect Yellow Lampmussel (*Lampsilis cariosa*) and Tidewater Mucket. Most recently, we collected Brook Floater (*Alasmidonta varicosa*), Creeper, Triangle Floater, Green Floater (*Lasmigona subviridis*), and Plain Pocketbook (*Lampsilis cardium*) from the Cacapon River, Morgan County, West Virginia. Additional collections are in progress and will end in June after collection of the short-term brooding species, Atlantic Pigtoe (*Fusconaia masoni*) and James Spiny mussel (*Parvaspina collina*) (Table 1).

VDGIF began propagation this season by utilizing *in vitro* propagation of three gravid Creeper from the South River. In this method of propagation, the larvae are contained in a sterile nutritive media until they develop fully, rather than using fish. This method is useful for species in which the host fish is unknown or difficult to obtain, or with low fecundity mussel species. VDGIF will continue to use this method later this season for propagation of Eastern Elliptio (*Elliptio complanata*) and Northern Lance (*Elliptio fisheriana*). VDGIF has completed several traditional infestations as well. First, four South River Triangle Floater inoculations using 450 Golden Shiner (*Notemigonus crysoleucas*) were completed. VDGIF also conducted five Eastern

Pondmussel inoculations on 575 Largemouth Bass (*Micropterus salmoides*), two Nottoway River batches and three Delaware River batches. VDGIF infested four batches of Brook Floater, using 60 hatchery-raised Brook Trout (*Salvelinus fontinalis*) and 600 Golden Shiner. Lastly, VDGIF conducted three Alewife Floater infestations using 882 Blueback Herring (*Alosa aestivalis*) for the Anacostia, Delaware, and Rappahannock Rivers.

VDGIF's target production goal for 2019 is 988,600 juvenile mussels of 13 species with grow out and release of approximately 30K mussels. Most of the species targeted for propagation in 2019 are not listed as threatened or endangered, but all are listed either as a species of greatest conservation need in Virginia's Wildlife Action Plan, species of concern by the USFWS, or are being produced as part of Natural Resource Damage Assessment and Restoration settlements. Work with federal and state endangered James Spiny mussel continues for the 5th year and VDGIF is again focusing efforts on the state-endangered and federally petitioned Brook Floater (*Alasmidonta varicosa*) and the state-threatened and federally petitioned Green Floater (*Lasmigona subviridis*).

Currently, VDGIF is holding 900 James Spiny mussel propagated in 2016 that are over 30 mm in length. In October of 2018, VDGIF released 488 James Spiny mussel, 278 in the Cowpasture River, Highland County and 210 in Rock Island Creek, Buckingham County. VDGIF is also holding over 13K Green Floater (10 mm in length) and nearly 2K Brook Floater (10 mm in length) propagated in 2018 for release this year. In addition to propagation during 2019, numerous sub-adult mussels propagated from 2016-2018 are being held for continued grow-out and release. VDGIF has provided approximately 1,600 mussels to North Carolina State University and USGS Upper Midwest Environmental Sciences Center for research thus far in 2019.

This winter, VDGIF completed construction of a pulse flow-through sediment culture system that will provide automatic water changes daily. This type of system has been utilized by a few other freshwater mussel culture facilities around the country with success. Typically, VDGIF's systems receive water changes once a week, but not more, because it is too labor intensive to do so. This system alleviates potential water quality issues while maintaining a low amount of work weekly. VDGIF looks forward to testing both this system and the new recirculating sediment system completed this winter.

Table 1. Planned and completed broodstock collections for the 2019 propagation season.

Mussel Species	River	Number Broodstock Collected	Production goal
<i>Alasmidonta undulata</i>	Cacapon	8	-
	Dan	-	100
	South	11	1,000
<i>Alasmidonta varicosa</i>	Cacapon	15	5,000
<i>Elliptio complanata</i>	Broad Bull Run/Cacapon	-	2,000*
	Broad Bull Run	-	N/A*
<i>Fusconaia masoni</i>	Dan	-	500
<i>Lampsilis cardium</i>	Cacapon	12	100,000
<i>Lampsilis cariosa</i>	Dan/Nottoway	6	50,000
<i>Lasmigona subviridis</i>	Cacapon	3	5,000
	Dan	-	100,000
<i>Lampsilis radiata</i>	Potomac/Anacostia	2	25,000**
<i>Leptodea ochracea</i>	Nottoway	2	N/A*
	Rappahannock	3	N/A*
<i>Ligumia nasuta</i>	Delaware	10	50,000
	Nottoway	14	50,000
	Potomac/Anacostia	4	25,000**
<i>Parvaspina collina</i>	Dan	-	15,000
	Mill Creek	-	10,000
<i>Strophitus undulatus</i>	Cacapon	8	N/A*
	South	16	N/A*
<i>Utterbackiana implicata</i>	Delaware	10	200,000
	Potomac/Anacostia	1	100,000**
	Rappahannock	14	250,000
Total		139	988,600

**In vitro* propagation research and development. **The species VDGIF works with will depend on ability to locate broodstock within this watershed.

Winter Bat Foraging and Roost Habits in the Coastal Plain

To assess fall, winter and early spring presence and activity of bats in the Piedmont and Coastal Plain, VDGIF contracted with the U.S. Geological Survey, Virginia Cooperative Fish and Wildlife Research Unit and the Virginia Tech Department of Fisheries and Wildlife Conservation to conduct mist-netting and acoustic survey efforts from October 2018-March 2019 in eastern Virginia.

Acoustic sampling data were collected from 69 frequency-division, zero-crossing recording stations across 15 counties in southeastern Virginia during September 2017–March 2019 (Fig. 1). Detectors were checked on 30–50 days intervals, and data were downloaded and returned to Virginia Tech for post-processing.

To date, VDGIF’s efforts have resulted in 6,778 recorder nights of acoustic data (Table 1). Netting during fall, winter, and spring in southeastern Virginia during 2018 and 2019 has resulted in the documentation of 6 bat

species (i.e., Rafinesque’s big-eared bat, big brown bat, silver-haired bat, southeastern bat, and evening bat) and capture of 13 individuals (Table 2). The southeastern bat (*Myotis austroriparius*) was captured most frequently (n = 5; 38%), followed by silver-haired bats (*Lasiurus noctivagus*; n = 3) and red bats (*Lasiurus borealis*; n = 2).

SECTION B.3 FEDERAL CONSISTENCY

During the period of October 1, 2018 and March 31, 2019, the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 54 development projects and management plans for consistency with the Virginia Coastal Zone Management Program (VCP). This represents 70% of the total amount of projects reviewed (77) during this period. Major state projects accounted for 18 projects, one was a State Corporation Commission review, 4 were National Environmental Policy Act (NEPA) documents without a federal consistency component, 21 were federal actions, and 43 were federally funded projects. The 21 federal actions included 11 federal agency activities, 10 federal licenses and approvals, and 0 outer continental shelf projects. The 11 federal agency activities included 6 projects submitted under the residual category pursuant to the federal consistency regulation (15 CFR 930.31(c)), which consisted of U. S. Department of Housing and Urban Development (HUD) mortgage insurance projects. All federal consistency determinations and federal consistency certifications were completed within the established legal deadlines.

The OEIR continues to provide informal training on federal consistency requirements to consultants who prepare consistency documents for federal agencies and applicants for federal permits and maintains a website for Federal Consistency Reviews that can be accessed through DEQ's main webpage or found at <http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview.aspx>. The OEIR webpage is updated weekly.

Table 1 depicts federal projects in Tidewater Virginia reviewed from 10/1/18 to 3/31/19.

TYPE OF FEDERAL PROJECTS REVIEWED*	NUMBER OF PROJECTS COMPLETED	REVIEW PERIOD
*Direct Federal Actions	11	30-60 Days
** Federal Activities (approvals & permits)	10	90 Days
***Federally Funded Projects	43	30 Days
Outer Continental Shelf	0	45-60 Days
TOTAL	63	30-90 DAYS

*Includes 6 FCDs reviewed under the residual category of Subpart C of the Regulations. (eg. HUD Mortgage Insurances).

**These are projects reviewed under Subpart D of the Regulations. These projects include individual permits issued pursuant to Section 404 of the Clean Water Act administered by the U.S. Army Corps of Engineers.

*** These include federal assistance to state and local government reviewed under Subpart F.

FEDERAL PROJECTS REVIEWED FOR CONSISTENCY WITH THE CZMP from 10/1/18 to 3/31/19

I. Federal Agency Projects

The following projects are examples of federal agency projects subject to Subpart C of 15 CFR 930.33(a).

Recreational Beach Relocation - The Federal Highway Administration (FHWA) and the U.S. Fish and Wildlife Service (FWS) are proposing to configure the parking areas, roads and related facilities needed to access and support the use of a new recreational beach on the Assateague Island National Seashore in Accomack County. The agencies are proposing the construction of a new two-lane access road and roundabout intersection; improvement of the entrance fee booths; new parking areas and paths to access the new recreational beach; vault toilets, rinse-off showers, foul weather shelters, changing room cabanas and other facilities needed to provide a safe and appropriate beach recreation experience. The project would also include the development of a new multi-use trail; replacement of the water control structures on C- and D-dikes; relocation of the U.S. National Park Service (NPS) staff offices and educational programs currently residing at Toms Cove Visitor Center; and, a new parking area at the South Pony Corral. The EA considers the preferred alternative, the no action alternative and three other alternatives.

The FHWA states that the recreational beach relocation project is consistent with the FWS Final Comprehensive Conservation Plan and Environmental Impact Statement (EIS), which was reviewed by DEQ under 15-146F and 14-084F, and the NPS Abbreviated Final General Management Plan and EIS, Assateague Island National Seashore (GMP/EIS), which was reviewed by DEQ under 16-026F. The selected alternative in the CCP/EIS Record of Decision included the relocation of the recreational beach. The NPS preferred alternative in the GMP/EIS adopts the CCP/EIS actions related to the new recreational beach as part of an effort to design visitor use infrastructure in the seashore to be more sustainable. According to the FCD, the project is consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management (CZM) Program.

Virginia Railway Express-Broad Run Expansion - The Federal Transit Administration (FTA) proposes to conduct the Broad Run Expansion Project in cooperation with the Virginia Railway Express (VRE) in Prince William County and the City of Manassas. The project involves station and yard improvements at the maintenance and storage facility (MSF) as well as adding a third main track between the Manassas VRE Station and the Broad Run Station. The Broad Run station and yard improvements include extending the train storage tracks to accommodate trains up to ten cars long, constructing an expanded employee welfare building to include locker and conference rooms, offices and a kitchen, shifting the station platform to accommodate the yard expansion, increasing parking capacity, and providing delivery access for the Storage and Inspection building off of Piper Lane. The third track will extend approximately 2.5 miles between milepost (MP) 35.7 and MP 33.6 and will primarily be located within Norfolk Southern right-of-way (ROW), though some property acquisition or permanent easements may be necessary. The third track will increase railroad capacity and efficiency and minimize congestion between VRE, Amtrak and freight trains in the corridor. Additional ROW will need to be acquired to accommodate the estimated 1,400 additional parking spaces that are needed by 2030. According to the FCD, the project is consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management (CZM) Program.

Amendment 31 to the Fishery Management Plan - The National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) submitted a FCD for Amendment 31 to the Fishery Management Plan (FMP) for Coastal Migratory Pelagic (CMP) Resources in the Gulf of Mexico and Atlantic Region. The South Atlantic Fishery Management Council has developed and approved Amendment 31. The Gulf of Mexico Fishery Management Council also approved this amendment. Amendment 31 would remove Atlantic cobia from the CMP FMP and would rely on the Atlantic States Fisheries Management Commission to manage Atlantic cobia through their Interstate FMP. The majority of Atlantic cobia landings occur in state waters and,

despite federal closures, recreational landings have still exceeded the recreational annual catch limit and the combined stock annual catch limit, resulting in shortened fishing seasons and ineffective management. If Amendment 31 is approved by the U.S. Secretary of Commerce, the NMFS would promulgate regulations to remove Atlantic cobia from federal management under the Magnuson-Stevens Fishery Conservation and Management Act and, at the same time, promulgate regulations under the Atlantic Coastal Fisheries Cooperative Management Act to replace the existing Magnuson-Stevens Act based regulations in federal waters. According to the FCD, the project would be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management (CZM) Program.

II. Residual Category

The following consistency determinations were submitted as a residual category of Subpart C pursuant to the federal consistency regulation 15 CFR 930.31(c).

Aspire at Little Creek Apartments/Little Creek Marina - The U.S. Department of Housing and Urban Development (HUD) is processing an application through its Multifamily Accelerated Program 221(d)(4) for the construction of senior apartment buildings in the City of Norfolk. BWF Little Creek, LLC owns the proposed project site, located at 4801 Pretty Lake Avenue. The property consists of three one-story warehouse marina structures: an office building/store, a boat storage building, and a boat maintenance shop on approximately 3.77 acres. The remainder of the property consists of an asphalt-paved parking lot, boat docks, and the Little Creek Channel. The proposed project consists of the demolition of the current on-site structures and the new construction of 16 connected senior apartment buildings, a lobby, swimming pool, gym, clubroom, restaurant, offices, media room, and 187 asphalt parking spaces.

Stafford Hospital Apartments - The U.S. Department of Housing and Urban Development (HUD) is processing a mortgage insurance application from Bonaventure Realty Group, LLC (applicant) through its Multifamily Accelerated Program 221(d)(4) for the construction of a proposed multifamily apartment complex in Stafford County. The proposed project site consists of undeveloped land owned by Powell Associates, LLP that is bound by Jefferson Davis Highway, Hospital Center Boulevard, and Old Potomac Church Road southwest of the Stafford Hospital complex. The proposed project includes the construction of three large buildings and three small buildings to house a total of 300 residential units, a clubhouse, pool, and 510 total surface parking spaces. The site would also include approximately 0.95 acre of stormwater management area and a two-acre retail pad in the northwestern property corner at the intersection of Jefferson Davis Highway and Hospital Center Boulevard. According to the FCD, the project will be consistent to the maximum extent practicable with the enforceable policies of the Virginia CZM Program.

III. Federal Activities (Permits, Licenses and Approval)

These projects were reviewed pursuant to Subpart D of the Consistency Regulations (15 CFR §930.53)

Alpha Omega Farm, Inc. Dredging - Frye Properties submitted a FCC on behalf of Alpha Omega Farm, Inc. (the applicant) for the proposed dredging of an unnamed creek that is a tributary of West Neck Creek in the City of Virginia Beach. The FCC was submitted because the project qualifies for an individual permit from the Corps. The applicant is proposing to conduct maintenance dredging of an existing channel to a depth of approximately 4.5 feet, which represents removal of 3,633 cubic yards of accumulated sediment. Dredging would affect a total of 4,635 square feet of non-tidal vegetated wetlands and 50,831 square feet of subaqueous land.

Accomack County Airport (MFV) Runway 21 Turnaround - The County of Accomack (applicant), owner and operator of the Accomack County Airport (MFV), is seeking approval from the Federal Aviation Administration (FAA) to construct turnaround access at the end of Runway 21 at the airport located in Melfa, Virginia. The proposed project involves the construction of the Runway 21 Turnaround east of the runway end

to provide an area for aircraft to turn around so that taxiing aircraft can exit the runway, allowing another aircraft to land. Runway turnarounds were recommended as part of the 2003 Airport Master Plan Update and will improve safety and efficiency of operations at the airport. Approximately 0.84-acre of additional impervious surface will be created by the Runway 21 Turnaround and construction will take approximately 120 days. The turnaround will be constructed in early fall 2020 or early spring 2021, dependent on weather, and all work will be performed on airport property. The design and construction will adhere to the 2003 FAA conditionally approved Airport Layout Plan and other applicable FAA requirements. Drainage improvements to include the installation of concrete pipes and inlets to drain the grass shoulders and infield are included as part of the project. The installation of a new ditch will be constructed to tie into an existing channel. The applicant certifies that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The FCC was submitted in conjunction with a categorical exclusion (CATEX) form that was prepared for this project (included as Appendix D of the CATEX).

Line VM 107 Recoat Project - TransCanada-Columbia Gas Transmission, LLC (Columbia or applicant) is seeking approval from the Federal Energy Regulatory Commission (FERC) to conduct the Line VM-107 Recoat Project, a FERC Blanket Automatic Authority Project (VA18-077). The proposed project involves the recoating of a segment of the existing Line VM-107 natural gas pipeline located east of the intersection of Boulder Spring Road and Boulder Spring Parkway. A private developer is proposing to build a road over this section of the pipeline and the work is proposed to protect the pipe from the roadway. The scope of work includes the unearthing and stripping of the existing pipe, an inspection of the pipe coating, and the placement of fillable flow around the pipe. The work will be performed within an existing right-of-way (ROW). Off-ROW space will be required for temporary workspace. The total limits of disturbance for the project are 1.48 acres and the off-ROW workspace contains an asphalt parking lot, private paved road, and an area of recently cleared trees where the proposed roadway will be built. The applicant certifies that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program.

Norfolk Southern Railway Co. Lambert's Point Dock Pier 6 Off-Shore Bulkhead Project - The Norfolk Southern Railway Company (NSRC or applicant) applied for an individual permit from the Corps under Sections 10 and 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403 and 408) for the Lambert's Point Dock Pier 6 Off-Shore Bulkhead Project in located at the NSRC Lambert's Point Yard in the Port of Hampton Roads on Norfolk Southern Terminal Drive in Norfolk, Virginia. The project proposes to add two off-shore bulkheads along the first 150 feet of the 1,600-foot existing Pier 6 in the Elizabeth River. The addition of the bulkhead will widen the 83-foot wide pier by a maximum of six feet (three feet on each side) within the project area. The proposed bulkhead on the north side of the pier (North Wall) will be a combined wall approximately 140 linear feet from the existing bulkhead channelward and 10 linear feet in front of the existing bulkhead. The proposed bulkhead on the south side of the pier (South Wall) will be a combined wall approximately 100 linear feet from the existing bulkhead channelward. In addition to the bulkheads, the project includes the installation of a coffer cell or containment cell between the two bulkhead using walers and tie backs under the existing pier. The purpose of the project is to maintain the functionality of Pier 6 and accommodate transportation demand.

IV. Outer Continental Shelf Activities

No projects were reviewed during the time period of this report for this category.

V. Federal Funds

DEQ completed the reviews of 43 projects from October 1, 2018 to March 31, 2019 that were submitted under 15 CFR, Part 930, Subpart F for federal financial assistance to state and local governments. The projects break out as follows:

- 5 new home construction
- 20 home rehabilitations
- 14 new multifamily housing construction/rehabilitation
- 3 demolitions of blighted property/relocations
- 1 community library construction

Examples of Federally –funded projects that were reviewed:

Endly Street Community Project - The town of Chase City requested \$1,250,000 in Community Development Block Grant (CDBG) Funds from the Virginia Department of Housing and Community Development for funding of the revitalization of Endly Street neighborhood. These revitalization efforts aim to improve living conditions for residents through housing rehabilitation activities, upgraded sewer infrastructure, retrofitted neighborhood recreational area and the elimination of blight throughout the neighborhood. The project area contains a total of 51 structures, 35 of which are occupied single family dwellings and 7 vacant single family dwellings. There is a funeral home, group home, church, metal shop, town shop complex, two vacant stores and two vacant lots also located in the project area.

810 26th St - The Newport News Redevelopment and Housing Authority (NNRHA) proposes to use Community Development Block Grant funding from the U.S. Department of Housing and Urban Development for the interior repair for the single-family owner occupied property located on 810 26th Street, Newport News. The property was originally developed in 1998 and encompasses roughly .11 acres of developed land. The proposed project includes the repair of bathroom floors and installation of an accessible shower, sink, toilet and new handrail on the exterior ramp.

Southside Norfolk Library - The City of Norfolk proposes to use Community Development Block Grant (CDBG) funding from the U.S. Department of Housing and Urban Development (HUD) for the construction of the Southside Norfolk Library. The proposed project will be a one-story, approximately 12,000 square foot branch library adjacent to the Southside Aquatics Center at 2300 Berkley Avenue. The total budget is \$8,000,000, whereas \$965,000 will be funded through the City’s general fund for furniture, fixtures and equipment (FF&E), and \$7,035,000 will be funded through a HUD CDBG/Section 108 Grant. The City is the developer and owner of the library and will operate the library upon its completion. The library will house a standard branch collection, a large community meeting room, a computer lab with 25 stations, a collaborative meeting room, a children’s area with an attached outdoor nature classroom and various staff support spaces.

642 35th St Demolition - The Newport News Redevelopment and Housing Authority (NNRHA) propose to use Community Development Block Grant funding from the U.S. Department of Housing and Urban Development for the demolition and disposal of the residential structure located on a 0.09-acre parcel of land at 642 35th Street, Newport News, Virginia. The subject property is a fully developed, unoccupied single family home originally developed in 1930.

SECTION B.4 PROGRAM CHANGES

During the reporting period, the Virginia CZM Program continued to work with the Virginia Coastal Policy Center (VCPC) and the Narrative Policies Advisory Committee to develop draft narrative enforceable policies. VCPC's work is supported by a Virginia CZM FY 17 grant. The advisory committee consists of representatives from NOAA, DEQ, VDH, the Office of the Attorney General, the Department of Defense, and the Hampton Roads Planning District Commission. VCPC staff provided an update to the Virginia CZM Program's Coastal Policy Team at its January, 2019 meeting.

VCPC continued its review of previously drafted narrative enforceable policies, as well as the drafting of additional narrative enforceable policies. VCPC worked with the Virginia Department of Game and Inland Fisheries (DGIF), Virginia Department of Agriculture and Consumer Services, and Virginia Department of Conservation and Recreation to obtain their input and approval of amendments to previously drafted policies. Additionally, VCPC worked with Virginia Department of Environmental Quality (DEQ) to redraft policies related to stormwater management, as well as erosion and sediment control. During each of these "small group" activities (with specific agencies, rather than the full Advisory Committee), VCPC was in continuous contact with CZM staff and NOAA staff to clarify comments and suggested edits to the policies. An Advisory Committee Meeting was held on March 13, 2019 to collect final feedback from the group on all of the narrative enforceable policies. VCPC continues to work with DGIF and DEQ to finalize the language of their respective policies. Next steps include working with CZM staff and NOAA staff to package all of the narrative enforceable policies for submission to NOAA.