

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #  e?

Task: 1.01 Dept. of Environmental Quality - Virginia Coastal Zone Management Program Federal Budget Total: \$319,300.00
Coastal Program Management

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Policy Team Products: A Coastal Policy Team meeting was held on January 11, 2018. Minutes for the meeting are at: <http://www.deq.virginia.gov/Programs/CoastalZoneManagement/DescriptionBoundary/VirginiaCoastalPolicyTeam.aspx>.

Grants Management and Reporting: The CZM Manager and Coastal Planner monitored grant activities including review of October 2017 semi-annual reports and development of scopes of work for SAC'ed focal area projects. The Grants Coordinator and CZM Manager processed extension and budget amendment requests, 306 A documentation approvals, SAC removals, and reprogrammed funds using Grants Online.

Ocean Planning: RPB and MARCO Documents: The CZM Manager continued to serve as the State Co-lead for the RPB helping to prepare and run monthly calls, leading 5 work groups, compiled the semi-annual progress reports and work plans: <https://www.boem.gov/Semi-Annual-Work-Plan-and-Progress-Report/>; prepared for a January 2018 in-person meeting <https://www.boem.gov/MidA-RPB-Public-Meeting-January-24-2018/> which was cancelled due to the federal shutdown and replaced with a Feb 13 public webinar. CZM Manager also worked on a Nov ERA Workshop – a summary is at: <https://www.boem.gov/MidA-RPB-Public-Meeting-January-24-2018/> and a Nov 8 Non-consumptive Recreation Workshop.

FY 2018 CZM Grant Application: The FY 2018 Draft application was submitted to NOAA on April 13, 2018, and the Final application will be submitted on May 25, 2018 via the CAMMP and Grants.gov systems. 43 projects totalling \$3.361M (federal + match) were submitted for funding.

Section 309 PSM Grant Applications: Two proposals were prepared and submitted for funding in December 2017: Development of Healthy Ocean Indicators for \$97,897 on behalf of MARCO and Identification of Geologic Conditions to Mitigate Coastal Hazards and Enhance Resiliency for \$210,669 by the VA Dept. of Mines, Minerals & Energy.

RPCs and Amendments: See Task 1.03

Performance Measures: Grants Coordinator tracked the Training events held by grantees during the reporting period Oct. 2016-Sept 2017. Coastal Planner tracked progress of projects that could be reported during this period for Public Access, Coastal Hazards and Coastal Dependent Uses and Community Development.

Outreach Materials: The Outreach Specialist manned a hands-on children's activity that she created – Bird Beak Adaptations – at the Kiptopeke State Park Children's Outdoor Exploration Day on October 7, 2018.

Events Sponsorship: The Eastern Shore Birding & Wildlife Festival has ended for the foreseeable future. Funds will be used to support other events or be reprogrammed.

312 Metrics: 312 Metrics information on Seaside Habitat Restoration (Eelgrass Planted and Bay Scallops Released) and Shoreline Management Plans was collected from the Virginia Institute of Marine Science (VIMS) and submitted through the Section B report to NOAA on October 30, 2017. A total of 165 acres of eelgrass were seeded, a total of 1,187,367 scallops were released and ten shoreline management plans were developed over the five-year 312 Metrics period of Oct. 2012 – Oct. 2017.

Program Representation: The CZM Manager represented the program at the Oct 3 and Feb 1 Southern Tip Partners meeting; Oct 12-13 Blue Economy Conference in Monmouth, NJ, Oct 27 Coastal Policy Center Conference, Dec 7 VA, NC Offshore Wind Task Force meeting, Feb 26 Environmental Advisory Council for Congressman Wittman; Mar 6 Secretary of Natural Resources Land Conservation meeting. The Coastal Planner represented the program at the Oct 11 DOF Forest Stewardship Meeting, Nov 7 Northern VA Resiliency Road Map planning meeting, Jan 29 Chickahominy Land Conservation Steering Committee and Econ study kick-off meeting, Feb 6 NVRC Plant NoVA Natives Campaign Annual Partners Workshop, March 22 Central Rapp Natives Steering committee meeting.

Final Products	% Completion	Anticipated Completion Date
Policy Team Products	50%	Sep 30 2018
Grants Management and Reporting	50%	Sep 30 2018
Ocean Planning	50%	Sep 30 2018
FY 2018 CZM Grant Application	65%	May 25 2018
Section 309 PSM Grant Applications	100%	Dec 15 2017
RPCs and Amendments	50%	Sep 30 2018
Performance Measures	50%	Oct 30 2018
Outreach Materials	50%	Sep 30 2018
Events Sponsorship	50%	Sep 30 2018
312 Metrics	100%	Oct 30 2017
Program Representation	50%	Sep 30 2018

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Task: 1.02	Dept. of Environmental Quality - Virginia Coastal Zone Management Program			Federal Budget Total:	\$98,000.00
Virginia CZM Program Outreach & Social Marketing					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

General Outreach Coordination – Publication work included working with CZM staff to draft Spring/Summer 2018 issue of Virginia Coastal Zone Management magazine, and design of a fact sheet on ES economics of conserved lands study working with CZM Manager. Worked with CZM staff to develop a retention plan for archiving Virginia CZM grant description webpages and to comply with ADA accessibility standards; focus will be on building content of CZM issues pages with grant results. Reorganized all outreach materials during DEQ move to new offices.

Social marketing to reduce helium balloon releases and debris -

- Compiled, with Clean Virginia Waterways, a final report for FY14 NOAA Marine Debris Program grant for Joyful Send-off campaign (sub. Oct 2017).
- Continued implementation of Joyful Send-off campaign including posts to Joyful Send-off Facebook page; updates to website; and, scripting for series of videos (6 videos – #1 3 minute and #5 30-60 second focused on the impacts of balloon debris.
- Drafted, with team of Mid-Atlantic Marine Debris Workgroup, FY18 NOAA MD grant proposal to expand the Joyful Send-off campaign to coastal areas of the Mid-Atlantic states (sub. Dec 2017).
- Designed new fact sheet on balloons as debris.
- Presented at 2018 International Marine Debris Conference on Joyful Send-off CBSM campaign with partners (March, 2018); designed poster, postcard and PP presentation. Received requests to share our work and explore possible partnerships from other states and countries.
- Presented on balloon release research and Joyful Send-off campaign at Ferguson Foundation Trash Summit (Nov 2017).
- Attended Hampton Roads chapter of International Live Events Association to share the Joyful Send-off campaign (Feb 2018). CZM was well-received.
- Exhibited at Coastal Virginia Hospitality Expo (Feb 2018), Virginia Green Travel Conference (March 2018).

Social Marketing and Coordination to Increase Native Plant Use –

- Continued State Pollinator Protection Strategy Plan Committee participation. Contributed content to report to Virginia General Assembly (by VDACS), highlighting Virginia CZM native plant marketing initiative as an outlet and opportunity for coordinated messaging on the diversity and value of Virginia’s pollinators and the native plant habitat needed to support these species.
- Added new pages to www.PlantVirginiaNatives.org website on non-native invasive plants of concern and regional native alternatives.
- Led retreat with regional native plant campaign coordinators (Oct 2017), who shared an overview of the successes and challenges of their respective campaigns, and discussed ways the campaigns might further collaborate for consistency across the regions. Set-up Google Group to encourage continued sharing of ideas.
- Exhibited at State Fair DEQ exhibit - native plant display (Oct 2017).
- Attended the Tri-State Native Plant meeting (VA, MD, WV), including discussion with BLM about native seed consortium (Oct 2017).
- Exhibited at Chesapeake Conservation Landscaping Council Conference (Nov 2017), shared PlantVirginiaNatives.org and regional campaign guides.
- Provided input to Mid-Atlantic Regional Seed Bank (MARSB) survey of native plant use and commercial availability. Ultimately, a partnership with the MARSB can create a pathway for collecting and banking seeds for the commercial market, and facilitate an increase of native plant use and diversity on public and private properties with a focus on ecoregion stock.
- Designed first draft of new regional guide for the Virginia Capital Region, to be released in early August, using FY15 Task 1.02 funds to leverage contributions to printing including \$5,000 from VA Dept of Game and Inland Fisheries. Designed logo for the “Plant RVA Natives: A Capital Idea” campaign to include in guide. The regional team will design campaign strategy and hopes to launch in Spring 2019.
- Participated on Plant Central Rapp Natives regional campaign team, including plans for installation of demo garden in Fredericksburg – CZM grant approved by NOAA, however demo site will need to be relocated due to new concerns that the site might include underground debris that will hinder success of the planting. Working with team to identify new site.
- Participated on ES Roundtable team, which is supporting Plant ES Natives implementation, including help in funding a new campaign element – two sets of migrating butterflies that will “pop-up” and “visit” native plant restoration sites around the Shore.
- Continued membership on Chesapeake Bay Program Partnership Stewardship Workgroup, which released results of a Bay-wide Citizen Stewardship Indicator survey to measure current public adoption of environmentally friendly behaviors, volunteerism and civic engagement. When the 19 behaviors were ranked according to likelihood of adoption and number of people who could still be influenced, reducing lawn and planting natives was number 3 on the list.

Final Products	% Completion	Anticipated Completion Date
Outreach and Social Marketing Strategies	50%	Sept 30, 2018
Printed Media	85%	Magazine release in late May/early June 2018
Events and Training	50%	Sept 30, 2018
Electronic/Social Media	50%	Sept 30, 2018

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Task: 1.03 Virginia Institute of Marine Science - Chesapeake Bay National Estuarine Research Re Federal Budget Total: \$126,835.00
Coastal Management Support

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

Policy Team Products: The Coastal Planner provided an update on coastal hazards projects under Section 309 and the focal area, as well as narrative policies development during the January 11, 2018 Coastal Policy Team meeting.

RPCs and Amendments: The Coastal Planner managed the grant to the Coastal Policy Center and participated in the process of drafting narrative policies for the Department of Environmental Quality (Chesapeake Bay Preservation Act) and Department of Health (Shellfish Sanitation).

Grants Management and Reporting: The Coastal Planner monitored grant activities through phone calls and visits and reviewed extension and budget amendment requests, 306 A documentation and proposals to reprogram funds. He participated in the Coastal PDC meeting in Northern Virginia in November, 2017.

FY 2018 CZM Grant Application: The Coastal Planner helped develop the FY 2018 Draft Application. He helped facilitate the process of developing section 309 and focal area projects for FY 18 related to building natural and community resiliency.

Section 309 PSM Grant Application: The Coastal Planner worked with agency staff from the Department of Mines, Minerals and Energy to develop and submit a proposal for sand management in the Hampton Roads Area. The proposal was not funded.

Performance Measures: The Coastal Planner reported on CZM performance measures #1, 2 and 8 in October, 2017.

MARCO Climate Change Action Team: The Coastal Planner participated in calls and reviewed MARCO grant products. He also participated in the mid-Atlantic ocean acidification network (MACAN).

Outreach Materials: The Coastal Planner revised articles on coastal resiliency and public access for the spring 2018 issue of the Coastal Zone Management magazine.

312 Metrics: The Coastal Planner collected 312 Metrics information on Shoreline Management Plans from the Virginia Institute of Marine Science. The information was submitted through the Section B report to NOAA in October, 2017.

Program Representation: The Coastal Planner participated in periodic calls for the Chesapeake Sentinel Site Cooperative, the Chesapeake Bay Program's Climate Resiliency Workgroup, and the Virginia Chesapeake Bay Interagency Team.

Final Products	% Completion	Anticipated Completion Date
Policy Team Products	50	Sep 30, 2018
RPCs & Amendments	50	Sep 30, 2018
Grants Management & Reporting	50	Sep 30, 2018
FY 18 Grant Application	75	May, 2018
Section 309 PSM Grant Application	100	Dec 31, 2017
Performance Measures	100	Oct 30, 2017
MARCO CCAT	50	Sep 30, 2018
Outreach Materials	50	Sep 30, 2018
312 Metrics	100	Oct, 2017
Program Representation	50	Sep 30, 2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

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**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 1.04	Virginia Commonwealth University	Federal Budget Total: \$106,213.00	
Coastal Management GIS Support and Coastal GEMS Maintenance			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

VCU CES staff:

- Performed Coastal GEMS maintenance, including installing software/security/data updates and refreshing map services as necessary. From October 1, 2017 to March 31, 2018, Coastal GEMS received 572 visits from 384 unique visitors with an average site visit time of 42 seconds. Coastal GEMS can be accessed online at: www.coastalgems.org.
- The Coastal GIS Coordinator:
 - Updated Coastal GEMS factsheets and repaired broken links as necessary and worked with VCU CES staff to update the Coastal Virginia Ecological Value Assessment (Coastal VEVA) feature map service consumed by Coastal GEMS
 - Created story maps for Coastal GEMS including, a cascade story map detailing the restoration of eelgrass on VA's Eastern Shore featuring a time enabled interactive map of SAV planting sites and coverage and a story map journal highlighting publicly accessible places in VA's coastal zone ranked in the highest category of the updated Coastal VEVA
 - Continued project management tasks related to VA CZM grants to enhance the Coastal GEMS mapping application and update the Coastal VEVA and VA DCR-DNH Natural Landscape Assessment datasets, including working with grantees to ensure proposals were complete, that all reporting requirements were met, that questions from NOAA staff were answered, that extensions were granted as needed, and that all final deliverables were completed and reviewed for quality
 - Continued work to raise awareness of Coastal VEVA and improve comprehension of the data, including engaging Coastal VEVA partners in discussion on factors driving change in the updated model, documenting these factors and creating slides/presentations that explain the data and methodology, discuss its intended uses, and explore changes
 - Continued work with MACAN and MARCO staff to maintain Acidification Monitoring Location data layers on the MARCO Portal, including updating spatial and tabular data and data catalog text as well as adding additional hyperlink functionality
 - Continued work on Mid-Atlantic RPB Non-Consumptive Recreation Work Group, including promoting, planning, facilitating, and presenting at workshop at CBF Brock Center in VA Beach and reviewing/editing workgroup and workshop reports
 - Responded promptly to all data/information inquiries, including requests from USFWS-NALCC, DCR-DNH, CBF, RRPDC, Terracon natural resources staff, Aecom environmental sciences staff, and Timmons Group GIS staff
 - Continued to provide technical support to VA CZM staff, including reviewing spatial data deliverables, creating maps and drafting text for VA CZM publications, assisting with meetings, and completing a public access site sign inventory template
 - Continued to provide technical support to VA CZM partners, including advising ANPDC on water trail website development, advising ANPDC and DCR-DNH on SHPO review process, and providing data layer showing VA CZM land acquisition, public access, and habitat restoration projects to DEQ staff for inclusion in DEQ 25th anniversary story map

Final Products	% Completion	Anticipated Completion Date
Coastal GEMS Application Maintenance	50%	September 30, 2018
Coastal GEMS Data Management	50%	September 30, 2018
Coastal GIS Coordination	50%	September 30, 2018
Coastal GEMS Training and Outreach	50%	September 30, 2018
GIS Map Products and Services	50%	September 30, 2018

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VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
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Task: 2	Dept. of Environmental Quality - Environmental Impact Review	Federal Budget Total:	\$171,286.00
EIR and Federal Consistency			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

During the period of October 1, 2017 - March 31, 2018, the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 127 development projects for consistency with the Virginia Coastal Zone Management Program (VCP). This represents 79% of the total amount of projects reviewed (160) during this period. Major state projects accounted for 18 projects, 4 were State Corporation Commission reviews, 11 were National Environmental Policy Act (NEPA) documents without a federal consistency component, 67 were federal actions, and 60 were federally funded projects. The 67 federal actions included 37 federal agency activities, 30 federal licenses and approvals, and 0 outer continental shelf projects. The 37 federal agency activities included 22 projects submitted under the residual category pursuant to the federal consistency regulation (15 CFR 930.31©), 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 which can be accessed through DEQ's main webpage or found at <http://www.deq.virginia.gov/Programs/EnvironmentallImpactReview.aspx> The OEIR webpage is updated weekly.

Final Products	% Completion	Anticipated Completion Date
Federal consistency, Sections A and B Semiannual Reports	50%	September 30, 2018
Consistency Information/Outreach Efforts	50%	September 30, 2018

Task: 3	Dept. of Environmental Quality	Federal Budget Total:	\$0.00
Water Quality Improvement Fund (WQIF) Match - Hampton Roads Sanitation District (HRSD) Virginia Initiative Plant (VIP) Nutrient Reducti			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

Construction on the Hampton Roads Sanitation District (HRSD) Virginia Initiative Plant (VIP) nutrient reduction technology is nearly complete, with the nutrient removal area of the plant operational. The portion still under construction is the pre-treatment area and that should be complete and a final payment made by the end of the calendar year. The project began in October 2013 and is scheduled for completion by June 2018, with a possible two to three (2-3) month extension, or longer, based on pending change orders. To-date, \$44,255,539.43 of the \$46,779,640.00 state grant has been paid to HRSD.

For the period of October 1, 2017 – March 30, 2018, reimbursements totaling \$2,501,502.70 have been made to HRSD for this project, which \$773,563 in State General Funds is needed to provide a match for the Coastal Zone Management Program.

Final Products	% Completion	Anticipated Completion Date
Certificate to Operate	90%	Dec 2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

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**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 4	Virginia Marine Resources Commission	Federal Budget Total: \$160,000.00	
Permit Review and Compliance			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

During the reporting period, VMRC received a total of 909 joint permit applications. Actions were completed on 881 projects, some of which were received prior to the reporting period. During the reporting period, 129 compliance inspections were conducted for previously issued permits. Also, 16 compliance inspections for the random sample of 130 projects permitted by local wetland boards were completed.

During the reporting period, local wetland boards throughout Tidewater Virginia acted on 233 projects involving tidal wetlands. Of this total, 191 were approved as proposed, 24 were approved as modified, 17 are pending, 1 no permit was required, and 45 required compensation either on or off site (23), or through payment of an in lieu fee (22) accounting for 38,155 square feet of tidal wetland impacts.

Final Products	% Completion	Anticipated Completion Date
Permit Program	50%	9/30/18
Compliance Evaluation	12%	9/30/18

Task: 5	Dept. of Conservation & Recreation - Natural Heritage	Federal Budget Total: \$55,000.00	
Habitat Conservation/Locality Liaison			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

The Locality Liaison held Natural Heritage Data Explorer (NHDE) training sessions on October 26 and December 7 of 2017, and February 23, 2018 with 2 locality staff, 6 consultants, 15 state agency staff, 1 federal agency and 1 land trust participating. The presentations included an overview of DCR's Natural Heritage Program, the Locality Assistance webpage, the Virginia Conservation Vision, the Virginia Wetlands Catalog, Virginia Ecological Value Assessment (VEVA), and hands-on training on the Natural Heritage Data Explorer (NHDE), which includes the Species and Community Database Search, conservation lands information and project review preliminary screening functions.

From October 1, 2017 to March 31, 2018, 489 projects were reviewed for impacts to natural heritage resources in the coastal zone (44% of all projects reviewed statewide). Project types reviewed included 18 solar projects and 17 cell tower projects. 243 projects were submitted through the NHDE representing 50% of the coastal projects submitted.

93% of the localities, 100% of the Planning District Commissions and 73% of the Land Trusts have Natural Heritage data. The website map (<http://www.dcr.virginia.gov/natural-heritage/localitiesmap>) on the local Assistance webpage, displaying localities with natural heritage data was updated reflecting the current status. There were 13 new or renewed licenses for Natural Heritage data in the coastal zone signed during this time. With the assistance of the Natural Heritage Database Manager, the Locality Liaison also posted two new coastal species highlights on the Local Assistance webpage (<http://www.dcr.virginia.gov/natural-heritage/localityliaison>).

The Natural Heritage Data Explorer (NHDE) Version 2.0 was released on December 26, 2017. The locality liaison was an integral part of the release through testing of the website and providing the first training session for the newly updated application on February 23, 2018.

Alice (Alli) Baird, who served as the DCR Coastal Locality Liaison from 2009-2018, retired on Feb. 28, 2018. During her tenure as the coastal locality liaison, she reviewed over 6000 projects and conducted over 50 NHDE training sessions increasing awareness of coastal zone resources and conservation planning tools. Alli worked closely with localities throughout the coastal zone providing natural heritage information for comprehensive planning and environmental screening. Her hard work and outreach efforts made a difference in the protection of natural heritage resources. DCR is currently working to hire a new locality liaison. In the interim, the Project Review Coordinator along with other project review staff have assumed the locality liaison tasks and duties.

Final Products	% Completion	Anticipated Completion Date
Project Review	50%	September 30, 2018
Local Assistance Program Presentations	50%	September 30, 2018
Improvements to Natural Heritage Tools	75%	September 30, 2018
Final Report	0%	November 15, 2018

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VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
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Task: 6	Virginia Institute of Marine Science - Center for Coastal Resources Management	Federal Budget Total:	\$42,000.00
Tidal Wetlands Management Technical Support			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

Product #1, General Technical Guidance:

The Wetlands Program continues to provide general technical guidance to both the general public and regulatory and non-regulatory authorities and other VIMS offices with regard to tidal shorelines. CCRM routinely reviews all Joint Permit Applications involving shoreline erosion control activities advertised on local wetlands board agendas for the preferred shoreline best management practices derived from the CCRMP's (<http://www.vims.edu/ccrm/ccrmp/>) and/or the applicable CCRM Decision Trees (http://www.vims.edu/ccrm/ccrmp/bmp/decision_tools/index.php); and compares the proposed project and approved decision with the recommended preferred management approach. Results are tracked in a database. In addition, other advisory information requests were responded to (via phone and email) covering a variety of coastal management issues. All technical advice continues to be tracked in a database maintained under this grant.

JPA Fidelity Reviews = 1168
Living Shoreline Advice = 9 (2 site visits)
Other Advisory Information Requests (climate change, mitigation, etc.) = 15
Technical Guidance Total = 24

Product #2 Education / Outreach:

CCRM e-News January 2018 (New CCRM web site, new 2017 & 2018 CCRMPs, new research paper, updated living shorelines design guidelines, living shorelines Group 2 general permit, Garden Club scholarship, VCPC Oct. 27th conference follow-up) <https://conta.cc/2Emgxqk>

CCRM is in the process of planning our annual Tidal Wetlands Workshop. "Shoreline Best Practice Case Studies" has been scheduled for June 14, 2018 at VIMS. The planned program includes presentations by CCRM, DCR Shoreline Erosion Advisory Service, Elizabeth River Project, ODU, and other invited speakers. All presentations will be related to what sustainable nature-based shoreline projects look like and how they work.

Planning is also underway for the next edition of Rivers & Coast. Potential topics for the Summer 2018 edition are being evaluated based on current interests and shoreline management questions.

Although not included in the grant task, additional outreach education training was completed for CCRMP orientation & Shoreline Best Management Practices. Five CCRM training sessions were held for a total of 188 participants.

Final Products	% Completion	Anticipated Completion Date
Product #1 – Technical Guidance <input type="checkbox"/>	50%	September 30, 2018
Product #2 – Education/ Outreach <input type="checkbox"/>	25%	September 30, 2018

Task: 7	Virginia Institute of Marine Science	Federal Budget Total:	\$60,000.00
2017 Submerged Aquatic Vegetation Distribution and Abundance Survey			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 12/31/2018 3/31/2019		

VIMS has successfully completed the acquisition of aerial photographs of the Chesapeake Bay and tributaries for the 2017 SAV annual survey.

VIMS also successfully completed ortho-rectifying all the photography and mosaicing all the flightlines. VIMS has completed 99% the photointerpretation and analysis and expect to submit the final report the second week of April. Maps completed for the 2017 work can now be viewed at: <http://web.vims.edu/bio/sav/sav16/index.html> and also on VIMS' interactive map: <http://web.vims.edu/bio/sav/maps.html>.

Final Products	% Completion	Anticipated Completion Date
Final Report	0%	Dec, 2018

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Task: 8	Dept. of Conservation & Recreation - Natural Heritage	Federal Budget Total:	\$27,000.00
Healthy Waters Program in the Coastal Zone			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

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. Programmatically, the assessment of program resources and needs has continued to determine gaps and areas of improvement. 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 NHD data explorer and the creation of new Element Occurrences (EOs) and Stream Conservation Units (SCUs).

During the reporting period, the Program Manager continued to participate in the Chesapeake Bay Program Healthy Watershed Goal Implementation Team to coordinate the involvement of VA Departments of Conservation and Recreation, Environmental Quality and Forestry. To continue the progress being made by the Commonwealth, the HW Program Manager coordinated with the Heritage Division staff to begin the process of conducting a vulnerability assessment to the 2014 HW sites in the Chesapeake Bay. The outcome is an identified list of HW sites that are most vulnerable to changes and most likely to be lost to future changes. The HW GIT coordinator has indicated their contractor Tetra-Tech was willing to conduct the analysis for the various states. Upon inquiry as to the utility of an outside contractor setting priorities for the states, the HWP Manager indicated the Commonwealth would be releasing their own vulnerability analysis that would be supported by those in Virginia and an outside assessment would not likely be supported nor implemented. The HWP Manager met with new staff from the DEQ to inform them of the Healthy Waters Program and inform them as to how they were developing these new tools and products. An outcome was the continued growth of the relationship between the DCR and DEQ to further advance the identification and protection of ecologically healthy resources in the Commonwealth. Conservation planning on a watershed basis would be a divergence from the opportunistic approach under which some conservation actions are achieved. To support this approach, the VDCR HWP developed and submitted a proposal to the US Endowment of Forestry and Communities to support the Healthy Waters Program. If awarded, this proposal would include 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. Likely partners on the application included the Virginia Chapter of the Nature Conservancy, Albemarle-Pamlico National Estuary Partnership, North Carolina Department of Environmental Quality, VA DEQ, and VA DOF.

Additionally, during the reporting period, the Program Manager continued to work with Heritage data management staff to prioritize ecologically healthy SCUs in the Commonwealth. This prioritization process would directly inform the identification of the most valuable SCUs to focus conservation and protection actions ensuring ecologically healthy aquatic conditions are maintained. This activity bridges the DNH Sections of Healthy Waters, Protection and Stewardship.

Final Products	% Completion	Anticipated Completion Date
Healthy Waters Program Growth and Admin	1%	Sept, 2018
Healthy Waters Capacity Development	1%	Sept, 2018
Healthy Waters Data Analysis and Evaluation	1%	Sept, 2018
Estuarine Healthy Waters, Oyster replenishment in the Coastal Zone	1%	Sept, 2018

Task: 9	Dept. of Environmental Quality - Virginia Coastal Zone Management Program	Federal Budget Total:	\$200,000.00
Eastern Shore Land Acquisition			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Pending	
Pending	Start: End: Closeout:		
	10/1/2017 3/31/2019 6/30/2019		

It's likely the FY 17 Land Acquisition funds will be applied to a second Spady Tract in Northampton County. Negotiations are underway and will be further discussed at the May Southern Tip partners' meeting.

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 10	Dept. of Conservation & Recreation - Natural Heritage	Federal Budget Total:	\$15,000.00
Coastal Zone Natural Landscape Assessment Update			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 11/15/2017	End: 12/31/2018	Closeout: 3/31/2019

During this project period, 1-meter land cover imagery developed by the Virginia Geographic Information Network was obtained, initially processed, and assembled. This dataset was packaged in both raster and vector formats for 6 regions of the state, and it contained hundreds of individual tiles that will need to be mosaicked seamlessly. A thorough investigation is being conducted to determine which format should be used and to determine the appropriate land covers that should be retained for the project. For example, the decision to retain the harvested/disturbed land cover cannot be made without an estimate of how much of this cover is likely to remain as forest rather than be converted to other land covers, such as developed. This investigation needs to be completed before the tiles can be mosaicked using scripting to produce a single image covering the entire Coastal Zone.

Final Products	% Completion	Anticipated Completion Date
Update of VaNLA with New Field Data and High Resolution Imagery	10%	December 2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2017

**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 41	Accomack-Northampton Planning District Commission			Federal Budget Total:	\$30,000.00
A-NPDC Technical Assistance Program					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

Climate Adaptation Working Group Newsletters

A total of six biweekly CAWG Newsletters were distributed to over 500 subscribers between October 1 and the end of January. These include numerous research and news items. There are quarterly CAWG meetings; one was held November 2nd and another February 7th, both at VIMS ESL Seaside Hall. During the February meeting, members decided that an annual synopsis of accomplishments and relevant projects and partnerships would be more useful. The A-NPDC is drafting this report and will compile contributions from all members to circulate to the mailing list and make available online. All newsletters and information about upcoming meetings and events can be found on the CAWG web page on the A-NPDC web site at the following link. <http://www.a-npdc.org/accmack-northampton-planning-district-commission/coastal-resources/climate-adaptation-working-group/>

Coastal Management Trainings

A-NPDC has successfully directed or trained during 7 events reaching approximately 665 people. Trainings focused on ground water, surface water quality planning, coastal hazards, and water access.

Technical Assistance

A-NPDC served on local & state committees including the ES Environmental Education Council, Southern Tip Partnership, ES Watersheds Network, VCZM Coastal Policy Team, and Resilience Planning for Water-Dependent Uses Projects.

Ground Water Committee

A-NPDC held 5 Committee meetings, one public Well, Septic, & Groundwater Forum in November, coordinated with VDEQ, and presented to both the Northampton County Planning Commission and the Eastern Shore of Virginia Master Gardeners. The Committee reviewed groundwater potential unpermitted withdrawal sites and tracked the VDEQ Compliance Initiative, completed reviews of research publications, and reviewed and tracked 5 bills in the 2018 General Assembly session. The Committee worked with the Counties and the Town of Chincoteague and VDEQ staff to initiate the update of the Water Supply Plans. The Committee educated local governments on local susceptibility to saltwater intrusion and pursued the development of programs to monitor the hazard. Minutes and new resources can be found on their respective pages at the following link, <http://www.a-npdc.org/accmack-northampton-planning-district-commission/ground-water-management/>.

Eastern Shore Water Access Authority Development Facilitation

A-NPDC researched Public Access Authorities in the state and drafted the Operating Agreement for the Eastern Shore Water Access Authority (WAA). A-NPDC presented the concept and potential function of the WAA to their Commission and has been placed on the April agenda for Accomack County and Northampton County Board of Supervisors and contacted most of the Towns in the region to explain the WAA and request adoption of a resolution and appointment of directors.

Benefits Accrued from Prior CZM Grants Report – No activity to report.

Final Products	% Completion	Anticipated Completion Date
CAWG Newsletter & Annual Summary of Local Projects Report	60%	9/30/2018
Coastal Management Training Report	50%	9/30/2018
Technical Assistance Report	50%	9/30/2018
Ground Water Committee Report	50%	9/30/2018
ES Water Access Authority Development Facilitation Report	50%	9/30/2018
Benefits Accrued from Prior CZM Grants Report	0%	9/30/2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2017

**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 42	Crater Planning District Commission			Federal Budget Total:	\$30,000.00
Crater PDC Technical Assistance Program					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

(1) Crater PDC staff processed 9 environmental impact reviews for local, state, and federal projects. (2) One coastal meeting/training session was held during the reporting period (1/24/18). Topics of discussion were Biking & Pedestrian Trails in the Netherlands, Virginia Geological Mapping Priorities, and the Potential Appomattox River Trail Connection to the Virginia Capital Trail. (3) Crater PDC staff coordinated and administered regional review of the Appomattox River Trail and Signage Plans and the Richmond-Crater Natural Hazard Mitigation Plan. (4) Commission staff participated in several environmental planning efforts pertaining to the Chesapeake Bay TMDL, the Albemarle-Chowan Watershed, the Middle James Round Table, the Town of Wakefield Base Flood Elevation, and the Central Virginia Waste Management Authority Comprehensive Plan. (5) Crater PDC staff continued to provide technical support to FOLAR – Friends of the Lower Appomattox River. This included hosting meetings, providing website maintenance, preparing brochures, and preparing and submitting grant proposals. Staff also assisted FOLAR with its 3/24/18 river cleanup day and its scheduled 4/28/18 RiverFest. (6) Staff continued work on maintaining and producing paper and internet versions of the Appomattox River Interpretive Guide.

Final Products	% Completion	Anticipated Completion Date
Environmental Impact Review Comments	50%	9/30/18
Coastal Meetings	50%	9/30/18
Coastal Training	50%	9/30/18
FOLAR Assistance	50%	9/30/18
Benefits Accrued From Prior CZM Grants	50%	9/30/18

Task: 43	Hampton Roads Planning District Commission			Federal Budget Total:	\$60,000.00
Hampton Roads Coastal Resources Management Technical Assistance Program					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

Environmental Impact Review. HRPDC staff provided comments to DEQ on one (1) federal consistency determination. HRPDC staff also provided scoping comments to VDOT on two environmental assessments/environmental impact studies for roadway projects.

Public Information and Education. HRPDC staff maintained information on its website and provided regular briefings to local elected officials on the HRPDC Commission, local governing bodies, and to professional and civic organizations. During this period, two (2) entries related to coastal resources management were posted to the HRPDC website. HRPDC hosted three (3) APA/AICP Web Conferences, and helped coordinate two (2) Hampton Roads Adaptation Forums, one in October 2017 and one in February 2018. HRPDC staff also helped coordinate and plan a workshop with DCR staff that was held in January 2018.

Regional Coordination Process. HRPDC staff facilitated monthly regional advisory committee meetings addressing wetlands, Chesapeake Bay issues, and other coastal and environmental issues. Through these committees, the localities develop regional consensus on state and federal regulatory and legislative issues, coordinate plans addressing these issues, and exchange information on program activities. During this period, the Regional Environmental Committee (REC) met five (5) times. Topics covered included regional studies and projects, resilient stormwater BMPs, green infrastructure, living shorelines, solar farms, public access to waterways, dredging, and stormwater management. The Coastal Resiliency Committee met two (2) times. Topics included regional resiliency program priorities, mapping areas of recurrent flooding, tracking local resiliency projects, communicating flood risks to the public, incorporating climate change into design storms and engineering standards, and subsidence monitoring.

Regional Technical Studies and Assistance. HRPDC staff discussed potential ideas for studies or other opportunities for local technical assistance.

Benefits Accrued from Prior CZM Grants. No progress was made on this deliverable during the current period.

Final Products	% Completion	Anticipated Completion Date
EIA/EIS and Coastal Consistency Review	25%	September 30, 2018
Public Information, Education, and Training	50%	September 30, 2018
Regional Coordination Process	50%	September 30, 2018
Regional Technical Studies and Special Projects	10%	September 30, 2018
Benefits Accrued from Prior CZM Grants	0%	September 30, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 44	Middle Peninsula Planning District Commission	Federal Budget Total:	\$30,000.00
MPPDC Technical Assistance Program			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Period Open
Open	Start:	End:	Closeout:
	10/1/2017	9/30/2018	12/31/2018

Coastal Management Analysis and Policy Support(MPPDC) staff provided analysis and policy assessment using a variety of approaches to assist and improve local and regional planning efforts. In particular, MPPDC staff worked with Delegate Keith Hodges, Virginia General Assembly 98th District concerning the development of numerous bills focusing on addressing key issues impacting rural coastal localities. Bills focused on Storm water, dredging, dredging permitting, dredging financing, dredge spoil placement, regional coordination for dredging services and the creation of a waterway maintenance program and fund.

Local and State Planning Coordination: MPPDC staff convened monthly and quarterly meetings with local government administrators and local level planners. Local Government Administrators meetings (6) included ongoing discussion related to GoVirginia and growing and expanding the blue and green economy of rural coastal Virginia; proposed Stormwater management legislation, Dredging Legislation, and Pre-discussion about the Commonwealth's TMDL Watershed Implementation Phase 3 WIP approach.

Special Project: Middle Peninsula Chesapeake Bay Public Access Authority: Met with staff from the Nature Conservancy to discuss easement monitoring on the Clay Tract and to review the educational and recreational purposes for the two nature viewing platforms completed on the Clay Tract and the relationship to a conservation easement on a portion of the Clay Tract. Responded to a request by Janice Moore, President of Friends of the Dragon Run interested in trying to connect the Dragon Run mainstem with the Hayworth Tract using a walking trail from the Middle Peninsula Chesapeake Bay Access Authority's Hayworth tract. Consulted with a marina owner interested in donating a marina to the MPCBPAA to assist with the preservation of working waterfronts and provide ample dockage for watermen.

Final Products	% Completion	Anticipated Completion Date
Coastal Management Analysis and Policy Support	50%	Sept 30 2018
Local and State Planning Coordination	50%	Sept 30 2018
Special Project: MPCBPAA	50%	Sept 30 2018
Benefits Accrued from Prior CZM Grants	0%	Sept 30 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 45	Northern Neck Planning District Commission	Federal Budget Total:	\$30,000.00
Northern Neck Planning District Commission Technical Assistance			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

NNPDC staff have continued to provide planning and technical support to local government through assessment of coastal issues, geographic analyses, and the production of mapping products. Additional continued support has been provided to the Northern Neck Land Conservancy, the Northern Neck Master Gardener's Shoreline Evaluation Program, and the Northern Neck Soil and Water Conservation District. NNPDC staff held a local coordination and training meeting on 11-06-17 conducted in collaboration with DCR staff regarding floodplain management on the Northern Neck and available tools and resources provided by DCR to aid in floodplain management efforts. Among the topics discussed were local floodplain ordinances and permitting, flood hazard maps and data, pre- and post-disaster considerations, the Community Rating System, and an update from DCR's Division of Dam Safety and Floodplain Management. Discussions also included local participation in new guidelines for permitting in the floodplain, whereby the localities and DCR staff addressed concerns regarding fair determination, undue burden and personal property rights. NNPDC staff have planned a local coordination and training meeting to discuss the upcoming Chesapeake Bay TMDL Phase III WIP development. The meeting will include coordination and discussion of local planning area goals and training on CAST in preparation for the regional development of the Phase III WIP. NNPDC staff have begun organizing a living shoreline stakeholder group. NNPDC staff, in collaboration with DEQ staff, have recently completed a regional TMDL review and plan on expanding the scope and continuing the effort. NNPDC staff attended a Virginia Oyster Branding meeting on December 12, 2017. In attendance were representatives from the Virginia Department of Agriculture and Consumer Service, Virginia Department of Housing and Community Development, Virginia Tourism, Artisans Center of Virginia, local stakeholders, and seafood industry representatives. The meeting's purpose was to discuss whose responsibility it is to brand the Virginia Oyster, how such branding could be implemented, and the role of the Virginia Oyster Trail in leveraging the Virginia Oyster brand to engender economic development and tourism in the coastal region of Virginia. On February 21, 2018, NNPDC staff attended a meeting of the Virginia Oyster Trail Management Team. Discussions were held regarding sustainable funding models for the Virginia Oyster Trail. Currently, the Virginia Oyster Trail has 160 trail sites mainly in the coastal region. Also during this reporting period, NNPDC staff met with three coastal communities and discussed how they could leverage the Virginia Oyster Trail for greater visibility for their respective communities. For another grant effort, a Virginia Oyster Community Toolkit has been developed to assist communities in working more collaboratively to create experiences and destinations as part of the Virginia Oyster Trail, and NNPDC staff is working with three communities to implement the toolkit in the Northern Neck. NNPDC staff have identified benefits accrued from products completed under previous VACZM grants.

Final Products	% Completion	Anticipated Completion Date
Coastal Management Support	50%	September 30, 2018
Local Coordination and Training	50%	September 30, 2018
Water Supply Planning	50%	September 30, 2018
Hazard Mitigation Planning and Hazard Mitigation Assistance Grant House Elevation Program	50%	September 30, 2018
Living Shoreline Program	50%	September 30, 2018
TMDL Project	50%	September 30, 2018
Virginia Oyster Trail	50%	September 30, 2018
Benefits Accrued from Previous VACZM Grants	50%	September 30, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 46	Northern Virginia Regional Commission	Federal Budget Total:	\$30,000.00
NVRC Coastal Resources Technical Assistance Program			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Coordination & Training:

During the reporting period, Northern Virginia Regional Commission (NVRC) staff coordinated and implemented one rain garden workshop held on February 10, 2018 at the Providence Community Center in Vienna, VA. Through the workshop, 50 participants learned how to design, build, landscape, and maintain small-scale residential rain gardens. NVRC has offered these workshops since 2006 and they continue to be popular with the communities. These classes have proven to be instrumental in providing technical expertise and resources to support the application of stormwater best management practices on private properties. Additionally, the workshops serve to educate local government staff on designing residential rain gardens. Local residents, master gardeners, master naturalists, landscape designers and other interested parties attended the workshop that occurred during this reporting period. www.novaregion.org/raingardens

The Coastal Technical Assistance Program allows NVRC staff to be a part of the Virginia Coastal Policy Team (CPT). One CPT meeting was attended by NVRC during the reporting period on 1/11/2018.

NVRC also held a special workshop on watersheds and road salt management. Approximately 55 people attended. The outcome was development of a Northern Virginia Stakeholder Advisory Group led by VA DEQ. This will be an on-going issue in Northern VA.

Special Project – Northern Virginia Clean Water Partners:

During this reporting period, the Northern Virginia Clean Water Partners initiated their annual Only Rain Down The Storm Drain campaign. The partners decided to continue to air stormwater pollution educational advertisements on cable television and online. Five 30-second ads that feature rubber duckies were selected to continue to illustrate the importance of picking up pet waste, reducing fertilizer application and implementing other general household stormwater pollution reduction measures. One ad was translated into Spanish and is airing on several Spanish language networks. The campaign will also feature banner ads, two sign-in page takeovers on Xfinity.com and taggable spots. These ads are expected to reach approximately 400,000 Northern Virginia residents and fulfill the outreach and education requirements of the jurisdictions' MS4 permits.

A post-campaign survey will be conducted of 500 northern Virginia residents to measure the effectiveness of the campaign. A summary report for the campaign including the number of people who viewed the ads will be prepared and distributed to the Partners in September 2017 for inclusion in their annual MS4 reports. <http://www.onlyrain.org/>

NVRC staff hosted a Clean Water Partner's meeting on January 26, 2018 to plan and coordinate 2018 activities.

EA/EIS/EIR Reviews:

Since October 2014 NVRC staff have reviewed and commented on 2 EIR requests across the region.

Final Products	% Completion	Anticipated Completion Date
Coordination & Training	50%	09/30/2016
Special Project – Northern Virginia Clean Water Partners <input type="checkbox"/>	50%	09/30/2016
Benefits accrued from prior CZM grants	50%	09/30/2016

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 47	George Washington Regional Commission			Federal Budget Total:	\$30,000.00
George Washington Regional Commission Coastal Zone Management Assistance					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

GWRC holds coordination/training meetings for the Regional Stormwater Managers Technical Committee and participates in Coastal PDC meetings with CZM staff. The Regional Stormwater Managers meetings are held for members to discuss topics of interest related to stormwater management and to improve understanding of stormwater regulations and best practices. During this reporting, period Regional Stormwater Managers meetings were held on November 15th and March 13th. Meetings will continue to be held quarterly throughout the remainder of the grant cycle. GWRC also participates in Coastal PDC meetings which provide an opportunity for the eight Virginia Coastal PDCs and Virginia CZM staff to identify and discuss coastal policy issues. A Coastal PDC meeting was held on November 8th and January 11th.

GWRC is working with its member localities to identify stormwater management best practices that are located within public access areas throughout the region. Some BMPs have already been identified, and sign designs are in draft. An initial draft of a sign providing information about an extended detention pond at a middle school in Stafford County was presented at the March 13th Quarterly Stormwater Managers meeting. The group provided some feedback on the proposed sign which will help as the remaining signs are produced.

Final Products	% Completion	Anticipated Completion Date
Minutes of coordination meetings, digital copies of training material, program, and financial reports	50%	9/30/18
Digital copies of sign designs and production cost estimates	25%	9/30/18
Final Report	25%	11/15/18

Task: 48	Richmond Regional Planning District Commission			Federal Budget Total:	\$30,000.00
Richmond Regional Technical Assistance					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

Technical Assistance Report – RRPDC staff completed 37 environmental review and 25 intergovernmental reviews during the reporting period. RRPDC attended two RVA H2O technical advisory committee meetings during the reporting period. RVA H2O is City of Richmond's integrated permit and water quality planning process. RRPDC staff attended one Richmond Native Plant Guide meeting. The Native Plant Guide will be produced in part by the VCZM Program and will feature plants native to the Richmond region. RRPDC staff followed developments of the Chesapeake Bay TMDL process, including recent developments related to the Phase III WIP process. RRPDC staff communicated with local staff about what the planning process will entail and how the RRPDC can support them.

Coordination and Training Report – RRPDC staff hosted an Environmental TAC (Env TAC) meeting on December 19, 2017. DEQ staff presented updates about Bay Act training and the Chesapeake Bay TMDL Phase III WIP process. RRPDC staff provided an update on projects completed and underway. The meeting concluded with a roundtable update discussion.

In February 2018, RRPDC staff completed a white paper outlining recommendations to reinvigorate the RRPDC Env TAC for greater benefit for the localities and the RRPDC work program. This white paper will be included in the grant Final Report.

RRPDC staff have scheduled an Env TAC conference call for April 10, 2018 to discuss the Chesapeake Bay TMDL Phase III WIP process. A conference call was preferred instead of an in-person meeting due to the quickly developing situation.

Regional Public Water and Sewer Inventory – RRPDC staff met with each of the locality public utility/works directors and GIS staff in February to begin the process of obtaining data updates for the Regional Water & Sewer brochure/map layer created in 2010.

Benefits Accrued – RRPDC staff has started a notes log of examples of benefits accrued from previously funded work. Highlights will be summarized in the grant Final Report.

Final Products	% Completion	Anticipated Completion Date
Technical Assistance Report	50%	9/30/2018
Coordination and Training Report	48%	9/30/2018
Regional Public Water and Sewer Inventory	60%	9/30/2018
Benefits Accrued	50%	9/30/2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 49	Virginia Aquarium and Marine Science Center Foundation	Federal Budget Total:	\$31,000.00
Virginia Sea Turtle and Marine Mammal Stranding Network			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 1/1/2018	End: 12/31/2018	Closeout: 3/31/2019

This grant started on January 1, 2018. From January through March 2018, the Virginia Aquarium Stranding Response Program (VAQS) recorded 28 strandings in Virginia. There were 32 strandings recorded during the same period in 2017.

The VAQS Stranding Team responded to 15 marine mammal strandings in Virginia during this reporting period, 14 cetaceans and one pinniped. Ten (67%) of the strandings were located in Virginia Beach, one (6%) in Chesapeake and four (27%) on Virginia's eastern shore. The cetacean species included seven bottlenose dolphin (*Tursiops truncatus*), one common dolphin (*Delphinus delphis*), one harbor porpoise (*Phocoena phocoena*), three humpback whale (*Megaptera novaeangliae*), one northern right whale (*Eubalaena glacialis*) and one unidentified delphinid. There was one pinniped species including one harbor seal (*Phoca vitulina*). Two live stranding events occurred during this reporting period. In February, a juvenile harbor seal stranded in Accomack County on Assateague Island. The seal was treated for several days and transferred to the Marine Mammal Stranding Center in Brigantine NJ for rehabilitation and eventual release. The other live stranding involved a large, probable offshore bottlenose dolphin that stranded in early March in Virginia Beach at Sandbridge. The dolphin was in very poor condition and was humanely euthanized by stranding team staff. In addition, the cool winter season resulted in fewer whale sightings off Virginia Beach compared with the same period in 2017.

There were 13 sea turtle strandings recorded in Virginia during this reporting period, compared with 12 during the same period in 2016. The sea turtle species included two loggerhead (*Caretta caretta*), 10 Kemp's ridley (*Lepidochelys kempii*) and one green (*Chelonia mydas*). Eight (62%) of the stranded turtles were located on the eastern shore, four (31%) in Virginia Beach and one (7%) in Suffolk. One of the sea turtles, a Kemp's ridley, was alive when it stranded on January 1 at False Cape State Park in Virginia Beach. The probable cause of stranding for six of the turtles was cold-stunning, for two was watercraft interaction, and five were unable to be assessed.

VAQS Staff attended professional meetings and workshops during this reporting period. There were also educational outreach presentations to groups in the Hampton Roads area. Stranding Team volunteers contributed more than 3,700 hours during this reporting period. A detailed list of all trainings, presentations and publications will be included in the final report.

Final Products	% Completion	Anticipated Completion Date
Stranding Response Data Sharing and Reporting	25%	December 31, 2018
Personnel and Cooperator Training Activities	20%	December 31, 2018
Public Education and Outreach Activities	20%	December 31, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 71	Virginia Institute of Marine Science	Federal Budget Total:	\$70,000.00
Expanding Virginia's oyster industry while minimizing user conflict			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 1/1/2018	End: 9/30/2018	Closeout: 12/31/2018

The focus of this project is to characterize the oyster industry as it exists today, examine the regulatory and economic framework that resulted in its recent growth, identify issues that will likely impact future expansion, and suggest pathways for supporting growth of the oyster industry into the future. Specifically, the project addresses (1) current and future productivity of public oyster grounds given their dependency on limited (both in quantity and future availability) shell resources for habitat and replenishment; (2) current and future productivity of private lease grounds including estimates of unproductive area; and (3) current and future productivity of intensive, hatchery dependent oyster aquaculture including limits to and opportunities for future expansion. This reporting period has focused on an assessment of shell resources on natural and restored beds within the public Baylor grounds in the Chesapeake. VIMS and others have worked to develop a protocol for importing and assessing monitoring data. Attribute information from long-term monitoring data records has been imported into GIS to assess productivity of public and private areas based on bottom type. The intent of the analysis is to quantify current wild harvest production, and estimate where and how much future production potential is likely based on available shell resources. Analysis has also begun to assess active harvesting of oysters within private leased areas. VIMS has coordinated with the VMRC to gain access to past and current harvest data. The intent is to assess utilization of public resources through leasing for aquaculture and wild harvesting. Current regulation requires lease holders to show activity within 5 years in order to maintain the lease. Data suggests this may not be the case; and bottom resources which could be available for active aquaculture, for example, is being held without purpose through the leasing program.

Redrawing regulatory boundaries that define state owned bottom land uses or redefining allowable uses on public bottom are two potential avenues for enhancing oyster production in the future. This project prepares data necessary to evaluate the production potential necessary to rationalize the benefits of this change. As well, the efforts this year will begin to examine the opportunity to introduce alternative aquaculture practices that will enhance oyster production in the future.

Final Products	% Completion	Anticipated Completion Date
GIS/Database Analysis of Shell Resources	65%	9/2018
GIS Analysis of Active Harvesting	30%	9/2018
Assessment of current and sustained aquaculture metrics	10%	9/2018
Assessment of regulatory impediments and conflict analysis; final map products	0%	10/2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 72	Accomack-Northampton Planning District Commission			Federal Budget Total:	\$100,000.00
Virginia Oyster & Water Trail Eco-Tourism Collaboration					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	12/31/2018	3/31/2019		

Product 1: Ecotourism The Steering Committee meeting met at VIMS on January 31. Agenda items included 1) discussion of the EcoTourism Steering Committee Vision Statement, Goals, Objectives and Composition of Subcommittees, (2) Website domain discussion and (3) Logo and Outreach material discussion. A-NPDC staff presented and exhibited at the Virginia Green Conference on behalf of the Ecotour Guide course.

Product 2: VA Water Trails The marketing subcommittee for the Steering Committee has had ongoing communication and met on March 22 to guide the graphic designer in creating the Water Trail logo. The hosting company has been contracted and several domains purchased.

Product 3: Seaside Water Trail A-NPDC has made initial edits to the existing Seaside Trail descriptions, has compiled a list of stakeholders to discuss the trail with and to comprise the Working Group, and is working with VCZMP staff to find and compile 2005 GIS trail resources in order to update/convert to Google maps.

Product 4: MP EcoAssets The MPPDC met with Middle Peninsula project partners to produce a Google map database and map of potential access locations to the Mattaponi, Pamunkey and York Rivers, including boat ramps owned by the Virginia Department of Game and Inland Fisheries, Virginia Department of Transportation road endings, State Parks, County owned sites, and PAA sites.

Product 5: Guinea Marsh The MPPDC received a completed appraisal and approval from NOAA for the Guinea Marsh Islands being donated to the Middle Peninsula Chesapeake Bay Public Access Authority. The islands have been valued at \$107,000. Prepared deeds for recordation.

Product 6: Oyster Trail The NNPDC continues to coordinate with the Artisan Center of Virginia, whose director has been included in the working group along with tourism staff from Mathews County. NNPDC and partners are assessing different options for the tool, such as the TRAIPOSE model and how these can integrate with the Virginia Oyster Trail website.

Final Products	% Completion	Anticipated Completion Date
1: Rural Coastal VA Ecotourism Vision Statement, Goals, Objectives	25%	Dec. 31, 2018
2: VA Water Trails Research & Branding Initiative	35%	Dec. 31, 2018
3: Summary of Stakeholder input to the Seaside Water Trail Update	35%	Dec. 31, 2018
4: Outreach Material & Map Development MP Ecotourism Assets/Trails	50%	Dec. 31, 2018
5: Guinea Marsh Donation	50%	Dec. 31, 2018
6: Development of Digital Engagement Tool for the VA Oyster Trail	20%	Dec. 31, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 73.01 The Nature Conservancy				Federal Budget Total: \$23,429.00
Atlantic Coast Interpretive Signage: Seaside Eastern Shore				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Period Open
Open	Start:	End:	Closeout:	
	10/1/2017	12/31/2018	3/31/2019	

Task 73.01 is progressing as anticipated as of March 31, 2018. Over the past several months, members of the project team have communicated extensively and laid the ground work for the design of the project deliverables to be carried out during the remainder of the project period. Due to the iterative nature of the project products, not all deliverables are equally as far along at this point, but their status will come together as the project progresses. Actual production of project deliverables (kiosk panels, printed materials) will occur towards the end of the project period once all design is completed.

In December 2017, The Nature Conservancy (TNC) finalized a contract with Waystone Design, LLC to carry out the design and development of each of the outreach products associated with Task #73.01: 1) a website, 2) poster and brochure, and 3) kiosk panels for seven locations. Neil McCoy, Creative Director at Waystone, traveled to the Eastern Shore of Virginia to meet with the project Advisory Team (consisting primarily of representatives from all agencies/organizations involved with land ownership and/or management on the seaside of Virginia's Eastern Shore), initiate the design phase of the project and conduct site visits at representative kiosk locations. Notes from the partner meeting provided Waystone with a solid foundation of information to begin to map out a plan for designing the products. TNC acquired a web hosting platform which enabled Waystone to begin to design the website and share draft pages for project partners to review.

In March 2018, TNC staff, VCZMP staff, staff from the Accomack-Northampton Planning District Commission and Waystone participated in several conference calls to further refine the objectives and anticipated content for the kiosk panels. These discussions resulted in a general outline that will guide the content development for the kiosk panels at each location. TNC and VCZMP staff presented an overview and update about the project to a broad group of partners on the Eastern Shore at the annual Virginia Coast Avian Partnership Meeting in order to solicit additional feedback and recommendations. TNC staff scheduled a second in-person meeting for the project Advisory Team for May 2018, at which partners will have the opportunity to review several draft products and provide feedback and recommendations. Finally, Waystone prepared two draft website pages that TNC staff distributed to the Project Advisory Team for review. All comments and feedback received from the project team are currently being compiled and summarized and will be distributed to the group in April 2018.

Final Products	% Completion	Anticipated Completion Date
Product #1: Design for website and outreach materials	25%	October/November 2018
Product #2: Additional printed materials	0%	September 2018
Product #3: Fabrication, delivery and installation of updated panels	0%	December 2018
Product #4: Final Report	0%	February 2019

Task: 73.02 Accomack-Northampton Planning District Commission				Federal Budget Total: \$23,628.00
New Eastern Shore Kiosks: Atlantic Coast and Bayside Interpretive Signage				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Pending
Pending	Start:	End:	Closeout:	
	10/1/2017	12/31/2018	3/31/2019	

Grantees are compiling 306A documentation which will hopefully be submitted in May.

Task: 74 Virginia Aquarium and Marine Science Center Foundation				Federal Budget Total: \$25,000.00
Atlantic Coast Interpretive Signage: Virginia Beach				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Pending
Pending	Start:	End:	Closeout:	
	10/1/2017	9/30/2018	12/31/2018	

Grantees are compiling 306A documentation which will hopefully be submitted in May.

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 75	Dept. of Environmental Quality - Virginia Coastal Zone Management Program		Federal Budget Total:	\$43,412.00
Promoting Ecotourism: Inventory and Update of Virginia CZM Public Access and Land Acquisition Project Signage				
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Pending	
Pending	Start:	End:	Closeout:	
	10/1/2017	9/30/2018	12/31/2018	

Development of the sign inventory has begun with a review of CZM's existing records of public access and land acquisition sites. CZM staff has also begun supplementing this information by contacting PDCs and the Department of Conservation and Recreation about the current status of signs on State Parks and Natural Area Preserve sites.

Prioritization of sign work will begin with existing information so that approval for 306 A documentation can begin as soon as possible.

Final Products	% Completion	Anticipated Completion Date
Inventory of public access/land acquisition sites and accompanying acknowledgement signs	30%	Sept 30, 2018
Prioritization of access/acquisition sites needing replacement/repair and coordination of work	5%	Sept 30, 2018
Sign replacement/repair and documentation	0%	Sept 30, 2018

Task: 81	Virginia Institute of Marine Science		Federal Budget Total:	\$70,000.00
Expanding the use of natural and nature-based infrastructure to enhance coastal resiliency				
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start:	End:	Closeout:	
	10/1/2017	9/30/2018	12/31/2018	

This project will identify local opportunities to increase community resilience to extreme weather, specifically flooding events, with projects that can garner co-benefits by addressing the local need for enhancing resiliency and regulatory requirements such as nutrient reduction and best management practices. The project uses GIS to generate spatially explicit data for localities in Virginia's coastal zone and formats it specifically for each locality in Virginia's coastal zone. The project focuses on identifying nature and nature based solutions, such as living shorelines, which can garner benefits toward nutrient reduction requirements. At the same time, living shorelines also offer shoreline resiliency to storm action.

The project uses data through the Shoreline Inventory and models living shoreline suitability through the VIMS Shoreline Management Model (SMM). This project includes revisions of the current version 4 of the SMM to include currently defended shoreline, and any data updates necessary for running the model in three pilot localities. Following a QA/QC of the pilot areas, the model will be run coastal wide and the portals for each locality (<http://www.vims.edu/ccrm/ccrmp/index.php>) will be updated with the revised tool.

This reporting period has focused on baseline data development for running the model in the pilot localities. Center for Coastal Resources Management (CCRM) staff scientists and GIS professionals have been working on data development. The corps Wetlands Advisory Program staff at the CCRM has been working on developing the protocol rules for enhancing the model to address shorelines that have been previously hardened with bulkheads, revetments, and groins.

Final Products	% Completion	Anticipated Completion Date
Develop protocol for considering shorelines previously modified	45%	May, 2018
Assess existing data and update data where necessary for model run	75%	May, 2018
Develop Model Code, test, qa/qc	0%	September, 2018
Coastal wide model update	0%	October, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
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for the period from #Name?

Task: 82	Virginia Institute of Marine Science	Federal Budget Total:	\$40,000.00
Living Shoreline Sea Level Resiliency: Performance and Adaptive Management of Existing Sites			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Living shorelines are the preferred method of shore protection because they provide habitat benefits in addition to erosion control. This project has two goals. The first is to monitor the effectiveness, from both a habitat and engineering perspective, of installed rock sill living shorelines at four sites in Chesapeake Bay. Two are relatively new projects. However, two have been in place for decades. A second goal is to understand the resiliency of these sites to sea-level rise. As sea-level rises, the marsh habitat will either migrate up a low bank or be squeezed against a high bank. Modeling the project's response to sea level rise will help provide adaptive management strategies for the many rock sill systems installed throughout Chesapeake Bay. This grant was received several months after the start date of October 1, 2018. Cold-weather conditions in the winter prevented much of the field work; however, as the weather warms up, site work will be planned.

Product 1: Monitoring

The readily-available existing reports and GIS information were obtained to begin assessing each site and determining coastal resiliency considerations. The GIS data include, where available, shoreline change, existing shoreline structures, existing aerial and ground photos, birding and wildlife information, habitat and SAV data, facilities, geology, LIDAR, archaeology, aquaculture, and nearshore depths. In addition, previously-collected data by Shoreline Studies Program was mapped into GIS.

One site, Captain Sinclair's Recreational Area, has been surveyed for elevation, shore condition, and habitats. GIS-referenced photos were taken to document shore condition. Shoreline type, bank condition, upland buffer considerations, and condition and effectiveness of existing structures were noted. Other sites to be surveyed are at St. Mary's City and Jefferson Patterson Park & Museum in Maryland and Occohannock on the Bay in Virginia.

Task 2: Sea Level modeling

A literature review on climate change and sea-level rise is being performed in order to determine which scenarios are most appropriate to model for our sites.

Task 3: Report

The format for the final report has been organized. The background information and literature review information is being added to the report.

Final Products	% Completion	Anticipated Completion Date
Product 1: Monitoring	25%	5/31/2018
Product 2: Sea level modeling	20%	8/15/2018
Product 3: Report	20%	9/30/2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2017

**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 83	Northern Virginia Regional Commission	Federal Budget Total:	\$59,253.00
Utilizing Regional Collaboration to Build Community Resiliency in Northern Virginia			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

Product #1- NOVA Climate Resiliency Team

During this reporting period, NVRC staff has planned the agenda for and scheduled the next meeting of the Climate Resilience Team for May 1st. Five members of the NOVA Climate Resilience team traveled to Pittsburgh and attended a leadership academy "Innovations in Building Resilient Communities" led by the Institute for Sustainable Communities. For three days, twelve teams from communities, cities, and metropolitan regions across the country explored innovative approaches to building resilient communities using approaches that are deeply rooted in equity and social cohesion and that emphasize collaboration across sectors and jurisdictions. The outcomes include ideas and actions about how principles of social equity can be integrated into our currently planned activities.

Product #2- Characterize Risk in Priority Sectors

NVRC is working to develop a risk characterization template within a variety of sectors using a common set of themes that consider the conditions and circumstances that result in low, moderate, or high societal consequences. This risk characterization template would weigh high probability of a low-consequence outcome (for example, prolonged and elevated summer temperatures affecting bridge infrastructure), weighted less than a high probability of a moderate-consequence outcome (such as prolonged and elevated summer temperatures creating higher incidences of heat stroke within vulnerable populations). Discussion of the template is on the agenda for the next Climate Resilience Team meeting.

Product #3-Resiliency Index

The Resiliency Index will be developed with input from the Climate Resilience Team and potentially a smaller subcommittee. Discussion of the index is on the agenda for the next team meeting.

Product #4-Monitoring Plan for Living Shorelines

A Scope of Work has been developed and a subcontract for scientists at the Virginia Institute of Marine Sciences to carry out the work has been initiated. Development of the monitoring protocol is in early stages.

Product #5 - Pilot-Scale Implementation of Risk Characterization Template

Pilot scale implementation of the risk characterization template will begin when the template is finalized.

Final Products	% Completion	Anticipated Completion Date
NOVA Climate Resiliency Team	10%	09/30/2018
Characterize Risk in Priority Sectors	5%	09/30/2018
Resiliency Index	5%	09/30/2018
Monitoring Plan for Living Shorelines	5%	09/30/2018
Pilot-Scale Implementation of Risk Characterization Template	0%	09/30/2018

Task: 84	Hampton Roads Planning District Commission	Federal Budget Total:	\$31,624.00
Development of First Floor Elevation Data for Use in Locality Vulnerability Assessments			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2017 9/30/2018 12/31/2018		

During this grant period, the HRPDC staff

- Contacted localities to request available data, including building footprint shapefiles and elevation certificates
- Started organizing data received from localities
- Began developing Python code to allow for converting pdf files to a database format
- Coordinated with localities and state and federal entities, including ODU and the U.S. Army Corps of Engineers, on related efforts

Final Products	% Completion	Anticipated Completion Date
Data Collection, Assessment, and Processing	25%	September 30, 2018
Analysis of Structure Data to Develop First Floor Elevations	5%	September 30, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 91	William & Mary - Virginia Coastal Policy Center			Federal Budget Total:	\$30,000.00
Narrative Enforceable Policies					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

The Virginia Coastal Policy Center (VCPC) drafted policies based on the Virginia Department of Environmental Quality's (DEQ) respective substantive Chesapeake Bay Preservation Act provisions, and then the Advisory Committee met on January 24, 2018 for comment on, and discussion of, the draft to ensure that the policies met the National Oceanic and Atmospheric Administration's (NOAA) criteria for approval and were faithful representations of the statutory and regulatory provisions upon which they were based. Comment and discussion of the enforceable policies resulted in multiple alterations to the draft, including changes in cited authorities, modified language that more accurately reflected the cited authorities, and removal of policies that did not meet NOAA criteria. After the meeting, VCPC incorporated suggested edits into a new draft that was then sent to the Advisory Committee for approval. Next VCPC moved into discussions with the Virginia Department of Health (VDH) and DEQ's Air division and began drafting policies based on those agencies enforceable programs. Additionally, an Advisory Committee Meeting to discuss the VDH and DEQ Air drafts is scheduled for April 18, 2018.

Final Products	% Completion	Anticipated Completion Date
Non-point Source Pollution enforceable policies	40%	August 2018
Point Source Pollution enforceable policies	0%	August 2018
Shoreline Sanitation enforceable policy	50%	June 2018
Air Pollution enforceable policy	50%	June 2018
Review Previously Drafted Policies	0%	September 2018

Task: 92.01	Virginia Institute of Marine Science			Federal Budget Total:	\$60,000.00
Coastal Resiliency and Shoreline Management - Adaptive Management for Resilient Communities					
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	10/1/2017	9/30/2018	12/31/2018		

With the shift in management priorities at local levels towards coastal resiliency, baseline data remains the backbone for the recent development of resiliency tools now populating the Virginia coastal resiliency atlas known as AdaptVA. This one stop shop addressing all issues surrounding coastal adaptation and resiliency is the gateway to geo-spatial models and tools developed to encourage the use of nature based solutions, support flood risk management in the Commonwealth, and address physical and social vulnerability within Tidewater communities. Managers of AdaptVA collaborate with state agencies and solicit input from local governments through various venues to insure stakeholders' needs are met. The need for up-to-date, accurate baseline data pertaining to shoreline condition remains a critical priority. The tools and models dependent on these data influence local and state policy and help local governments implement statewide mandates.

This progress reporting period has been dedicated to developing the baseline data necessary to run management models and update inventories in 5 coastal localities: Richmond, Essex, Caroline, New Kent, and Arlington. Shorelines for all localities have been mapped and conditions along their shorelines have also been mapped. A rigorous 3-step QA/QC procedure is in place and nearly complete. In progress, is a high resolution delineation of tidal marshes for two localities. This is nearly complete for one locality. The datasets will be used to generate a model that delineates shoreline best management practices along tidal shoreline. Built into this model is a living shoreline suitability model that identifies where living shorelines are practical alternatives for erosion control.

Final Products	% Completion	Anticipated Completion Date
Update Shoreline Inventories for Richmond, Essex, Caroline, New Kent, and Arlington Counties	75%	9/30/2018
Update Tidal Marsh Inventories for Richmond and Essex Counties	35%	9/30/2018
Run Shoreline Management Model for 4 localities	0%	9/30/2018
Living Shoreline Suitability Analysis for Public Lands	0%	9/30/2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
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Task: 92.02	Virginia Institute of Marine Science	Federal Budget Total:	\$40,000.00
Targeted Living Shorelines for Virginia State Parks			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

To begin the site assessment process, a collecting permit was obtained from the Department of Conservation and Recreation for each state park that will be visited. Though the collecting permit is obtained through a central office, each park manager has to sign off on the permit so the parks are aware of the project. The 11 parks that are part of this project are Mason Neck, Leesylvania, Widewater, Caledon, Westmoreland, Belle Isle, York River, Middle Peninsula, Chippokes, First Landing, and Kiptopeke.

Product 1: Site assessment

The readily-available existing reports and GIS information were obtained to assess coastal hazards risks and other considerations for each park. The data include shoreline change, existing shoreline structures, existing aerial and ground photos, birding and wildlife information, habitat and SAV data, facilities, geology, LIDAR, archaeology, aquaculture, and nearshore depths.

Four of the sites have been visited by boat to assess the shoreline condition. GIS-referenced photos were taken to document shore condition along Belle Isle, Middle Peninsula, York River, and Chippokes. Shoreline type, bank condition, upland buffer considerations, and condition and effectiveness of existing structures were noted. In addition, bottom depths and general bottom material type have been determined as needed for site design, and a preliminary management plan has been created.

Task 2: Ranking and plan site selection

The site assessment data is the basis for this task. Each park is being looked at individually and will be ranked according to need for structures and appropriateness for a living shoreline demonstration project.

Task 3: Report

The format for the final report has been organized. Each park will have its own stand-alone shoreline management plan summary report. The background information is being added to each of these sections in preparation for finalizing the shoreline management planning.

Final Products	% Completion	Anticipated Completion Date
Product 1: Site assessment	85%	4/30/2018
Product 2: Ranking and site selection	10%	5/31/2018
Product 3: Report	15%	9/30/2018

Task: 92.03	The Rector and Visitors of the University of Virginia	Federal Budget Total:	\$40,000.00
Refining the RAFT For Broader Implementation			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Because of delays in negotiating the scope of work and terms and conditions of this project, a contract was not signed until April 3, 2018. The project is now underway and progress will be reported during the next progress report in the fall of 2018.

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
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for the period from #Name?

Task: 92.04	Wetlands Watch	Federal Budget Total: \$18,400.00	
The Community Rating System: Driving Adaptation in Coastal Virginia			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Wetlands Watch has made progress on all its tasks and products under its grant to drive adaptation in coastal Virginia through participation and success in the National Flood Insurance Program's (NFIP) Community Rating System (CRS). To further product 1, Analysis of Regional CRS Support Positions, Wetlands Watch helped organize, with the help of Virginia Sea Grant, a Workshop held at William & Mary School of Business in December 2017. This workshop brought a distinguished panel of University experts in finance, commerce, public affairs, and local government from William & Mary, Virginia Tech, University of North Carolina at Chapel Hill, and University of Virginia together to discuss student research work on how technical assistance related to the CRS program is provided across the nation. This discussion sought to identify innovative funding strategies for regional CRS support in coastal Virginia. Wetlands Watch will combine its independent research completed on this issue with the workshop outcomes and recommended strategies identified in workshop discussion into one white paper, which will serve as the final deliverable under this grant. Wetlands Watch is currently in the process of meeting, in person and electronically, with key stakeholders engaged in resilience efforts in coastal Virginia to discuss information pertaining to both product 2 (Data Needs Assessment & Funding Opportunities for Resiliency) and product 3 (CRS Program Recommendations to Benefit Coastal Localities). The interview feedback collected will build the final deliverable for each task. Wetlands Watch has created a list of CRS Coordinators outside the Virginia Coastal Zone who will be contacted over the next several months for input on product 3, CRS Program Recommendations to Benefit Coastal Localities. Finally, Wetlands Watch collected and responded to feedback received from various stakeholders on their report funded under a FY16 CZM grant, The Costs & Benefits of the CRS Program in Virginia. Wetlands Watch received actual salaries from several CRS Coordinators to generate more accurate benefit cost ratios; one of the localities presented their more accurate ratio to a County Board of Supervisors to show the economic value of participation in the CRS Program. Additionally, Wetlands Watch staff was requested to present on the report at multiple conferences and workshops, most notably at the annual Virginia Floodplain Managers conference in March 2018 and the annual Association of State Floodplain Managers conference in June 2018. Wetlands Watch is registered to attend and present at this national level conference held in Phoenix, Arizona, which will help further the completion on three of the four tasks included in this grant and increase general visibility for the Virginia Coastal Zone Management Program's support of this work.

Final Products	% Completion	Anticipated Completion Date
Product 1: Analysis of Regional CRS Support Positions	20%	September 30, 2018
Product 2: Data Needs Assessment & Funding Opportunities for Resiliency	40%	September 30, 2018
Product 3: CRS Program Recommendations to Benefit Coastal Localities	20%	September 30, 2018
Product 4: Cost-Benefit Analysis Follow Up	80%	July 1, 2018

Task: 93.01	Richmond Regional Planning District Commission	Federal Budget Total: \$25,000.00	
Chickahominy Resources Steering Committee			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Mapping and Data Gathering of Conservation and Economic Resources – RRPDC staff have obtained the updated data from DCR and DGIF. The process of updating existing maps and adding to the map repertoire of the project has begun. Maps will be shared with the steering committee and included in the grant Final Report.

Facilitation of Steering Committee and Economic Study Contractor – RRPDC staff hosted a meeting of the Study Contractor and the project steering committee on January 29, 2018. Follow up communication with the contractor and steering committee members has been ongoing since the meeting, including creation of a conserved land dependent business list for the study area. More recently, RRPDC staff has been in contact with localities regarding parcel assessment data needed for the Economic Study.

Research and Development of Educational Resources for Future Policy Discussion – RRPDC staff have begun a list of policy options that can be discussed by the project steering committee. This list will be basis for creating a menu of policy options for local governments at the conclusion of this project.

Final Products	% Completion	Anticipated Completion Date
Mapping and Data Gathering of Conservation and Economic Resources	50%	9/30/2018
Facilitation of Steering Committee and Economic Study Contractor	50%	9/30/2018
Research and Development of Educational Resources for Future Policy Discussion	40%	9/30/2018

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2017

**Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?**

Task: 93.02 George Mason University		Federal Budget Total: \$88,500.00	
Economic Costs and Benefits of Land Conservations and Natural Resource Protection in the Lower Chickahominy River Watershed			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 1/15/2018	End: 9/30/2018	Closeout: 12/31/2018

Project Kick-Off Meeting

Research team (Clower, Bellas) attended kick-off meeting with project advisory committee/stakeholder group. Percent Complete: 100%
GMU and Urban Analytics team members have engaged in several activities including planning meetings with advisory committee staff and preparing background materials for tasks associated with Product #1 and Product #2

Product #1: Description and Quantification of the Value of Direct, Indirect and Induced Economic Benefits

Preparing data collection instruments, identifying organizations engaged in project-oriented activities in the LCRS. (Clower, White) Preparing economic models for analysis. (Clower) Percent Complete: 20%

Product #2: Description and Quantification of Direct and Foregone Tax Revenues

Urban Analytics team (Bellas) has started data gathering for building the fiscal impact model, participated in planning meetings. Percent Complete: 15%

Product #3: Determine the Overall Net Benefits and Costs of Conserved Land

This task begins in April 2018. Percent Complete: 0%

Product #4: Final report

This task begins on June 1, 2018. Percent Complete: 0%

Final Products	% Completion	Anticipated Completion Date
#1 Description and quantification of economic impacts	20%	May 31, 2018
#2 Direct and Foregone tax revenues	15%	July 1, 2018
#3 Net benefits and costs of conserved lands	0%	August 31, 2018
#4 Final report	0%	September 30, 2018

Task: 93.03 Accomack-Northampton Planning District Commission		Federal Budget Total: \$47,500.00	
Rural Chesapeake Bay/Seaside of Virginia Working Waterfront Language and Policies			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Product 1: Master Plan & Legislative MPPDC and A-NPDC staff attended numerous General Assembly committee meetings to provide legislative support for various WWF 309 Bills focusing on dredging permitting process, dredge spoil placement, dredging financing tools, functional consolidation of dredging services and Working Waterfront (WWF) preservation initiatives.

Product 2: Zoning & Coastal Living Policy The MPPDC assisted in research of waterfront zoning and coastal living policies in places across Coastal US. The A-NPDC has started compiling example language from and for comprehensive plans, compiling a list of resources (primarily zoning & legislative) and examples that localities can use to better manage WWFs, and designing the general education outreach materials for living in areas with active WWFs.

Product 3: Outreach & Presentations The A-NPDC worked primarily with the Regional Navigable Waterways Committee and their Commission, both entities with elected Supervisors as members, to share information about new legislative options for WWF management. The MPPDC provided their localities with updates on key WWF Bills moving forward and how these bills address local WWF issue of concern, received a request for technical assistance from the Town of Mount Pleasant in South Carolina looking to develop a working waterfront master plan, discussed how MPPDC has approached this issue, & directed the staff to the National Working Waterfront website for more information.

Final Products	% Completion	Anticipated Completion Date
1: WWF Master Plan Adoption & Legislative Update	90%	9/30/2018
2: WWF Zoning & Coastal Living Policies	40%	9/30/2018
3: Outreach & Presentations to Interested Localities	10%	9/30/2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 94.01 Virginia Commonwealth University	Federal Budget Total: \$48,000.00	
Ocean Stakeholder Coordination		
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open
Open	Start: 10/1/2017 End: 12/31/2018 Closeout: 3/31/2019	

For the Project 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 Ocean Planning Stakeholder Engagement (OPSE) Coordinator to the VA Coastal Zone Management Program at the VA DEQ. During the reporting period, the OPSE Coordinator continued to work with the commercial fishing industry in support of the VA efforts to advance the Mid Atlantic Ocean Plan. These opportunities continue to strengthen the relationship between the offshore commercial fishing industry and the VA Coastal Zone Management Program.

Due to delays in the VCU Office of Sponsored Programs, this contract was not executed until March 20, 2018.

However, during the reporting period, the OPSE Coordinator attended the BOEM Offshore Continental Shelf Oil and Gas Development public meeting held in Richmond on February 21. While a significant public presence was on site during a pre-event press conference, attendance was extremely light.

The OPSE Coordinator met with Dominion Energy and Orsted to discuss the planned deployment of the test turbines for the VA Offshore Wind Technology Advancement Project (VOWTAP), renamed to Coastal Virginia Offshore Wind, to prepare for in-water activities in the 2018 fishing season. Recommendations were shared with Dominion and Orsted to follow the process outlined in the Collaborative Fisheries Management Project and Best Management Practices. VA has offered Dominion assistance in the development of communication materials that would inform the commercial and recreational sectors of timing and potential impacts. Dominion has indicated their interest but has yet to provide updates.

Final Products	% Completion	Anticipated Completion Date
Report on Ocean Stakeholder Engagement and addressing VA's Ocean users' needs for the Healthy Ocean Ecosystem (HOE) Goal	1%	Sept, 2018
Report on Ocean Stakeholder Engagement and addressing VA's Ocean users' needs for the Sustainable Ocean Uses Goal	1%	Sept, 2018

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 94.02 Coastal States Stewardship Foundation	Federal Budget Total: \$48,000.00
Identifying and Assessing Ecologically Rich Areas (ERAs)	
<u>Project status:</u>	<u>Final deliverable(s) status:</u> Project Period Open
Open	
Current approved	
Start: 10/1/2017	End: 9/30/2018
Closeout: 12/31/2018	

- MARCO staff (Kate Morrison, Kaity Goldsmith and Judy Tucker) planned and executed scientist and stakeholder workshop, November 2, 2017, in Annapolis, MD.
- Highlights of the workshop and the subsequent recommendation of Mid-Atlantic Regional Planning Body's Ecologically Rich Areas (ERA) Work Group were drafted, reviewed, and published December 14, 2017 to the RPB website with materials for the Mid-Atlantic Regional Planning Body (RPB) Public Meeting scheduled for January 24, 2018 (<https://www.boem.gov/ERA-Work-Group-Recommendation-on-Next-Steps/>). Due to lack of federal appropriations, this meeting did not occur and was re-scheduled as a public webinar for February 13, 2018.
- The ERA Workshop Summary Report from November 2017 was drafted, sent through the review process, approved, and posted on the RPB (<https://www.boem.gov/ERA-November-2017-Workshop-Summary/>) and MARCO (<http://midatlanticocean.org/wp-content/uploads/2018/04/ERA-November-2017-Workshop-Summary.pdf>) web sites.
- MARCO staff assisted with drafting the ERA Work Group section of the RPB Semi-Annual Work Plan and Progress Report to document progress from June-November 2017 and the work plan for January- June 2018. This document was initially developed through the leadership of the RPB State Co-Lead (Virginia), provides a publically available, transparent accountability tool among RPB entities, and between the RPB and the general public, and also serves as a notification mechanism for opportunities of additional stakeholder engagement. (<https://www.boem.gov/Draft-Semi-Annual-Work-Plan-and-Progress-Report-December-13-2017/>)
- MARCO staff participated in the RPB Public Meeting via webinar on February 13, 2018, (formerly scheduled for January 24, 2018 as above). The recommendation from the ERA Work Group was approved (below), following an opportunity for public feedback via a chat mechanism and subsequent RPB discussion.
- The recommendation approved stated: Data and Tool Production: Data and tools to assist in identifying ERAs will be provided by the RPB. Individual agencies, entities planning activities and all ocean stakeholders will be able to access the data and tools, and apply as they wish. Both the organization/classification of data and further synthesis products would be considered tools to use among others that may be available. Data and tools provided through this OAP action will be available on the Mid-Atlantic Ocean Data Portal. Drawing from alternatives presented in the ERA Component Synthesis Options paper (October 2017), the Work Group recommends further effort on Option One, including developing materials to improve the understanding of each dataset under the ERA components. User-friendly communication tools will be developed to explain individual data layers, models, syntheses, the five ERA Component groupings, data gaps, and levels of confidence or uncertainty for data layers and related limitations. The Work Group also recommends further exploration of the Option Two approach (Classify and Overlay) during 2018. This would enable stakeholders to take selected datasets identified under each ERA Component and classify them and overlay them with other data. The process will include a range of quantifiable choices for various parameters to test a proof of concept. The Work Group recommends an initial, limited set of layers be included in this exploration, including taxa with the best available data. Further scoping on portal integration is needed to refine and choose among possible technical approaches. Opportunities for scientist and stakeholder input will be made available throughout 2018.
- Date adjustments were made to the RPB Semi-Annual Work Plan and Progress Report, following the Public Meeting. MARCO staff distributed the link to the updated report to ocean stakeholders.
- To implement the recommendation, a more detailed and specific ERA Action Timeline for March-December 2018 was developed for internal staff and Work Group use. The timeline includes discussion items and decision points for the ERA Work Group and RPB respectively and includes four opportunities for scientific or public input throughout the process.
- The Scope of Work for the Marine Life and Data Analysis Team (MDAT), administered by Duke University, was finalized to match the Work Group timeline and was coordinated with the northeast region where appropriate. The contract, which will run through December 31, 2018, was pending counter-signature at the time of grant report submission.
- Five ERA Work Group meetings were held during the reporting period, and monthly additional meetings were scheduled for the rest of 2018. MARCO staff worked with the ERA Work Group Lead (Virginia) to develop draft agendas, advance read-aheads and to take and finalize meeting notes.
- MARCO staff participated in coordination meetings with the Marine Life and Data Analysis Team (MDAT) and the ERA Work Group Lead (Virginia) two times a month, for a total of 12 meetings during the reporting period. These meetings assisted in connecting technical benchmarks and workflow to the ERA Work Group timeline and in preparing for monthly ERA Work Group discussions.
- A change in scope of work request will be submitted via GrantsOnline soon to reflect changes made by the RPB.

Final Products	% Completion	Anticipated Completion Date
Scientist and Stakeholder Workshop and Summary Report	100%	November 2017, March 2018
Selection of an area for the first ERA Report	0%	Change of Scope requested
Assessment report on first ERA	0%	Change of Scope requested
Evaluation of utility of assessment report	0%	Change of Scope requested

Year: 2017

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA17NOS4190152
for the period from #Name?

Task: 94.03 Longwood University	Federal Budget Total: \$60,000.00		
Virginia Marine Debris Reduction Plan Refinement			
<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Project Period Open	
Open	Start: 10/1/2017	End: 9/30/2018	Closeout: 12/31/2018

Product #1 Marine Debris Reduction in Virginia and the Mid-Atlantic

Engaging the stormwater management community: Stormwater managers in Virginia were interviewed during this grant period in preparation for an upcoming "Stormwater + Litter Workshop" (June 13, 2018 in Richmond, VA). The workshop will provide a forum for sharing litter monitoring protocols, solutions to intercepting land-based debris items, and preventing litter from entering storm drains.

Resources, data, and information about the VMDRP, Joyful Send-off CBSM campaign, balloon monitoring and mid-Atlantic regional planning on marine debris prevention were shared with attendees of the Trash Summit (Washington, D.C., November 2017), 6th International Marine Debris Conference (San Diego, March 2018), CZM Partners Workshop (January 2018), and the Virginia Green Tourism Conference (VA Beach, March 2018) as well as through web sites (CZM & CVW), Facebook and other social media platforms.

Product #2 Balloon Release Reduction Campaign: outreach to venues and universities

CVW staff compiled a list of public universities in Virginia, Maryland, Delaware, New Jersey & New York, and identified key decision makers (sustainability offices, facilities management offices, faculty members, or an environmentally-focused student group) at each. Student policy handbooks at 13 VA universities were examined for pre-existing balloon/sky lantern release policies – only Longwood University had a policy in place. Key contacts for 11 VA universities were contacted requesting that their universities pursue an educational campaign about balloons as litter, and consider adding balloons and sky-lanterns to their anti-litter policy. Our previous CBSM research shows that universities are considered midstream target audiences and are key components to reaching people who might be planning a balloon release.

VA State Park staff informed CVW that brochures for all parks will eventually carry the "no balloon release or sky lantern" language.

Product #3 Balloon Debris Monitoring

Fisherman Island was monitored in February and March 2018 by contractors Christina Trapani and Kathy O'Hara for balloon litter.

Product #4 Derelict & Used Clam Netting

Clam net disposal: Given the high costs of sending used clam netting to landfills, CVW worked to determine if there are lower-cost disposal or recycling options for used clam nets. CVW collected derelict clam netting and sent it to the R&D department of Terracycle which determined that plastic recycled from netting could be good for application in other outdoor products made from polypropylene. The next step is to determine the annual tonnage of discarded nets, learn if there are certain times of year when the nets are discarded, and learn if clam farmers can switch to white nets as light-colored recycled plastic has more end-uses than dark plastics.

Derelict clam netting on VA's beaches: Discussions between CZM, CVW, clam farmers and other stakeholders led to a system where clam aquaculture businesses promptly collect clam nets that become loose after ice storms and similar events. Removing derelict netting demonstrates the industry's commitment to being good stewards and wanting to maintain good relations with neighbors.

Final Products

	% Completion	Anticipated Completion Date
Product #1 Marine Debris Reduction in Virginia and the Mid-Atlantic	50%	9/30/2018
Product #2 Balloon Release Reduction Campaign: outreach to venues & universities	50%	9/30/2018
Product #3 Balloon Debris Monitoring Report	50%	9/30/2018
Product #4 Derelict & Used Clam Netting Report	50%	9/30/2018
Product #5 Final Report	0%	9/30/2018