

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 1 Dept. of Environmental Quality - Virginia Coastal Zone Management Program			
Coastal Program Management			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Period Open
Open	Start:	End:	Closeout:
	10/1/2009	3/31/2011	

Policy Products: The CZM Program Manager, Coastal Planners and Grants Coordinator have worked collaboratively through specific issue-oriented work groups including members of the CPT and other stakeholders to produce a draft Section 309 Needs Assessment and Strategy document for submission to OCRM for review. Submitted to OCRM on September 29, 2010, this draft includes an assessment of the current status and needs of nine coastal resource issues as defined by the Section 309 Coastal Enhancement Program with five (draft) priority strategies for three of these nine issues.

RPCs and Amendments: The Virginia CZM Program distributed a Public Notice regarding NOAA-approved updates to the Program's enforceable policies stating that the policies would become effective on July 19, 2010. CZM Program staff has also contacted the Environmental Law Institute to discuss contractual assistance to address several program change issues, including an analysis of policies related to state-listed threatened and endangered species and identifying a clear list of its enforceable policies for federal consistency.

Grant Administration, Management & Reporting: A Section A, Semiannual Progress Report, a Section B Agency Report, and a Section C Success Stories Report was compiled and submitted to NOAA on April 30, 2010 for the reporting period of Oct. 1, 2009-Mar. 31, 2010. Semiannual Progress reports from grantees and information for the Section B and Section C reports was gathered by CZM staff for the reporting period of April 1, 2010-Sept. 30, 2010. The CZM Manager and Coastal Planner monitored grant activities through phone calls and site visits. And the Grants Coordinator and CZM Manager processed extension and budget amendment requests, 306 A documentation approvals, SAC removals, and reprogrammed money using the Grants Online system.

FY 2010 CZM Grant Application: The FY 2010 Draft application was submitted to NOAA on April 15, 2010, and the FY 2010 Final application was submitted to NOAA on May 18, 2010 via the CAMMP, Grants Online, and Grants.gov systems.

FY 2011 CELCP Grant Application: Two projects were submitted for CELCP FY 2011 funding by the VA CZMP: 1) Lynnhaven Oyster Restoration and Estuary Protection in VA Beach, approximately 84 acres for \$3,000,000 and 2) The King William County-Mattaponi River Coastal Lands Acquisition project at Scotland Landing, 188 acres for \$829,800. CZM staff worked with applicants to refine proposals and forwarded applications to NOAA on April 5, 2010.

Performance Measures: In September, CZM staff solicited information from the necessary sources to assist in completing the Oct. 1, 2009 – Sept. 30, 2010 Performance Measures report.

Mid-Atlantic Regional Council on the Ocean Documents: The CZM Manager participated in weekly MARCO conference calls throughout this period and met with NOAA officials on April 27 to help define how Regional Ocean Partnership funding could be administered by NOAA. Subsequently she prepared language for the MARCO website detailing the process for applicants to receive MARCO endorsement for their proposals. She participated in the May and September Management Board meetings in Delaware. A major outcome of those meetings was the preparation of a MARCO "Highlights" document soon to be published. At the September meeting federal agencies were invited and briefed on MARCO priorities and 5 Action Teams were set up. The Virginia CZM Manager is leading the Coastal & Marine Spatial Planning Action Team. The CZM Manager briefed the Secretary of Natural Resources Office on MARCO on May 10 and was directed to prepare a decision brief for the Governor as to Virginia's continued participation in MARCO. The brief, recommending continued participation was prepared and signed by the DEQ Director. The Governor's Office has not yet responded.

Final Products	% Completion	Anticipated Completion Date
Policy Products	100	
RPCs and Amendments	100	
Grant Administration, Management & Reporting	100	
FY 2010 CZM Grant Application	100	
FY 2011 CELCP Grant Application	100	
Performance Measures	100	
Mid-Atlantic Regional Council on the Ocean Documents	100	

Task: 1.01 Virginia Institute of Marine Science - Chesapeake Bay National Estuarine Research Reserve System			
Coastal Program Management			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

This task funds one of our Coastal Planners through a contract with VIMS. For progress see Task 1, FY 2009. Final products will be submitted through Task 1 above.

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Task: 1.02 Virginia Commonwealth University
Coastal GIS Support

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

-The Coastal GIS Coordinator processed GIS data layers for effective display on Coastal GEMS and uploaded layers to VCU to be added to Coastal GEMS. Layers updated this period include: Public Oyster (Baylor) Grounds, Private Oyster Leases, and Condemned Shellfish Areas. Data requests and other inquiries received regarding the Coastal GEMS application and the datasets it hosts were responded to in a timely manner. Coastal GEMS can be accessed online at: www.coastalgems.org.

-Although no live demos were requested, the Coastal GIS Coordinator provided slides outlining the main features and functions of Coastal GEMS for DEQ Environmental Education staff to utilize in presentations. Up to date Coastal GEMS factsheets were made available at all events attended by VA CZM staff.

-The Coastal GIS Coordinator provided GIS support to DEQ's Wind Energy Regulatory Advisory Panel as they worked to create proposed regulation to permit small renewable wind energy projects. The GIS Coordinator prepared a detailed list of available GIS datasets that would meet the spatial planning needs of the panel. The GIS Coordinator also worked with Center for Conservation Biology and DGIF staff to create a coastal avian protection zone map and narrative. The proposed regulation lists Coastal GEMS as one of the online data portals where applicants for permit by rule wind energy projects in Virginia's coastal zone can obtain natural resource spatial data. When it becomes final, Coastal GEMS will house the Coastal Avian Protection Zone spatial data created as part of the regulation.

-The Coastal GIS Coordinator worked with other CZM staff as well as members of the Southern Tip Partnership to create a map of lands conserved on the southern tip since the partnership was formed. The map was incorporated into signage at Kiptopeke State Park.

-The Coastal GIS Coordinator worked with VMRC staff to digitize coordinate data and convert CAD data to create polygon shapefiles. Shapefiles created include rotational oyster harvest areas in the Rappahannock and oyster sanctuaries on the seaside.

-The Coastal GIS Coordinator produced coastal resource maps and made GIS based calculations as needed for CZM staff to utilize in meetings, presentations, and publications. This includes maps produced for the VA CELCP Plan, the VA CZM Magazine, and large scale printouts for use in presentations.

Final Products	% Completion	Anticipated Completion Date
Updated Coastal GEMS Internet Mapping System	100%	
Coastal GEMS Training Program	100%	
Coastal GEMS Meeting Notes	100%	
GIS Map Products	100%	

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**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
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Task: 1.03 Dept. of Environmental Quality - Virginia Coastal Zone Management Program
Virginia CZM Program Outreach

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2009 3/31/2011 6/30/2011		

Continued coordination of the "Plant ES Natives" campaign including presentations by partners in May and July at the ABCRC on the Shore native coastal habitats and migratory songbird habitat needs (various other community presentations were given by team members); procured fall 2010 planting season radio ads; designed a new social marketing presentation which highlights the campaign and presented at the VA Tech/VA Cooperative Extension Good Green Bad Green conference in September; facilitated planning for new demonstration garden in Wachapreague to be funded by Virginia CZM under FY08 Task 14 (town heard of campaign and other demos, local landscaper and nursery donating services); secured garden center adoption of 4 official campaign demonstration sites, including the Wachapreague site; and, responded to numerous requests for information and materials.

Produced a final draft of the Summer/Fall 2010 issue of Virginia Coastal Zone Management magazine, which should be published prior to the Virginia Coastal Partners Workshop in early December 2010; designed draft layout of MARCO highlights report working with Program Manager.

As part of a media strategy for (1) the Plant ES Natives campaign and release of new ES native plant guide and (2) a press releases on the acquisition and restoration project at Kiptopeke State Park, articles were secured in a local ES magazine, Mosaic (highlighting the campaign, guide and acquisition), and a series of articles appeared in local environmental newsletter, Shorelines, produced by Citizens for a Better Eastern Shore - articles attached.

Coordinated with DCR on design of first 3 of 5 interpretive signs installed in October at Kiptopeke State Park on VA CZM/Taylor tract (highlighting bird migration, Southern Tip Partnership and land conservation, and value of on site pond – two final signs will highlight forest succession and the value of ES native plants – signs are a product under FY08 Task 13); drafted design for signage at TNC Living Shorelines site in Oyster (product under FY09, Task 1.03).

Facilitated program exhibits at Virginia Aquarium's Coastal Trends Program in April, Hampton Roads Earth Day in May, various native plant exhibits through the spring and summer and the Virginia Conservation Network annual conference in September.

Maintained the Virginia CZM website, including work with DEQ staff to convert the main site and sub-sites to CMS, website management system.

Remaining funds in this extended task were used to procure: ink cartridges for the Virginia CZM Program's plotter and color printer and paper for the plotter and fall 2010 Plant ES Campaign radio ads. Funds were transferred to FY09 Task 1.02 to support procurement of a laptop for the Virginia CZM GIS Coordinator. Remaining funds have been set aside to reprint "Native Plants of Accomack and Northampton"; to print the MARCO highlights report; to print and mail the Summer/Fall 2010 issue of the Virginia CZM magazine; and, to produce the interpretive signs for the Living Shorelines demonstration in Oyster installed by TNC.

Final Products	% Completion	Anticipated Completion Date
Campaigns and Events	100%	
Virginia Coastal Zone Management Magazine and Other Publications	20%	December 31, 2010
Website	100%	
Exhibits	100%	

Task: 2 Dept. of Environmental Quality Subcontract
Quick Response Grants

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Funds Transferred Out of Task
Proposed	Start: End: Closeout:		
	10/1/2009 3/31/2011		

About \$416 remains in this task. On July 28, 2010 \$2,280 of the remaining balance was moved under DEQ's 10% authority to Task 1.02 (VCU) GIS Support to allow for the purchase of a laptop and ESRI ARCInfo Version 10 license for the CZM Program's GIS Coordinator. This will allow for GIS maps to be displayed and manipulated during meetings at remote locations such as for the seaside Special Area Management Plan meetings on the Eastern Shore.

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Task: 2.01 Back Bay Restoration Foundation
Back Bay Restoration Foundation State of the Bay Conference

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Attached
Closed	Start:	End:	Closeout:	
	1/1/2010	6/30/2010	9/30/2010	

The Back Bay Restoration Foundation submitted its final report on the "State of the Bay" Conference on July 16, 2010. In addition to presentations from the conference, the report includes survey results from participants and an action plan for future education and conservation projects.

Final Products	% Completion
Forum agenda/registration form and nametags (15%)	100%
CD of the Back Bay Forum 2010 Presentations (15%)	100%
Web site (15%)	100%
Forum Survey and Comment Form (forms returned – data compilation in progress) (10%)	100%
Action Plan (45%)	100%

Task: 3 Dept. of Environmental Quality - Environmental Impact Review
Environmental Impact Review & Federal Consistency

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:	
	10/1/2009	9/30/2010	12/31/2010	

During the second half of FY 2010 the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 119 development projects and management plans for consistency with the VCP. This represents 79% of the total amount of projects (150) reviewed during this period. Major state projects accounted for 14 projects, 57 were federal actions, and 48 were federally funded projects (predominantly (44) local government projects). The 57 federal projects included 36 federal agency activities, 13 HUD mortgage insurance projects (submitted as a residual category pursuant to the federal consistency regulation 15 CFR 930.31(c)) and 8 federal licenses, approvals. OEIR staff attended the second meeting of the Minerals Management Service (MMS) Virginia Task Force on April 27, 2010 in Williamsburg. The inter-governmental task force includes local, state, tribal, and federal stakeholders working to facilitate the commercial leasing process for Outer Continental Shelf (OCS) renewable energy development off the Virginia shore. The meeting discussion focused on identifying potential lease blocks on the Virginia OCS for the development of renewable energy alternatives; specifically the production of electricity from wind turbines. All federal consistency determinations and federal consistency certifications were completed within the established legal deadlines.

The OEIR continues to maintain a website for Federal Consistency Reviews which can be accessed through DEQ's main webpage or found at <http://www.deq.virginia.gov/eir>. The webpage includes the Commonwealth's Federal Consistency information package, a project list with project descriptions, and links to the DEQ main webpage for public notices of Federal consistency reviews. The webpage is updated weekly.

Final Products	% Completion	Anticipated Completion Date
Federal consistency determinations and certification responses	100%	

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Task: 4 Dept. of Environmental Quality - Environmental Education
Community Environmental Education

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

Over the past six months, DEQ staff David Ruble in the Virginia Office of Environmental Education, completed the development of and field tested a Public Climate Change Education Training Module for community educators. The training program consists of web resources, PowerPoint module, and community-based resources.

David researched and wrote a scripted PowerPoint, "Introduction to Climate Science for Virginians" through review of existing literature related to climate literacy and consulting climate communications specialists from NOAA, NASA, VCZM partners and the private sector. The presentation also went through two rounds of review by VOEE staff and CZM staff. Another tool, "5 Ways to Help Virginia's Environment" was published which focuses on reducing personal ecological footprints. Reducing ecological footprints leads to reductions in carbon footprints and the idea of the ecological footprint has been accepted as a teaching tool and communication strategy across the Commonwealth.

David developed the revised 'Carbon Footprint' webpage on Virginia Naturally and renamed the page "Air Pollution & Environmental Quality Resources" to better connect with air quality and align with agency priorities. Resources related to carbon footprints and climate change represent the best available information. Office staff coordinated and conducted a Leadership Summit focused on Air Quality & Climate Science which trained 48 experienced non-formal educators. The summit included additional content related to climate adaptation planning and the link between criteria air pollutants and climate change. The "Introduction to Climate Science" for Virginians" presentation also reached 35 formal and non-formal educators at the Virginia Environmental Education Conference.

The spring annual meeting for the interagency group VRUEC was held on May 27th and included a 10-year retrospect of Virginia Naturally and accomplishments of the VA Business Plan for Environmental Education. Nearly 200 people attended the annual environmental education conference on Sept 14-15 at Montpelier. Also, the process for updating the state master plan was developed and a survey launched in June. Two focus group meetings (Norfolk and Orange, VA) have supplemented the survey data and a draft report is being compiled.

Final Products	% Completion	Anticipated Completion Date
1. Virginia Public Climate Change Education Training Program Module	100	September 30
2. Capacity Building Reports on Delivering Environmental Education	100	September 30
3. Meaningful Education Workshops/Training	100	September 30

Task: 5 Dept. of Environmental Quality - Chesapeake Bay Program
Phase 2 Tappahannock Wastewater Treatment Plant Upgrade (WQIF)

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

Retrofitting the Tappahannock wastewater treatment plant with enhanced nutrient removal technology under WQIF Grant #440-S-08-10 was completed during this reporting period, with final grant reimbursement authorized 7/20/10. Construction began in April 2008 and the Certificate to Operate was issued 7/23/10. The final grant amount was \$4,551,827 in State cost-share.

Final Products	% Completion	Anticipated Completion Date
Install enhanced nutrient reduction technology at Tappahannock WWTP	100%	

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**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
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Task: 6 Virginia Marine Resources Commission			
Permit Review & Compliance			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

During the reporting period, VMRC received a total of 1118 joint permit applications. Actions were completed on 1080 projects, some of which were received prior to the reporting period. During the reporting period, 130 compliance inspections were conducted for previously issued permits. Also 67 compliance inspections for the random sample of 130 projects permitted by local wetland boards were completed.

During the reporting period, local wetlands boards throughout Tidewater Virginia acted on 244 projects involving tidal wetlands. Of this total, 173 were approved as proposed, 63 were approved as modified, 8 were denied and 18 required compensation either on or off site (2), in a mitigation bank (2) or through payment of an in lieu fee (14), accounting for 8,236 square feet of tidal wetland impacts.

Final Products	% Completion	Anticipated Completion Date
Collect permit compliance data for projects permitted by VMRC	Ongoing	
Collect permit compliance data for wetland projects permitted in 2008	100%	
Compile data for entry into data base	100%	September 2010

Task: 7 Dept. of Conservation & Recreation - Natural Heritage			
Habitat Conservation/ Locality Liaison			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

Multiple presentations have been given to Planning District Commissions, localities, consultants and state agencies including: James City County, Newport News, York County, Prince William County, City of Hopewell; Dept. of Conservation & Recreation (DCR) Soil & Water; Dept. of Environmental Quality (DEQ), Dept. of Health (VDH). Presentations included an overview of DCR's Natural Heritage Program, the Locality Assistance Program, the Natural Heritage Data Explorer (NHDE) website, the Virginia Conservation Lands Needs Assessment (VCLNA), and the Land Conservation Data Explorer (LCDE).

For 04/01/10 through 09/30/10, 515 projects were reviewed for impacts to natural heritage resources in the coastal zone (43% of the projects reviewed statewide). Some of the projects included an environmental assessment for Back Bay National Wildlife Refuge Comprehensive Conservation Plan and the National Park Service Assateague Island National Seashore General Management Plan. NASA's Flight Facility on Wallops Island proposed an additional project for the Goddard Space Flight Center, including a new runway. Through right-of-way maintenance recommendations, DCR-DNH collaborated with VDOT to conserve the only known population of Sun-facing coneflower (*Rudbeckia heliopsis*, G2/S1/NL/NL) in the state.

68% of the Coastal Zone localities and Land Trusts have Natural Heritage data.

Locality Assistance: As a follow-up to information provided in 2008, the Locality Liaison is working with Mathews County to incorporate natural heritage language and conservation site maps into their comprehensive plan. Natural Heritage information has also been provided to Chesterfield County for inclusion in their comprehensive plan. The City of Hopewell has requested locations of natural heritage resources for use in the city's environmental screening process.

The Locality Liaison participated in the Earth Day celebration at Fort A. P. Hill, providing information about natural heritage resources found on the base. A PowerPoint presentation and flyer on the Natural Heritage conservation tools was also created for the Conserving Our Commonwealth conference. In addition, the Locality Liaison participated in the NEMO Discourse-based Education #2: Situation Assessment & Program Design and attended the VA ASLA conference, Sustainable Site Initiatives.

The Wetland Restoration Catalog has been incorporated into the DEQ CZM Coastal GEMS website.

The 2009 Information Services order form has been improved and a new form developed for localities and non-profits.

Final Products	% Completion	Anticipated Completion Date
Project Review	100%	September 30, 2010
Locality Assistance Program Presentations	100%	September 30, 2010
Natural Heritage Data for Coastal Partners	100%	September 30, 2010
Improvements to the Natural Heritage Data Tools	100%	September 30, 2010

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Task: 8 Virginia Institute of Marine Science
Tidal Wetlands Management Technical Support

<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

CCRM Advisory Activity:

	Information Requests	Add'l Field Visits	Meetings	Advisory Reports	Website Hits
APR	151	05	20	43	515
MAY	140	04	15	54	500
JUN	170	01	17	56	626
JUL	213	02	21	55	452
AUG	201	01	23	41	518
SEP	226	09	20	42	439

Wetlands Reports:

The Center for Coastal Resources Management continues to post Joint Permit Applications with VRMC assigned numbers in a searchable database on the VIMS-CCRM website. To view the original shoreline permit applications, as well as the associated VIMS report, additional information, photos, and public hearing information for every application reviewed by the Wetlands Program staff please see: <http://ccrm.vims.edu/perms/newpermits.html>

Publications:

Rivers and Coast, Summer 2010, Vol. 5, No. 2, Decision Tree for Untreated Shorelines
http://ccrm.vims.edu/publications/pubs/rivers&coast/vol5_no2decisiontrees.pdf
CCRM e-News October 2010, (workshop announcement, living shorelines website updates)
Virginia Wetlands Report, Fall 2010, Volume 25, Issue 2, Living Shorelines Website and workshop registration
http://ccrm.vims.edu/publications/publications_topics/vwr/VWR_2010_fall.pdf

Workshops:

Integrated shoreline management training for wetland boards:
4/13/10 Northumberland County Wetlands Board
4/19/10 Stafford County Wetlands Board
7/06/10 King George County Wetlands Board
9/24/10 Fairfax County Wetlands Board
Tidal Wetlands Workshop:
4/22/10 Coastal Management Decision Tools

Final Products	% Completion	Anticipated Completion Date
Product #1 – Permit Application Reviews	100	Sept 30, 2010
Product #2 – Outreach Publications	100	Sept 30, 2010
Product #3 – Wetlands Program Database	100	Sept 30, 2010

Task: 9 Virginia Institute of Marine Science

2009 Submerged Aquatic Vegetation Distribution and Abundance Survey of Virginia's Chesapeake Bay and its Tributaries

<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Period Open
Open	Start: End: Closeout:		
	10/1/2009 12/31/2010 3/31/2011		

A draft report of the 2009 SAV monitoring was submitted to VA CZM. In addition, all ground supporting SAV data was included in the survey. VIMS has received comments for the draft and has modified the report and checked all data based on the appropriate protocols developed in our QA-QC procedure approved by the USEPA. The final report is almost complete.

2009 SAV data can now be viewed at:

<http://web.vims.edu/bio/sav/sav09/index.html> and also on the VIMS interactive map: <http://web.vims.edu/bio/sav/maps>.

Final Products	% Completion	Anticipated Completion Date
Draft Final Report	100	June, 2010
Final Report	98	Nov. 1, 2010

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Task: 10 Dept. of Environmental Quality Subcontract Eastern Shore Land Acquisition				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Pending
Proposed	Start:	End:	Closeout:	
	10/1/2009	3/31/2011		

The Southern Tip partners met in May and again in September. There is a good possibility of acquiring an interest in what is known as the Henrietta Trower tract which is immediately north of the Davis tract currently being acquired by DCR-Natural Heritage. The Trower property has several nice swatches of very good, fairly mature migratory bird habitat as well as beach, dunes and scrub shrub on the Bay and some excellent restoration potential. It is a "natural" to be combined with the Davis tract. TNC owns an unrestricted 2/15ths interest in the property and is confident that its 2/15ths interest, at around 50 acres, is easily worth the match required for the FY 09 and FY10 CZM funding. The owner has been discussing a partition of the property, but has not made TNC a specific offer but has also told others she "wants to protect it". Most recently, she has asked TNC to sign a 30 year lease with a wind energy operation for a wind farm on the site. TNC will not sign the lease, but is looking to review the document and begin discussions with the owner in earnest as soon as possible.

DCR reported that the Davis tract to the south, which shares Devil's Ditch as well as some prime migratory bird habitat but not much waterfront with the Trower parcel, is scheduled to close late Oct or early Nov 21010 with AEP funds.

TNC will seek an outright purchase of Trower if possible, especially in light of the proposed wind farm, use the 2/15ths interest to match CZM funds, and along with all Southern Tip partners, look for additional funding, which is likely to be required.

Task: 11 The Nature Conservancy Mid-Atlantic Regional Council on the Ocean (MARCO) GIS Portal				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Period Open
Open	Start:	End:	Closeout:	
	10/1/2009	3/31/2011	6/30/2011	

All marine habitat layers have been compiled and formatted for the portal. After discussion with the MARCO portal project Core and Full teams, TNC decided to approach the "Stakeholder's Review Report" through a web-based survey distributed to over 90 federal and state coastal and ocean resource managers. The survey results (50% response rate) regarding potential uses of the portal the functions, features and data needed to support those uses informed TNC's work to complete the first draft of the portal.

A web-based meeting was held in August 2010 to provide an opportunity for peer review of the draft portal by the Core and Full Teams. Numerous suggestions TNC received were subsequently used to improve the portal's functionality and design characteristics (menu operation, fact sheets, data download feature, legend design, data disclaimer page, and others).

The revised and updated MARCO GIS Portal was presented to representatives of MARCO and several federal agencies (NOAA, USFWS, EPA, USGS, USCG) in 1) development and implementation of a communications and outreach plan for rolling out the portal and identifying potential future improvements, first for agency staff and subsequently for stakeholder review; 2) "migrating" the portal to ArcGIS Server version 10, to provide enhanced features and functionality; and 3) working with NOAA Coastal Services Center staff to identify and integrate select map layers from the Multipurpose Marine Cadastre, directly through web mapping services if possible, and obtaining and integrating additional map layers identified through our stakeholder survey and other communications.

Final Products	% Completion	Anticipated Completion Date
#1 Marine Habitat Data Layers in Web Format	100%	n/a
#2 Collection and Formatting of Additional Layers	85%	March 31, 2011
#3 Stakeholder's Review Report	100%	n/a
#4 Overlay Analysis	20%	March 31, 2011
#5 Regional MARCO GIS Portal	100%	n/a

Task: 12.01 Accomack County Accomack County Blue & Green Infrastructure Project				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Attached
Closed	Start:	End:	Closeout:	
	10/1/2009	4/30/2010	9/30/2010	

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Task: 12.02 Northampton County

Northampton County Blue & Green Infrastructure Protection

Project status:

Current approved

Final deliverable(s) status: Project Period Open

Open

Start: End: Closeout:

10/1/2009 12/31/2010 3/31/2011

Products #1 & #2: The Northampton County Board of Supervisors has not yet acted on the draft stormwater management regulations developed under the county's FY 2008 grant. Accordingly, a stormwater management plan and subsequent regulatory revisions have not been accomplished. Sandra Benson, Director of Planning & Zoning, has discussed with VA CZM Program Manager Laura McKay the possibility of moving these tasks/products to an FY 2010 proposal and reprogramming the amount budgeted for this work in the FY 2009 grant for another purpose associated with TMDL Implementation Plan development for Kings Creek and Cherrystone Inlet. A proposed grant amendment will be forthcoming.

Product #3: Northampton County's Community Planning Academy commenced on September 20, 2010, with nineteen (19) participants. The group represents a cross-section of county residents, and they have been very engaged. The upcoming October 18, 2010, session will focus on how environmental issues intersect with planning activities and goals. As part of that session, Dave Morton of the VA Department of Game & Inland Fisheries will provide a presentation on the work done under another CZM project to identify Priority Conservation Areas in Northampton County. Sandra Benson, Director of Planning & Zoning, and Peter Stith, Long-Range Planner & GIS Administrator, are participating in the Academy. Support staff members Nyoka Hall and Kay Downing have assisted in preparing materials for the short course, which will conclude on October 25, 2010.

Product #4: As previously reported, Peter Stith has completed ten (10) hours of CommunityViz training provided by Placeways, LLC. At the time of the prior Progress Report, the invoice for that training had not been received, so that amount will be reported on the Financial Report accompanying the current Progress Report. Six (6) hours of training remain to be accomplished and had been expected to be finished in August. However, completion has been delayed due to the inability of Placeways to finalize a software "patch" so that CommunityViz will be compatible with ARCGIS 10, our current version of GIS software.

Product #5: The Comprehensive Plan Update to incorporate identified Priority Conservation Areas (PCAs) will be undertaken after Mr. Stith completes the CommunityViz training, which will enable him to present the PCAs to the Northampton County Planning Commission, Northampton County Board of Supervisors, and the public.

Final Products	% Completion	Anticipated Completion Date
Stormwater Management Plan	0	Amendment to be submitted
Revised Stormwater Management Regulations	0	Amendment to be submitted
Community Planning Academy	60	10/25/10
CommunityViz training	63	12/31/10
Comprehensive Plan Update-Environmental & Natural Resources element	0	2/15/11

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 12.03 George Washington Regional Commission
Developing a Blue-Green Infrastructure Plan for the GW Region

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start: End: Closeout:	
	10/1/2009 9/30/2010 12/31/2010	

GWRC staff completed the report entitled, Estimating Impervious Surface Area: A Comparative Assessment of CITYgreen and NOAA's Impervious Surface Analysis Tool (ISAT) Methodologies, which provides a comparison of methodologies to provide more accurate estimates of the amount of impervious surface area for any defined study area. This report also documents the estimation error in tree canopy and impervious surface acreage resulting from the use of 30-meter vs. higher resolution 1-meter imagery. A major finding of this study in the case study of 2009 imagery for the City of Fredericksburg is that 30-meter imagery over-estimates impervious surface area by 34% and under-estimates tree canopy by 40 percent.

GWRC staff completed the Urban Ecosystem Analysis for the George Washington Region (PD 16): Calculating the Value of Nature report, which provides an analysis of classified 30-meter satellite images of the Planning District for 1996, 2001, 2006 and 2009, resulting in an estimate of the loss of tree cover over the 13 year study period and the growth in impervious surface area in the same time. Generated through the use of American Forests' CITYgreen software, the report documents the relative ecosystem service benefits (i.e. in terms of carbon storage and sequestration, storm water retention and pollution reduction) performed by the remaining tree canopy in the Region.

GWRC staff worked with FAMPO staff and consultants to integrate defined regional eco-cores and corridors and the results of Urban Ecosystem Analysis (UEA) into the on-going regional land use scenario planning process. The regional eco-core and corridor layer was added to data layers used in Community Viz regional development suitability modeling. Questions about the relative importance of environmental protection were introduced into a regional on-line public opinion survey, and adding results of the UEA report were integrated into the Scenario Plan Regional Scan, along with other environmental regulatory considerations, including referencing the impact of new alternate septic systems, revised storm water management regulations, the Chesapeake Bay TMDL allocations, Chesapeake Bay Preservation Act (Phase III), and the emergence of conservation easements, etc.

Final Products	% Completion	Anticipated Completion Date
#1: NOAA Remote Sensing Class for Land Cover Change Detection	100%	April 30, 2010
#2: Impervious Surface Change Detection using ISAT	100%	September 30, 2010
#3: CITYgreen Training Workshop	100%	March 30, 2010
#4: Application of CITYgreen to C-CAP Imagery & Change Analysis for Various Areas	100%	September 30, 2010
#5: Development & Implementation of Public Educational Outreach Program	100%	September 30, 2010
#6: Coordination with NEMO program to support BGI mapping in the development of regional and local visioning, and smart growth-oriented, green infrastructure plans	100%	September 30, 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 12.04 Hampton Roads Planning District Commission
Sustainable Communities Focal Area: Climate Change in Hampton Roads

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	1/1/2010	12/31/2010	3/31/2011		

Assessment of Economic Impacts

HRPDC staff continues to collect data and review methodologies for assessing the economic impacts of climate change on the Hampton Roads Region. HRPDC staff is developing a methodology for estimating economic impacts to various sectors.

Tool Development: Sea Level Rise Impacts

HRPDC staff has continued to work with academic and other researchers to promote development of accurate and precise modeling tools for assessing the regional impacts of sea level rise. HRPDC staff has continued to meet with staff from VIMS and Noblis and maintains contact with both organizations. HRPDC staff is currently developing analysis tools based on best available data to estimate the impacts of sea level rise and storm surge on the region's population and built and natural environments, with a specific focus on critical infrastructure systems.

Policy Recommendations: Built Environment

HRPDC staff is analyzing possible adaptation responses related to the built environment in Hampton Roads. This includes continuing to analyze climate change impacts on the region's infrastructure, with a specific focus on vulnerability to sea level rise and storm surge. This will result in a report that summarizes the relative benefits and costs for various adaptation and mitigation approaches and makes various recommendations for the region's local governments.

Policy Recommendations: Natural Environment

HRPDC staff is analyzing possible adaptation responses related to the natural environment in Hampton Roads. This includes continuing to analyze climate change impacts on the region's natural resources, with a specific focus on sea level rise. This will result in a report that summarizes the relative benefits and costs for various adaptation and mitigation approaches and makes various recommendations for the region's local governments.

Development of a Framework for the Response to Climate Change in Hampton Roads

HRPDC staff is in the process of establishing a working group that will provide technical advice for policy research and analysis. This working group will be composed of local government staff, representatives from regional academic institutions, and other relevant stakeholders. HRPDC staff is also working with other regional stakeholders and initiatives to promote awareness of climate change and sea level rise in the region.

Final Products	% Completion	Anticipated Completion Date
Assessment of Economic Impacts	20%	December 2010
Tool Development: Sea Level Rise Impacts	50%	December 2010
Policy Recommendations: Built Environment	20%	December 2010
Policy Recommendations: Natural Environment	20%	December 2010
Development of a Framework for the Response to Climate Change in Hampton Roads	25%	December 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 12.05 Middle Peninsula Planning District Commission

Middle Peninsula Climate Change Adaptation Phase 2- Facilitation of Presentations and Discussions of Climate Change Issues with Local E

Project status: Current approved Final deliverable(s) status: Submit w/next Semiannual Report

Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

Product 1 (General Public Education): Middle Peninsula Planning District Commission (MPPDC) staff continued to work with community groups in order to educate them as well as to gather public perceptions about climate change, sea level rise and local governments' role in addressing impacts within the Middle Peninsula. Through the use of Qwizdom software, an audience response system that utilizes hand held remotes and an interactive tablet to engage the audience on a topic of interest, feedback gathered from the Piankatank Civic Group, local planning staff, and the Mathews County Rotary Club, was organized and summarized in a cumulative findings report. The report demonstrates large discrepancies between stakeholder group knowledge and beliefs with regard to climate change and sea level, but this report also provides direction for future education and policy.

Product 2 (Elected Official Education): MPPDC staff also informed local elected officials of the availability of climate change and sea level rise education by MPPDC staff. However, of the six counties in the Middle Peninsula, Mathews County was the only county that took advantage of this opportunity. Therefore, MPPDC staff visited the Mathews County Planning Commission to present information about sea level rise and local government's role in addressing impacts. In late spring and early summer of 2010, a series of Qwizdom exercises were also conducted with various local elected officials. The report demonstrates large discrepancies between elected officials knowledge and beliefs with regard to climate change and sea level, but this report also provides direction for future education and policy.

MPPDC staff also worked with a variety of partners, including Georgetown Climate Change and Virginia Tech University to provide local insight with regards to climate change and sea level rise impacts and initiatives within the Middle Peninsula.

Final Products	% Completion	Anticipated Completion Date
General Public Education	100%	Sept 2010
Elected Officials Education	100%	Sept 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 12.06 Northern Neck Planning District Commission
Northern Neck Blue-Green Infrastructure Protection

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2009	End: 3/31/2011	Closeout: 6/30/2011

NNPDC staff created a presentation on Blue Green Infrastructure Planning and presented it on May 20th, 2010 at the Northumberland Planning Commission Meeting. VCLNA maps, clipped to the county boundary depicting the Recreation Model, Forest Model, Cultural Model, and Agricultural model were incorporated into the presentation. The benefits of planning now for Blue Green infrastructure were emphasized, realizing that it will take several years for any planning policies to be effective. After the presentation, a planning commission member asked if there was a map layer that showed where economic development would be best located. NNPDC staff told him that the State does not have that type of data layer, as local government is in charge of deciding where development should occur within their county. He further wanted to know if these economic development areas are inside of the natural areas shown in the VCLNA. NNPDC staff responded that they would do their best to answer his question with data that was available. NNPDC staff presented on Blue Green Infrastructure Planning at the June 17th, 2010 Lancaster County Planning Commission Meeting. The presentation noted that natural areas provide ecosystem services to the citizens that would be lost if those areas were developed. Most planning commissioner members agreed this is a good idea, but were not comfortable "drawing lines on a map" that might adversely affect local property owners. However, they agreed they wanted to learn more about the concept. NNPDC staff presented again on Blue Green Infrastructure Planning at the July 15th, 2010 Northumberland County Planning Commission. This presentation focused on the county's future growth areas and enterprise zone areas, and how they were, for the most part, mutually exclusive (i.e. the natural cores were outside the growth areas). After the presentation, a planning commission member asked how a Blue Green Infrastructure Plan would impact individual property owners and their property rights. NNPDC staff responded that it depends on how the County implements the plan. At the low level, the County could merely encourage persons to enter into private conservation easements if they so chose. At the highest level, if the County deemed it important and appropriate, they could create a Blue Green Infrastructure Zoning Overlay District that would reduce the level of development allowed in Blue Green Infrastructure Areas. NNPDC staff relayed that this Blue Green Infrastructure plan could be anything the Planning Commission wants it to be. NNPDC staff presented a second time on Blue Green Infrastructure at the August 19th Lancaster County Planning Commission Meeting. After the presentation, the Planning Commission Chairman asked "How would this planning benefit the average citizen of Lancaster County?" NNPDC staff will attempt to answer that question in future Planning Commission Meetings scheduled for October 21st in Lancaster County and November 18th in Northumberland County.

NNPDC staff has been working with the Richmond County Comprehensive Planning Committee to hopefully include a new conservation area for the Cat Point Creek area. However, no decision has been made yet. Westmoreland County is very close to adopting their newly revised Comprehensive Plan, and several Blue Green Infrastructure Maps will be included.

Final Products	% Completion	Anticipated Completion Date
Northumberland and Lancaster County Conservation Corridors Map	70%	March 31, 2011
Planning Commission/Consensus Building and Report	30%	March 31, 2011
Follow-up Work on Richmond and Westmoreland Conservation Corridors	90%	March 31, 2011

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 12.07 Northern Virginia Regional Commission

Climate Change Adaptation: Sustainable Shoreline Community Management in Northern Virginia; Phase II

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Since April, the Sustainable Shorelines and Community Management project focused on sharing the results of the vulnerability assessment mapping and policy analysis with other local, state, and federal entities. Additionally, NVRC staff has worked closely with the Arlington County Office of Emergency Management, which is overseeing a revision to the Northern Virginia Regional Hazard Mitigation Plan.

To assist in preparing information and data for possible incorporation into the Regional Hazard Mitigation Plan, the Sustainable Shorelines and Community Management Workgroup met in May and met jointly with the Emergency Managers from across the region in July. An intangible outcome of these meetings was the improved recognition by the localities of the value of having Land Managers and Emergency Managers working together to address issues related to climate change.

For inclusion in the Plan, NVRC staff provided background information, including a white paper on the process of identifying scenarios used for the Sustainable Shorelines and Community Management project, also with high resolution imagery of two regionally significant areas – Reagan National Airport and Old Town Alexandria. At the time this report was written, the plan was still in development.

Additionally, NVRC, NOAA – Coastal Services Center, and Virginia NEMO developed a survey for waterfront property owners in Northern Virginia understanding waterfront property owner's familiarity with coastal hazards and shoreline maintenance, including topics such as erosion, flooding, increased high tides, and sea level rise. Surveys were mailed to roughly 900 private waterfront property owners located along Northern Virginia's tidal shoreline, within the City of Alexandria; the counties of Arlington, Fairfax, and Prince William; and the Towns of Dumfries, Occoquan, and Quantico. Approximately 18 percent of the property owners responded. At the time of this report, the data was still being analyzed.

NVRC staff moderated a dialogue on Local Government Responses to Climate Change, featuring Wetlands Watch and the Hampton Roads Planning District Commission, at the Environment Virginia Symposium in April 2010 and co-presented with HRPDC and Wetlands Watch on Regional Planning for Climate Change in Virginia, at the annual conference of the Virginia Chapter of the American Planning Association in May 2010. Finally, NVRC supported the development of the first Planning for Sea Level Rise using a Green Infrastructure Approach Workshop sponsored by The Conservation Fund. In addition, during the workshop, NVRC staff presented an overview of adaptation options at the municipal level, based on the Policy Inventory report developed as part of Phase I.

Final Products	% Completion	Anticipated Completion Date
Workgroup Outcome Report	100	September 30, 2010
Vulnerability Maps and Report	100	September 30, 2010
Survey of NoVA Waterfront Property Owners Summary	60	November 15, 2010
Draft Adaptation Strategy Report	75	November 15, 2010

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 12.08 Richmond Regional Planning District Commission
Central Virginia Blue and Green Infrastructure Protection Planning Project

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

GIS Data and Mapping for the City of Richmond – PDC staff have worked extensively with staff from the City of Richmond, Center for Green Infrastructure, and E² Consulting to develop a green infrastructure asset inventory for the City of Richmond. The inventory includes sample site analysis using CommunityViz© software that quantifies the stormwater and other benefits of implementing various land cover scenarios. The PDC’s inventory is being combined with the Virginia Department of Forestry’s recently completed tree canopy layer and the Center for Green Infrastructure’s vacant building inventory to develop an implementation tool - a robust database for City staff to use for determining potential GI opportunities for pending development projects. This project is being formatted for final printing.

Rural Green Infrastructure Asset Implementation: Richmond Regional PDC staff prepared and presented locality-specific green infrastructure presentations to the Ashland Planning Commission on July 14 and the Chesterfield Planning Commission on July 20. Both the Ashland and Chesterfield presentations were routed to the local television public access channel for re-viewing by the general public. All presentations were well received with local commissions considering local implementation. An additional presentation is being planned for Hanover County.

Urban Green Infrastructure Asset Assessment Model: RRPDC staff has completed the Urban Asset Assessment Model Report, entitled Green Infrastructure Assessment: A Green Pilot Program for Richmond. This report details the steps taken to produce GIS data, mapping, and analysis of existing green infrastructure assets in the City of Richmond. By detailing the steps taken for analysis of assets in the City of Richmond, the report can act as a model for other urban localities and region in Central Virginia and the Mid-Atlantic region.

Crater PDC staff participated in joint meetings with Richmond Regional PDC staff regarding the development of the Central Virginia Blue and Green Infrastructure Protection Planning Project. The Crater staff sponsored quarterly meetings of the Crater Local Planning Directors, and the Green Infrastructure/Greenway Project was discussed to determine the best approach to take in the Crater region regarding specific education programs and presentations on the benefits and the development of local strategies regarding the project. The Crater PDC staff developed for Prince George County an inventory of mapping of Green Infrastructure Assets within the County. This information can be integrated into the County’s comprehensive planning process. On July 29, 2010, the Crater Commission sponsored a special meeting for all Crater local planning commissions to present the Green Infrastructure Planning project to the Crater Region. Twenty-five persons participated in the workshop. Local planning commissions now have the background in regard to the project to integrate this initiative into their local comprehensive planning processes. Also, the Crater staff conducted an Impervious Surface Analysis for the Crater Region during the year. The results of this effort can be integrated into the Green Infrastructure data base.

Final Products	% Completion	Anticipated Completion Date
GIS Data and Mapping for the City of Richmond	99	
Rural Green Infrastructure Asset Implementation	100	

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 41 Accomack-Northampton Planning District Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Ground Water Committee

A-NPDC has held four Ground Water Committee meetings. The committee has reviewed seven ground water withdrawal permits, two VPDES permits, and completed two environmental reviews. The committee has also reviewed and commented to the EPA-Sole Source Aquifer Program on a landfill spray irrigation project in Accomack County. The committee has served on the State RAP for developing VA Ground Water Withdrawal Regulations and is currently finalizing Water Supply Plans for Accomack and Northampton Counties. The committee has served on the Shellfish TMDL Implementation Advisory Committee. The committee held a public workshop focusing on presenting a general overview of the Eastern Shore ground water system and regional ground water management efforts. A Household Hazardous Waste Collection was held on May 8, 2010 on Chincoteague Island and was the most successful collection in the 8 year history of the program.

Coastal Management Committee

A-NPDC has held two Coastal Management Committee meetings. The committee reviewed and discussed growth potential maps for the Eastern Shore and reviewed the outcomes and potential implementation strategies developed at the Eastern Shore of Virginia Climate Change Workshop, which worked to develop adaptation strategies by bringing together multiple local community interest groups and stakeholders. The committee discussed developments of the VA & Coastal MD Area Committee Regional Emergency Response Team regarding environmental response to hazardous spill events in local coastal waters. The committee reviewed and discussed the USGS animated model for geologic evolution of the Chesapeake Bay and Eastern Shore of VA. The September 28 meeting was held in conjunction with educational training regarding the Chesapeake Bay TMDL regulation developments. The committee also identified future training opportunities for FY2010 involving sea level rise/climate change public education campaign and training for local planners involving new LIDAR data for the Eastern Shore.

Land Use and Ground Water Resources Report

A-NPDC has produced an analysis of Land-Use practices and Ground Water Resources for the Eastern Shore. The report presents summaries of multiple regional datasets including county-level zoning, current built-out parcels, existing subdivisions, government lands, soil type, and ground water availability. These datasets were all considered when determining areas on the Eastern Shore most suitable for future development. Potential growth areas determined in the report are being considered in the continued development of the Ground Water Management Plan. The Land Use and Ground Water Resources Report will also be presented to local governments to aid in future planning efforts.

Technical Assistance

A-NPDC facilitated the development of a Plant Eastern Shore Natives Demonstration Garden in Wachapreague.

Final Products	% Completion	Anticipated Completion Date
Coastal Management Committee Report	100%	9/30/2010
Coastal Management Training Report	100%	9/30/2010
Technical Assistance Report	100%	9/30/2010
Ground Water Committee Report	100%	9/30/2010
Land Use and Ground Water Resources Report	100%	9/30/2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 42 Crater Planning District Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

(1)Crater PDC staff processed 14 environmental impact reviews in regard to local, state, and federal projects. (2) The Impervious Surface Study within the Crater Coastal Communities effort was completed. (3) The Spring Appomattox River Clean-Up was held on April 10, 2010 and 16 volunteers participated, picking up 38 large bags of trash at locations in Petersburg, Hopewell and Prince George. (4) One coastal PDC meeting was held in Northern Virginia on July 13, 2010. The main topic of discussion was the Chesapeake Bay TMDL's. (5) Crater PDC staff continued to support FOLAR initiatives; participation in Fort Lee's Earth Day Celebration on April 28, 2010; the "Paddle and Battle" Kayak and Canoe race on September 18, 2010 from Petersburg to Hopewell. There were 28 race participants. There was construction of a trail boardwalk in the Appomattox River Regional Park located in Prince George county by FOLAR volunteers. (6) Two meetings were held (4/28/10 & 5/21/10) by the U. S. Corps of Engineers in regard to the Chowan River Basin Reconnaissance Phase which is designed to meet with stakeholders to gather and identify "problem areas" within the watershed. The major issue that has been identified is major flooding within many sections of the study area. (7) On July 29, 2010, the Crater Commission held a special meeting for local planning commission members to learn more about the Green Infrastructure Project, and 25 persons participated in the workshop. (8) Two coastal and coastal training meetings were held during the reporting period (4/30/10 and 9/17/10). Topics of discussion centered on the Impervious Surface Analysis, Chesapeake Bay TMDL, Flood Map Modernization Program, Fort Lee Master Plan and Joint Land Use Study (JLUS) and Tomorrow Woods-Forest Management Implementation Assistance Program. (9) The Crater PDC staff continued to support the Chowan Watershed Roundtable and participated in the Roundtable meeting held on July 15, 2010.

Final Products	% Completion	Anticipated Completion Date
Environmental Impact Review Comments	100%	9/30/10
Coastal Meetings	100%	9/30/10
Coastal Training	100%	9/30/10
Impervious Surface Study	100%	9/30/10

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 43 Hampton Roads Planning District Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2009 12/31/2010 3/31/2011		

Regional Coastal Resources Management Program for Hampton Roads. This program encompasses environmental impact review, coordination of regional environmental programs addressing environmental issues, public information and education, and technical assistance to the localities. Through this Program, the HRPDC staff provides the following:

Regional Coordination Process. HRPDC staff facilitates monthly regional advisory committee meetings addressing wetlands, Chesapeake Bay Preservation Act, and other coastal and environmental issues. Activities are coordinated with local utilities, stormwater, and general planning programs and regional geographic information system issues. Through these programs, 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 the period, this effort focused on state water quality and TMDL requirements, implementation of Phase III of the CBPA, and responding to the Chesapeake Bay TMDL. This process resulted in recommendations to state agencies and EPA concerning new state stormwater regulations and the Chesapeake Bay TMDL.

Environmental Impact Review. Thirty-three (33) environmental impact assessments/statements and coastal zone consistency determinations were reviewed, local government input coordinated, and comments provided to DEQ for inclusion in official state positions. Summaries of all projects were provided to the HRPDC.

Regional Technical Studies. HRPDC staff pursued a number of technical studies addressing water quality and watershed management. Staff analyzed the impacts of the proposed Chesapeake Bay TMDL on local governments and utilities.

Public Information and Education. HRPDC staff produced two (2) quarterly newsletters, maintains information on its website, and provides regular briefings to local elected officials on the HRPDC Commission, local governing bodies, and to professional and civic organizations. Copies of the newsletters and additional information can be found on the HRPDC web site: <http://www.hrpdcva.gov/Documents/Newsletter.asp>. In addition, several technical training sessions on water quality and regulatory issues were held during the year. A new electronic newsletter system is starting in Fall 2010.

Technical Assistance. Daily assistance is provided to local government staff, consultants, businesses and citizen environmental organizations on environmental and planning issues. This includes ordinance and plan development, provision of technical information, acquisition and interpretation of aerial photography, and GIS data and maps. Assistance with organizational development and consideration of technical, regulatory, and policy issues is provided to regional environmental organizations in order to facilitate informed education and participation in local, regional and state planning and decision-making.

Committee Participation. HRPDC staff participated on several committees related to the Regional Coastal Resources Management Program. These committees included the Hampton Roads Southside Trail, the Southeast Coast Paddling Trail, the Virginia Coastal Zone Management Policy Team, several TMDL TACs, and the Virginia Stormwater Regulatory Advisory Panel and subcommittees.

Final Products	% Completion	Anticipated Completion Date
Final Report: Hampton Roads TA Program	25	November 2010
EAVEIS and Coastal Consistency Review	75	December 31, 2010
Public Information, Education, and Training	75	December 31, 2010
Regional Coordination Process	75	December 31, 2010
Special Regional Studies	75	December 31, 2010

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 44 Middle Peninsula Planning District Commission			
Technical Assistance Program			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	10/1/2009	9/30/2010	12/31/2010

Coastal Management Support: MPPDC staff continued to provide coastal management support to local elected officials and other government officials, local planning commission and local planning staff. On a variety of occasions, MPPDC staff provided direct GIS analysis to supplement proposals, land conservation, land use plans, local land use ordinance implementations, as well as water use conflicts. Specifically speaking, MPPDC staff developed a map for the Essex County Countryside Alliance (ECCA) to highlight protected lands (i.e. holdings by private land owners, Virginia Department of Forestry, the Middle Peninsula Public Access Authority, etc). Additionally, MPPDC staff provided maps that provided a visual to discuss the concern amongst a variety of stakeholders about commercial workboats potentially mooring at Perrin Creek wharf in Gloucester County.

Local Planning Coordination: MPPDC Staff continued to convene meetings with local government level planners and administration as well as bi-monthly meetings of the Middle Peninsula Chesapeake Bay Public Access Authority (MPCBPAA) to discuss ongoing and new issues related to coastal zone management. In particular, the topic of the Chesapeake Bay Total Maximum Daily Loads was researched and discussed as these regulations will impact each jurisdiction.

Assistance with the Implementation of the Middle Peninsula Chesapeake Bay Public Access Authority annual work plan. Two special focus area themes are proposed: (a) Preservation of Working Waterfronts – Coastal Cultural Identity and (b) Wetland Mitigation Banking: a. In partnership with Mathews County, Mathews Maritime Foundation, as well as Mathews Blueways, the PAA worked toward better understanding public access needs and working waterfront issues impacting Mathews County. Through the implementation of a Mathews County Coastal Survey as well as through a series of educational presentations about public access, MPPDC staff gathered a wealth of information that was used to supplement the development of a draft of a Middle Peninsula Regional Public Water Access Master Plan. b. In August 2010, MPPDC staff received a final report from Vanasse Hagen Brustlin, Inc investigating the feasibility of developing a regional tidal wetland mitigation bank on the Shenk Parcel that would be utilized by local tidal wetland boards and citizens within the region. It was concluded that this parcel is not a good candidate for the development of the wetland bank since wooded buffers would need to be removed from the land, thus ruining the ecological integrity of the land.

Final Products	% Completion	Anticipated Completion Date
Coastal Management Analysis and Policy Support	100%	Sept 2010
Local Planning Coordination	100%	Sept 2010
Assistance with the implementation of the Middle Peninsula Chesapeake Bay Public Access Authority annual work plan. Two special focus areas themes are proposed: Preservation of Working Waterfronts – Coastal Cultural Identity and Wetland Mitigation Banking.	100%	Sept 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 45 Northern Neck Planning District Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

NNPDC staff has updated five Northumberland County digital GIS taxmaps. These maps are integrated into the revised tax maps layer for delivery to the county for use in their Land Use Office GIS.

NNPDC staff has completed the hurricane storm surge analysis using Virginia Department of Emergency Management hurricane surge map GIS data for all four Northern Neck Counties. Some issues have been identified regarding creating a reverse 911 phone list for the counties. From information relayed from the county emergency coordinators, the phone database is updated every two weeks and given to the county for their 911 system. The coordinators do not have the capability to continue to update the storm surge vulnerable properties, or the time. In addition, since so many of the homes on the waterfront are second homes, a large proportion of the calls would go unanswered. Finally, since many people are foregoing conventional landlines for cell phones only, there is no logistical way to contact those persons who might be affected by storm surge. As a result, the E911 contact list for storm surge properties will not be created, as it would not be utilized by the counties, due to it being outdated in a matter of weeks. In the future, if staff and emergency coordinators can work out the issues, this could be revisited, as the GIS layer will be available for their use.

Working waterfront sites have been identified using photos from the water and the Virginia Base Mapping Program's 2009 Aerial Photographs in all four Northern Neck counties, and a GIS file of the point locations has been created. County administration staff have reviewed the maps and have offered additions, deletions and revisions as needed.

NNPDC staff held a local coordination meeting of Northern Neck Land Use Administrator's on June 14th, August 30th, and September 28th, 2010. At the June 14th meeting, the main agenda item was alternative septic system placement in wetland areas, with a staff person from the Army Corps of Engineers assisting in the discussion. Some interesting facts from that training session were: 1) there is an exception to building on wetlands if the area disturbed is less than 1/10 of an acre, and 2) standing water does not in and of itself constitute a wetland. At the August 28th meeting, the training agenda item was the Chesapeake Bay TMDL; the status and future local implications of implementing the Bay TMDL. Local staff were familiar with the Bay TMDL, but not details of the States Watershed Implementation Plan. When certain details of the plan were announced, local staff asked "who is going to implement this?" After discussion, many believed that the local governments will end up being handed "unfunded mandates" from the State to implement and enforce these new initiatives. There seems to be a disconnect between the State and Local governments on the Bay TMDL. At the September 28th meeting, the main training agenda item was an overview of the Community Viz software. Past applications of the software were explained, as well as the buildout analysis that was attempted in Richmond County. In the afternoon, a hands-on training session with the software was held. One county mentioned that the software would be useful in reviewing a large planned unit development that the Board of Supervisors was currently reviewing.

Final Products	% Completion	Anticipated Completion Date
Coastal Management Support	100%	September 2010
Local Planning Coordination	100%	September 2010
Northumberland County % Revised Digital Tax Maps	100%	September 2010
Regional Coastal Storm Surge Hazard Assessment	100%	September 2010
Northern Neck Working Waterfront Inventory Map	100%	September 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 46 Northern Virginia Regional Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

Since April, NVRC formed a partnership with NoVA Outside – An Alliance for Environmental Educators in Northern Virginia, provided technical service in the form of website development (www.novaoutside.org) and technical training planning for formal and informal educators. Additionally, NVRC supported the development of a mini-grant program, based on results from a 2008 survey following up on participants of rain garden workshops requesting funding support. Three projects were awarded a total of \$1,000 to implement a small-scale rain garden or other stormwater retention project.

For the 2010 campaign, the Northern Virginia Clean Water Partners decided to focus more specifically on the issue of pet waste, by creating a web Blog about dogs (www.northern-virginia-dog-blog.com), a Facebook page, and a Twitter site. The Dog Blog features interesting articles about dogs, with the message about picking up pet waste woven into the articles a specific number of times per month. The partners will also feature several contests on the Blog as well, to encourage viral marketing of the Blog amongst residents of Northern Virginia.

Between April 1 and September 30, the Dog Blog has had 3,693 views. The Partners added contests to the campaign this year, beginning with a trivia quiz in August, which resulted in 328 people completing the quiz. The trivia quiz included a question about what dog owners should do with their pet waste, which 87 percent of people completing the quiz answered correctly. Additionally, the Partners hosted an essay contest for non-profit organizations – four organizations submitted entries. The one with the most votes will be decided in early-October 2010. As of September 30th, over 120 visitors completed a poll, of them 87 percent stated they always pick up after their dog.

The Only Rain web site (www.onlyrain.org) was enhanced for the 2010 campaign, with new information and links to the Dog Blog. Between April 1 and September 30, the Only Rain web site had 423 unique visitors and over 577 total visits. In 2010, the Partners also selected a new radio public service advertisement “Dog Beep”, which aired 176 times in September, on five radio stations, including one with a primarily Spanish-speaking audience.

Since April, NVRC staff reviewed and responded to 12 environmental assessments or environmental impact statements across the region. To date, NVRC has not received notice of significant changes in projects due to comments provided by NVRC staff. NVRC staff hosted a Coastal PDC coordination meeting, at Leesylvania State Park, and attended two Coastal Policy Team meetings in person or via conference call.

Final Products	% Completion	Anticipated Completion Date
Report on Northern Virginia Coastal TA Program	100	September 30, 2010
Summary of Regional Stormwater Education Campaign	100	September 30, 2010

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 47 George Washington Regional Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start: End: Closeout:	
	10/1/2009 9/30/2010 12/31/2010	

GWRC staff convened 2 quarterly meetings of the local government planning directors, and continued to provide technical staff support to three active sub-committees of GWRC's Green Government Commission; namely: Green Buildings, Green Waste/Recycling and Green Earth. GWRC staff time invested in these sub-committee efforts produced the following accomplishments:

- Completion of the regional green government green resources/sustainability website which was activated prior to Earth Day using the URL: <http://www.GWGreenGovt.org>
- Coordinated updated article on activities of the GWRC Green Government Commission ("Regional Green Government Plans Make Every Day Earth Day") which appeared in the Fredericksburg Free Lance Star on Sunday, April 25, 2010 (Earth Day, 2010)
- Working with the Green Waste/Recycling sub-committee, GWRC:
 - oProvided on-going support of discussions between Spotsylvania and Caroline Counties and Fort A.P. Hill, exploring potential for shared use of Spotsylvania Co mobile tub grinder to process Caroline & Fort AP Hill wood waste to produce wood chips for Spotsylvania organic compost, along with potential agreement to divert Caroline wastewater sludge from landfill disposal into Spotsylvania compost operation
 - oParticipated in regional Earth Day event at City's Alum Spring Park on April 24th to promote public awareness in recycling and conservation practices and to survey public on interest in Children and Nature Initiative.
 - oOrganized regional school district recycling symposium on Aug 3, 2010 to educate school district personnel in City and Caroline & King George Counties on alternative recycling systems to implement school recycling.
 - oCompiled regional recycling rate report to demonstrate progress across the region and opportunities for program enhancement
- Working with Green Building Committee, GWRC:
 - oDrafted RFP for Home Performance with Energy Star project management and planning consulting services
- Working with the Green Earth sub-committee, GWRC:
 - oDeveloped draft regional greenway corridor proposal and local maps of identified corridors (see: <http://www.millionmilegreenway.org/software.php>), using regional greenway corridor model development by Million Mile Greenway consultants and inputs of various landscape and cultural features selected and ranked by Green Earth Committee.
 - oDeveloped 2 Children and Nature Network Initiatives:
 - George Washington Regional Children and Nature Guide (Fall 2010), inventorying locations and events that provide environmental education and outdoor natural recreation experiences for children, and a Google Map application that thematically illustrates the locations and provides links to additional information: (<http://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=107065627227072054188.00048fd7102c34a76008d&z=9>)
 - Passport to the Rappahannock, developed in partnership with the Friends of the Rappahannock, this environmental activity book provides indoor and outdoor activities tailored to different park and other outdoor settings throughout the region and is designed to give kids some structured learning experience as they experience the outdoors.
 - oDemonstrated CITYgreen software to Committee, presented Urban Ecosystem Analysis study and solicited Committee review comments.

Final Products	% Completion	Anticipated Completion Date
#1: Report on Local Government Coordination and Training Program	100	Sept 30, 2010
#2: Support Regional Children & Nature Network/ "No Child Left Inside" Initiative	100	Sept 30, 2010
#3: Support to GWRC's Green Government Commission Sub-Committees	100	Sept 30, 2010
•Regional Green Government/Sustainability Website/Internet Portal	100	April 15, 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 48 Richmond Regional Planning District Commission
Technical Assistance Program

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Product 1: Report on Coordination Initiatives:

Environmental Reviews: PDC worked with local environmental staff to process 24 environmental reviews for the reporting period.

James River Map Distribution: 2,625 James River Interpretive guides were distributed to the following organizations – Town of Ashland and Charles City County Parks and Recreation Departments, the Virginia Welcome Center (at the state capitol), Richmond Metropolitan Convention Centers and Visitors Bureau, Riverside Outfitters, Venture Richmond, Peak Experiences, Chesterfield Cooperative Extension, Pamunkey Regional/Hanover County Library, Town of Ashland Library, Powhatan County Library and Richmond City library.

DCR Legislation: PDC staff summarized the contents of nine legislative bills proposed to improve water quality of the Chesapeake Bay and presented the findings to the regional Environmental Technical Advisory Committee for consideration and comment. PDC staff also worked individually with several localities to address how the proposed changes in state regulations might impact existing programs.

Product 2: Report on Training Initiatives:

7-8-10 VCU Rice Center: PDC staff worked with the Virginia Commonwealth University's Rice Center for Environmental Research to arrange an educational tour of the LED Platinum facility and surrounding grounds.

9-15-10 Regional Environmental Technical Advisory Committee Meeting: PDC staff held a meeting of the nine local government environmental staff. The primary purpose of the meeting was to discuss nine bill proposed to expand water quality regulations to better protect the Chesapeake Bay and meet EPA requirement for reducing pollution loading.

9-30-10 James River RiverKeeper: PDC staff worked with the James River Association to plan a tour of the middle James River to review and discuss it's shoreline, public access points, wildlife habitat, water quality and hazards, and impacts from local development. This boat tour of segments of the middle James River has been tentatively rescheduled to the week of October 18 due to a flash flood watch issued by the National Weather Service.

Product 3: Impervious Cover Forecast Report – Richmond Regional PDC staff has completed the digitization of all structures added in the region for each of the nine localities from 2007 to 2009. A final report with maps is being formatted for final printing.

Product 4: Water Supply and Wastewater Treatment Report – Richmond Regional PDC staff has worked with nine local utility directors to inventory existing water supply and wastewater systems and has prepared an informational pamphlet to inform citizens and decision makers of available resources. The pamphlet is being formatted for printing.

Final Products	% Completion	Anticipated Completion Date
Report on Coordination of Initiatives	100	September 30
Report on Training Initiatives	100	September 30
Impervious Cover Forecast Report	99	November 15
Water Supply and Wastewater Treatment Report	99	November 15

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 49 Virginia Beach/Virginia Aquarium and Marine Science Center
Sea Turtle and Marine Mammal Stranding Response

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	1/1/2010 12/31/2010 3/31/2011		

This grant officially started on January 1, 2010. During the period from April through September 2010, the Virginia Aquarium Stranding Response Program (VAQS) recorded 213 strandings in Virginia. There were 276 strandings during the same period in 2009.

The VAQS Stranding Team responded to 80 marine mammal strandings in Virginia during this reporting period, compared with 90 strandings during the same period in 2009. Marine mammal strandings included 87 cetaceans and three pinnipeds. Of the strandings, 35 (44%) were located in Virginia Beach and south side, 35 (44%) on Virginia's eastern shore, and the remainder (10 = 12%) along the western shores of Chesapeake Bay north of the James River. The cetacean species included 52 bottlenose dolphin (*Tursiops truncatus*), one Atlantic spotted dolphin (*Stenella frontalis*), three short-beaked common dolphin (*Delphinus delphis*), two pilot whale (*Globicephala* species), two pygmy/dwarf sperm whale (*Kogia* species), one Gervais beaked whale (*Mesoplodon europaeus*), nine harbor porpoise (*Phocoena phocoena*), two minke whale (*Balaenoptera acutorostrata*), one humpback whale (*Megaptera novaeangliae*), and four unidentified cetaceans. Pinniped species included one harbor seal (*Phoca vitulina*) and two gray seal (*Halichoerus grypus*). There were four live marine mammal strandings during the period, though none of the animals survived. These strandings will continue to be investigated.

The VAQS Stranding Team and our cooperators responded to 133 sea turtle strandings in Virginia during this reporting period, compared with 186 strandings during this same period in 2009. Of the strandings, 59 (44%) were located in Virginia Beach and south side, 53 (40%) on Virginia's eastern shore, and the remainder (21 = 16%) along the western shores of Chesapeake Bay north of the James River. Sea turtle strandings included 104 loggerhead (*Caretta caretta*), 21 Kemp's ridley (*Lepidochelys kempii*), four green (*Chelonia mydas*), two leatherback (*Dermodochelys coriacea*), and two unidentified to species. There were two live sea turtle strandings in Virginia; one did not survive and one loggerhead remains in rehabilitation.

VAQS Staff attended seven professional meetings and made many formal presentations during this reporting period. There were many educational and/or training presentations by Stranding Team members to groups in the Hampton Roads area. Grant funded VAQS staff worked more than 700 hours and Stranding Team volunteers contributed more than 8,000 hours to the stranding response program 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
VA Sea Turtle & Marine Mammal Stranding Response & Reporting	75%	December 31, 2010
Personnel Training Activities	85%	December 31, 2010
Public Education Activities	90%	December 31, 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 81 Dept. of Conservation & Recreation
Coastal NPS Program Management

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: 10/1/2009	End: 3/31/2011	Closeout: 6/30/2011

For the grant reporting period, the Environmental Analyst at the Virginia Commonwealth University continued to serve as the Coastal NPS Program Manager and implement the Coastal NPS Program at the Virginia Department of Conservation and Recreation. The focus of the Coastal NPS Program is the continued expansion of the role and services of the Virginia Network for Education of Municipal Officials (VNEMO) in the Coastal Zone.

The Coastal NPS Program Manager continued to implement the VNEMO Program to support the Sustainable Community Planning Focal Area Projects, integrate the Chesapeake Bay TMDL Watershed Implementation Plan for local government process, and implement the National Fish and Wildlife Foundation Grant at the Science Museum of Virginia.

VNEMO, in coordination with Chesapeake NEMO, has continued a strong role with the implementation of the project in coordinating specific roles and responsibilities within the program delivery and context of the Shoreline Project, under the guidance of the NVRC, the VNEMO client. VNEMO provided the NOAA Coastal Services Center to provide survey development and data analysis for the residential survey portion of the project. The NVRC collected the relevant data utilizing a web based approach and the NOAA CSC developed a data cataloging form and is assisting in the analysis of the data. The survey was to obtain an understanding of the waterfront residents' knowledge of shoreline issues mostly related to climate change but also to seek additional information regarding other issues of concern.

The Coastal NPS Program Manager was requested by VDCR to implement a training program to improve the capacity of the field staff in implementing outcome based technical assistance for local governments, following the model of the VNEMO Program. This initiative is intended to prepare the VDCR staff for the likely increases in requests for technical assistance from local government when the CBTMDL and VA SWM Regulations are implemented. The CNP Program Manager began participating in the development of the local government engagement strategy of the CB TMDL including the development of communication and outreach materials. Two trainings were held during the grant reporting period, both provided by the Virginia Cooperative Extension service. A third training was provided by the NOAA Coastal Services Center on Public Issues and Conflict Management. This two day workshop was held in Oct, 2010. Invitees included the VDCR field staff from the Divisions of Soil and Water, Chesapeake Bay Local Assistance, and Natural Heritage; and staff from the VA CZM, Virginia Sea Grant, Chesapeake Bay National Estuarine Research Reserve, VIMS Coastal Resources Center and the Coastal Planning District Commissions.

The CNP Program Manager continued the management of the \$1.7M, NFWF funded project at the Virginia Science Museum. The Manager is sharing the Project Management role with the Director of Science at the Museum. Project leadership outlined the overall project and identified teams to begin the preparation of engineering designs, monitoring program design and educational and outreach materials. During the period, the CNP Manager oversaw the development of the designs for the stormwater practices, conducted a presentation to 50 participants and helped coordinate four other public educational events at the museum.

The VNEMO Program directly assisted both Charles City and Richmond Counties with their Comprehensive Planning efforts. Charles City County requested assistance with the identification of urban growth areas and Richmond County has been in the process of a Comprehensive Plan revision. The VNEMO Program led the public, community visioning session and has continued to build local capacity.

The CNP Program Manager partnered with the MPPDC to develop a NFWF proposal to implement a nutrient management strategy based upon a working waterfront model. Partners included: VCU, Virginia Tech, Rappahannock River Oyster Co and MPPDC. This effort was unfortunately not funded.

The CNP Program Manager continues to play a role in the development of the Chesapeake Bay TMDL WIP.

The CNP Program Manager also secured additional funding to support the position through NFWF and EPA 319 monies, resulting in a request for extension. The 319 monies permitted the NEMO program to work in the upper Chesapeake Bay watershed through the Ches Bay Program Circuit Rider.

Final Products	% Completion	Anticipated Completion Date
Product #1	80	Dec 2010
Product 2	80	Dec 2010
Product 3	30	Mar 2011
Product 4	80	Dec 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 91.01 University of Virginia - Institute for Environmental Negotiation
309 Assessment & Strategy

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

IEN compiled and reviewed its notes from the final two Coastal policy team and strategy/focus group meetings in March (March 24 to discuss Ocean Strategy; March 31 meeting to discuss the Coastal Strategy).

IEN emailed its summary notes from these focus group meetings to the Coastal Program on April 19, 2010.

IEN received final comments from Coastal Policy Team members and incorporated these into its final draft of the 309 Assessment.

IEN delivered the final draft of the Coastal 309 assessment to the Coastal Program on May10, 2010.

Virginia CZM Program staff conducted the final strategy work group meetings and drafted strategies for the Coastal 309 Assessment based on the outcome of these meetings as part of Task 1.

Virginia CZM Program staff completed the final assessment and submitted it to NOAA on September 29 by finalizing the priority strategies discussed during the work group meetings. This took place in collaboration with the Coastal Policy Team as part of Task 1. It is also reflected in the Task 1 progress report, and the final assessment which was submitted to NOAA September 29, 2010 will be submitted through this task (91.01) as well as the Task 1 final products.

IEN completed the project and filed its final project summary report on August 1, 2010.

Final Products	% Completion	Anticipated Completion Date
Presentation of assessment findings to the Coastal Policy Team	100	
Notes from CPT meeting and 2 focus group meetings delivered	100	
Final draft of Coastal 309 Assessment delivered	100	

Task: 91.02 Environmental Law Institute
Program Administration: RPCs & Amendments

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Pending
Proposed	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Virginia CZM staff has contacted the Environmental Law Institute regarding development of a scope of work to analyze implications of updating the Virginia CZM Program with the recodified Game and Inland Fisheries laws. Recodification revealed uncertainties in interpretation as to whether state endangered species laws currently are, always have been or are not actually incorporated. A contract is currently under development.

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 92 Middle Peninsula Planning District Commission
Shellfish Aquaculture and Working Waterfront Infrastructure: Mathews County Phase 2

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Middle Peninsula Planning District Commission (MPPDC) Staff worked closely with Neal Barber, President of Community Futures, to develop a report focused on the components of establishing an In-the-Water Aquaculture Park in Mathews County. To accomplish such a task, a variety of stakeholder meetings were held in order to generate specifics about the park and how the concept would be implemented. First MPPDC staff scheduled a meeting with professional stakeholders, including Jack Travelstead, Deputy Commissioner and Chief of Fisheries Management with Virginia Marine Resource Commission (VMRC); Chip Neikirk, Habitat Management Division at VMRC; Laura McKay, Program Manager of Virginia Coastal Zone Management Program (CZM); Nick Meade, Coastal GIS Coordinator with CZM; Steven Whiteway, Mathews County Administrator; John Shaw, Mathews County Director of Planning; Matthew Rowe, Mathews County, Planner; and Neal Barber, to discuss the passing of HB 138 and how Mathews County may be utilized as a pilot site for Aquaculture Opportunity Zones. Following this meeting, MPPDC staff scheduled a local stakeholders meeting with active aquaculture industry participants to introduce the concept of the park, as well as to gain specific information as to (1) the location of the in-water component(s) of the park that consist of the appropriate environmental conditions to grow shellfish, (2) the possible location of on-land facilities (i.e. docks, electricity, parking, boat launch, fuel, maintenance areas, cold storage, water and sewer infrastructure, etc.), (3) the types of services desired and needed at the parks and (4) the size of the park(s). Consequently, with the support of the local stakeholders, specific locations – on land and in the water - ideal for the park as well as relay areas were identified by stakeholders, which were then mapped by MPPDC staff with GIS and sent to VMRC for evaluation. To date, VMRC has identified 6-7 sites that range in size from 25 to 100 acres each that are generally located just inside each of the tributary rivers to Mobjack Bay, with at least one site on each river. VMRC is in the process of having their engineers map these areas for the in-the-water aquaculture park as well as for "alternative use" areas.

Mathews County Planning Commission, with assistance from an Advisory Committee appointed by the Board of Supervisors and a hired consultant, is currently in the process of conducting an update of the County's Comprehensive Plan. As a document that provides guidelines for decisions related to land use, the current draft of the comprehensive plan has 135 references to six of the seven York River Use Conflict Committee Recommendations. The draft was presented to the Planning Commission on August 17, 2010 and a unanimous vote was tallied to recommend that the Board of Supervisors hold a joint public hearing to solicit comments from the public.

Final Products	% Completion	Anticipated Completion Date
York River Use Conflict Policy Recommendations	100%	Sept 2010
New Policy Strategies for Shellfish Aquaculture and Working Waterfront Protection	100%	Sept 2010
Possible Establishment of "Alternative Use" Areas	100%	Sept 2010

Task: 93.01 Virginia Commonwealth University
Coastal GEMS Maintenance

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Coastal Gems maintenance was performed during this grant project period. Tasks were to refresh map services and update data and cartography in the map file. During this period, CZM staff requested that data and symbology in the application be updated on 3 currently, in production, layers. These updates have been completed.

Coastal Gems has remained operational during these updates and was only offline to install software/security updates or to refresh map services.

Google Analytics remains operational and sends an email PDF report to CZM staff weekly to show access and web statistics for the Gems application. From April 1, 2010 to September 30, 2010, Coastal GEMS received 816 visits from 422 unique visitors resulting in 1,007 pageviews and an average site visit time of 1 minute and 45 seconds.

Coastal GEMS can be accessed online at: www.coastalgems.org

Final Products	% Completion	Anticipated Completion Date
Coastal GEMS Maintenance	100%	

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 93.02 TBD				
CSI: Intergovernmental Decision-making: GEMS Improvements				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Project Pending
Proposed	Start:	End:	Closeout:	

To Be Determined.

Task: 94.01 Virginia Institute of Marine Science				
Design and Construction of Living Shorelines Course Development and Implementation				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:	
	10/1/2009	9/30/2010	12/31/2010	

The Living Shoreline Design and Construction curriculum, test, and tools were completed during the reporting period. Applications were created in Google Earth to facilitate the use of specific data in structure design (<http://web.vims.edu/physical/research/shoreline/LivingShorelineDesign.html>). A "Living Shoreline Design and Construction" class was held September 29, 2010. Twenty one consultants or contractors in the field of shore erosion control attended. The course curriculum, tests, as well as other pertinent information and links were added to the VIMS website. (<http://web.vims.edu/physical/research/shoreline/LivingShorelineDesign.html>)

Final Products	% Completion	Anticipated Completion Date
Curriculum	100%	August 2010
Class	100%	August 2010
Publish to the web	100%	September 2010

Task: 94.02 Virginia Institute of Marine Science				
Shoreline Inventory Reports for Tidewater Localities Phase 3-Fairfax and Prince William Counties				
<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:	
	10/1/2009	9/30/2010	12/31/2010	

This project develops shoreline inventories for Prince William and Fairfax County in the Northern Virginia region of the Commonwealth. The project includes data collection, processing, and map production, as well as the posting of data to the website and Coastal GEMS.

In this second reporting period all field data has been collected, processed, tabulated, and summarized maps have been generated, QA/QC has been completed, and final reports have been prepared and checked for content. Data have been posted to the Chesapeake Shoreline Inventory Website at this url: http://ccrm.vims.edu/gis_data_maps/shoreline_inventories/index.html. All digital data, files and metadata have been copied to CD for final product delivery.

Final Products	% Completion	Anticipated Completion Date
Fairfax County Shoreline Inventory	100	10-1-2010
Prince William County Shoreline Inventory	100	10-1-2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 94.03 Virginia Institute of Marine Science
Shore Evolution in Four Virginia Localities

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start: End: Closeout:		
	10/1/2009 12/31/2010 3/31/2011		

The necessary images for James City County, Isle of Wight, Suffolk and the City of Portsmouth have been collected and scanned. All photos, except for two years in James City County, have been rectified and mosaicked. Shorelines have been digitized for Portsmouth, Suffolk, and Isle of Wight. The reports for these three localities are in the final stages and will soon be printed. The background information for the James City County report has been collected and written. Once the GIS data is analyzed and maps, the final report will be completed.

Years available for each locality:

Portsmouth 1937, 1953, 1963, 1994, 2002, 2004, 2007, and 2009.

Suffolk 1937, 1954, 1963, 1994, 2002, 2004, 2007, and 2009

Isle of Wight 1937, 1954, 1963, 1976, 1994, 2002, 2004, 2007, and 2009.

James City County 1937, 1954, 1994, 2002, 2004, 2007, and 2009

Final Products	% Completion	Anticipated Completion Date
Shore Evolution GIS data	90	Dec 2010
Final Reports	75	Jan 2011

Task: 94.04 Virginia Institute of Marine Science
Living Shorelines Website for Property Owners, Industry and Managers

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

VIMS-CCRM has completed all but the last edits and the last checking of links within the website. Changes from the original site include a significant increase in the amount of information and the degree of detail. Most notable is the addition of detailed descriptions of various living shoreline options and accompanying photographs of actual projects over time. The website is now live and CCRM intends to make the final necessary changes as they are identified or are notified by users of corrections needed.

The website is

<http://ccrm.vims.edu/livingshorelines/index.html>

Final Products	% Completion	Anticipated Completion Date
Website	95	Oct 31, 2010

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 95 Middle Peninsula Planning District Commission Special Area Management Plan for Dragon Run			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:
	4/1/2010	9/30/2010	12/31/2010

Task 1: Land-use planning – MPPDC staff consulted with representatives from the two watershed counties in the process of updating comprehensive plans. None of the counties are updating zoning ordinances currently. Dave Whitlow, Essex County Administrator, reported that the recommended language is currently included in their draft and that they are aiming for adoption in Spring 2011. Anne Ducey-Ortiz, Gloucester County Planning Director, reported that many of the recommendations are in the draft Comprehensive Plan, which is anticipated to be considered for adoption in Summer 2011. Middlesex County Planning Director reported that the recommendations will be considered as the county reviews its zoning ordinances over the next year or two.

Task 2 : Watershed Management Plan Implementation and SAMP TA – MPPDC staff provided staff support to the citizen-based Dragon Run Steering Committee at two quarterly meetings and associated sub-committee meetings, including the Dragon Run Stewardship Award Subcommittee. MPPDC staff also assisted the Dragon Run Day Planning Committee with coordination and facilitation for Dragon Run Day 2010. MPPDC staff coordinated a kayaking trip down the Dragon Run, inviting watershed Boards of Supervisors member, planning commissioners, county administrators and planning directors. During this reporting period, MPPDC staff distributed approximately 200 Dragon Run DVDs and continued to update the Dragon Run website (www.mppdc.com/dragon). Additionally, MPPDC staff provided input during development of Dragon Run Watershed curriculum by Chesapeake Bay NERRS and provided information to the press about the Dragon Run, Dragon Run Steering Committee, SAMP and its partnerships.

Task 3: Quantitative Conservation Impacts – MPPDC staff consulted with Virginia Dept of Taxation to understand code requirements for assessing lands with conservation easements. MPPDC staff consulted with each Middle Peninsula locality’s Commissioner of Revenue to understand the processes used to assess easements. MPPDC staff collected quantitative information on eased parcels that the counties reported and vetted the list with easement holder data. MPPDC staff conducted research to determine the cost of public services for different land types. MPPDC staff collected data on quantifiable benefits associated with easements and tax exempt conservation land holdings, such as that from timber tax and fees in lieu. MPPDC researched the composite index formula and provided information to the Virginia Dept of Taxation to ascertain the school aid benefit attributable to conservation easements and land holdings. MPPDC staff presented this data to the Middle Peninsula Planning District Commission at its September meeting. MPPDC continues to assist localities as they incorporate policy changing stemming from this project. MPPDC collected all of this quantitative data into a report.

Final Products	% Completion	Anticipated Completion Date
Task 1: Land use planning	100	
Task 2: SAMP TA	100	
Task 3: Quantitative Conservation Impacts	100	

Task: 96 TBD Seaside Special Area Management Plan			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Pending
Proposed	Start:	End:	Closeout:

Funds from this task were transferred to Tasks 96.01 and 96.02. Both tasks were approved by NOAA on 5-3-10.

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 96.01 The Nature Conservancy

Seaside Special Area Management Plan: Project Team Administration and Habitat Distribution and Suitability Evaluation

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Project Period Open
Open	Start:	End:	Closeout:		
	5/1/2010	3/31/2011	6/30/2011		

The Nature Conservancy's Steve Parker, Barry Truitt and Alex Wilke (TNC), the Virginia Institute of Marine Science's Mark Luckenback and Marcia Berman (VIMS), with Virginia Coastal Zone Management Program's Laura McKay and Nick Meade (VA-CZM), the Virginia Marine Resource Commission's Hank Badger, Tony Watkinson and Jim Wesson, Dave Burden of the Eastern Shore Keeper and the aquaculture clam and oyster industry's Tom Walker of JC Walker & Sons Seafood and Heather Lusk and Pete Terry of Terry Brothers Seafood continued as the Project Team to expand the work completed in the previous Special Area Management Plan (VA-CZM FY08 Task 96.01). The purpose of the Project is to: 1) map, analyze, and interpret the current status and trends in the uses, economic values, and beneficial eco-system functions associated with state-owned and other habitats in the seaside bays of Virginia's Eastern Shore; 2) to re-evaluate these uses in light of current and projected conditions, and 3) to recommend guidelines for the allocation of resources in a manner that optimizes the environmental and socio-economic benefits derived from Virginia's barrier island lagoon system. The focus of FY09 work is on central Hog Island Bay, South and Magothy Bays and Chincoteague Bay for the purpose of increasing economic productivity, enhancing ecosystem health and resolving potential conflicts between stakeholders in this system.

A Project Team meeting was held on June 17, 2010. Discussions of the recreational use of the barrier islands, led by Dave Burden, and shorebird and beach nesting bird use of the islands, led by Barry Truitt, showed very little conflict during the spring migration. The importance of the barrier islands and coastal bays to migratory shorebirds is becoming increasingly better known, as radio and satellite transmitter tags permit tracking of both local foraging behavior (red knots on blue mussel spat and coquina clams on beaches; whimbrels on fiddler crabs in salt marshes) and long distance migration to nesting grounds in the Arctic. The potential, however, for even slight human disturbance causing significant harm to these birds during the highly sensitive migratory and nesting periods is great because both human beach visitors and the birds prefer sandy overwash plains - the birds for nesting and the humans for recreating. Management recommendations for plentiful and conspicuous signs, "virtual" fences that warn beach goers about bird disturbance, educational leaflets and public outreach by state, federal and private organizations are being emphasized to minimize disturbances to these important resources.

Also discussed was a legislative resolution sponsored by seaside clam aquaculturists and introduced in early 2010 by Del. Lynwood Lewis to the House of Delegates Rules subcommittee to examine the use and productivity of Baylor Grounds on the seaside. The Project Team, which had assisted with drafting the resolution, proposed that suggestions and recommendations be prepared to advise the state regarding guidelines that could be explored that would improve the productivity and ecological health of the seaside coastal bays. Several suggestions were made such as more flexible aquaculture enterprise zones for both clams and "off bottom" oysters, developing a more flexible use allocation management system and avoiding "lines in the sand" that are permanently fixed over the long term in the face of rapidly changing barrier islands, inlets and marshes. The Team concluded that a more dynamic management system is needed to enhance the productivity of a dynamic natural system and a thriving and growing clam and oyster aquaculture industry on the seaside.

GIS data and mapping of uses and resources, along with sound scientific analysis, can greatly inform stakeholders, the general public, legislators and other policy makers to more efficiently and productively manage marine resources. The results of VIMS' Cumulative Resource Assessment and the 209 square kilometer Baylor review, along with aquaculture and oyster and eelgrass restoration overlays, were reviewed and further overlaid on aerial photographs (available at the VA-CZM website <http://www.deq.virginia.gov/coastal/>). Bay scallop meta-population restorations and the difficulties of culturing this species and re-introducing them into restored eelgrass beds are still in the experimental stage. Additional information is also needed on wild clam distributions. Field work on central Hog Island Bay, South and Magothy Bays and Chincoteague Bay will be completed in December 2010. Oyster and eelgrass restoration goals would be completed in January 2011.

Further discussion on next steps included the Team's need for more information on wild clam distribution and establishing allocations for eelgrass and oyster restoration on the seaside, including more precise GIS data gathering and mapping of existing state sanctuaries. A second important goal is to gain broader input from users and stakeholders through outreach, particularly regarding the Team's compiled spatial data and habitat potential and vulnerability analysis. Additional stakeholders were recommended including recreational fishers and shellfish harvesters, wild harvest commercial watermen, and more aquaculture businesses, as well as local government officials and planners. This input, along with existing conditions maps, non-suitability and vulnerability maps, and potential areas that are suitable for public harvest, restoration, recreational and commercial uses, can provide the tools that shape policy and regulatory changes and assist the appropriate managers and stakeholders in their decision making. A skilled facilitator and participation of Team Members to help ensure the success of this outreach effort was also recommended. It is important for the Team to be able to demonstrate clearly what is not working, what does work, and to ask the broader stakeholder group about their priorities and what improvements are needed. These goals will be implemented during the final months of FY09 SAMP and form the proposal for the FY10 SAMP.

Final Products	% Completion	Anticipated Completion Date
Administration, Coordination and Communication	28%	3/31/2011
Updated spatial data analysis and interpretation of waterbirds	15%	3/31/2011
Oyster and eelgrass restoration allocations and guidelines	5%	3/31/2011
FY10 SAMP Recommendations and FY09 Final Report	30%	3/31/2011

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
 Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
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Task: 96.02 Virginia Institute of Marine Science			
Seaside Special Area Management Plan: Spatial Information Analysis and Interpretation for Shellfish Grounds and SAV Beds			
<u>Project status:</u>	<u>Current approved</u>		<u>Final deliverable(s) status:</u> Project Period Open
Open	Start:	End:	Closeout:
	5/1/2010	3/31/2011	6/30/2011

Table 1. Summary areas by region for current habitat suitability assessment*
 Area (km2)

Region	Baylor	Non-suitable Baylor	Currently Leased	Existing SAV	Potential SAV	Total Non-marsh Area
South Bay/ Magothy Bay	39.7	14.7	18.1	7.0	26.1	133
Central Hog Island Bay	95.2	51.8	43.8	2.8	53.2	228
Chincoteague Bay south	10.3	5.4	6.7	0	0	44

*Habitat suitability designations are a work in progress. Values represent current area assessments and will change as more data are integrated into the analyses.

VIMS staff used coarse-scale habitat suitability maps for SAV and shellfish developed during Phase 1 of this project to select three regions of the seaside for finer-scale suitability characterization. Those regions, designated as South Bay/Magothy Bay, central Hog Island Bay, and Chincoteague Bay south, were outlined in GIS and initial habitat suitability data summarized (Table 1). The staff obtained high resolution bathymetry data (collected by G. Ortell ODU) for Hog Island and Magothy bays and sediment data from Chincoteague Bay (collected by National Park Service). These data, along with samples of water depth, sediment characterization and benthic infauna from 96 stations in Hog Island (collected by VIMS staff) are currently being used to refine these habitat suitability assessments.

Additional bathymetry and sediment data will be collected from each of the regions during the next 3 months and used to further refine the habitat suitability assessments. Coupled with input from clam culturist and wild shellfish harvesters these data will be used to produce geo-spatial data layers for these regions to produce higher resolution maps of habitat suitability for (1) oyster restoration, (2) wild shellfish harvest areas, (3) clam and oyster aquaculture and (4) submerged aquatic vegetation. These higher resolution "working maps" will serve as a starting point for developing a consensus-building approach towards developing recommendations for management policies in Phase 3 of this project.

Final Products	% Completion	Anticipated Completion Date
Geo-spatial environmental data for habitat suitability	50	12/31/10
Spatial analysis of current use versus suitability	25	2/1/11

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

Year: 2009

**Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010**

Task: 97.01 Middle Peninsula Planning District Commission
Middle Peninsula Conservation Corridors Plan

<u>Project status:</u>	<u>Current approved</u>			<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start:	End:	Closeout:		
	10/1/2009	9/30/2010	12/31/2010		

Product 1 (Fact Sheet): For the last six months Middle Peninsula Planning District Commission (MPPDC) staff have worked to complete the development of green conservation corridor maps for the region. GIS data gathered from the 2006 Department of Conservation and Recreation - Division of Natural Heritage's (DCR-DHN) Virginia Natural Landscape Assessment, as well as Virginia Department of Game and Inland Fisheries (DGIF), DCR, and Virginia Commonwealth University Center for Environmental Studies' Priority Conservation Areas (PCA) study, was used in the development of a variety of regional maps. Maps included (1) a Composite of Ecologically Significant Areas in the Middle Peninsula (from DCR), (2) the most ecologically significant area in the Middle Peninsula, (3) Priority Conservation Areas and Currently Protected Areas within the Middle Peninsula, and (4) Virginia Natural Land Networks – the link between unfragmented natural habitats.

Product 2 (Inventory): Upon completion of these maps, MPPDC Staff shared information with the Middle Peninsula Planning District Commissioners at their July monthly meeting. To support these visuals of current green infrastructure, MPPDC staff provided Commissioners with an information sheet about green infrastructure conservation corridor planning, how it may be beneficial to the region, as well as green infrastructure planning initiatives throughout the Commonwealth of Virginia. At this same meeting MPPDC staff recommended that the Board pass a resolution supporting the management and importance of "Blue and Green Infrastructure" within the Middle Peninsula. After discussion and an amendment to the last paragraph of the resolution, the Board unanimously voted to adopt the resolution.

Product 3 (Public Policy): In conjunction with FY2009 NA09NOS4190163 Task 95, MPPDC staff analyzed the fiscal impacts of the conservation easements within the Middle Peninsula as a way to understand the local cost of utilizing this perpetual tool for conservation efforts. To gather needed fiscal impacts to conduct this analysis, MPPDC staff worked with Commissioners of Revenue from each county to gain insight as to how conservation easements are handled –from recordation of a conservation easement, to reducing the property's fair market value, to reporting the total land book value to the Virginia Department of Taxation - and its impact on the local composite index and therefore on state school funding. It was found that easements help the composite index by lowering the total land book value reported to the Virginia Department of Taxation which increases the amount of school funding from the State.

Final Products	% Completion	Anticipated Completion Date
Educational fact sheet on the practical uses and benefits of Green Infrastructure Planning	100%	Sept 2010
GI Inventory Development	100%	Sept 2010
GI Public Policy Recommendation Development and Endorsement	100%	Sept 2010

Year: 2009

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM
Performance Report, Section A, for Cooperative Agreement No. NA09NOS4190163
for the period from April 1, 2010 -September 30, 2010

Task: 97.02 Northern Virginia Regional Commission
Northern Virginia Conservation Corridor Planning

<u>Project status:</u>	<u>Current approved</u>	<u>Final deliverable(s) status:</u>	Submit w/next Semiannual Report
Closeout	Start: End: Closeout:		
	10/1/2009 9/30/2010 12/31/2010		

Since April, NVRC held four meetings to inform and engage stakeholders in the development of draft conservation corridor maps in Northern Virginia. The Green Infrastructure Center, Inc provided technical support in meeting design and in methodology development for creating a base green infrastructure map and subsequent thematic maps that takes into account Northern Virginia's unique urban-rural gradient.

In between information and work session meetings, NVRC staff made individual visits to the localities to expand the participation for those unable to attend the regularly scheduled meetings. NVRC staff presented to the Chief Administrative Officers of each jurisdiction on the effort. The outcomes of these presentations and meetings led to an enlarged stakeholder process and better understanding of the importance of a regional effort. Additionally, in August, NVRC and GIC staff presented to the Prince William County Planning Commission, who are revising the Environmental Chapter of the County's Comprehensive Plan. Based on the presentation and subsequent discussions, the County recommends incorporating the results of the Conservation Corridor Project into the Chapter, upon completion. Highlights from the meetings include:

- May 21, 2010 – Information Session
 - oPresented Green Infrastructure 101
 - oIntroduced Conservation Corridor Planning in Northern Virginia Project
- July 8, 2010 – Work Session
 - oHighlighted Green Infrastructure Planning Applications
 - oReviewed Draft Base Map (Unprotected Resources)
- August 20, 2010 – Work Session
 - oRevised Draft Base Map & Draft Thematic Maps
 - oIntroduced the Capabilities of American Forest's CITYgreen
 - oReviewed Existing Local Policies & Tools
- September 24, 2010 – Work Session
 - oReflected on Green Infrastructure Initiatives, Challenges, and Opportunities: Local Panel Discussion
 - oDiscussed Additional Needs for Establishing a Northern Virginia Conservation Corridor Base Map
 - oInitiated Discussion of an Implementation Framework

Meeting summaries, maps, and presentations, are available on-line by visiting: www.novaregion.org/conservation.

Final Products	% Completion	Anticipated Completion Date
NoVA Conservation Corridor Maps and Report	100	September 30, 2010
NoVA Conservation Corridor Presentation	100	September 30, 2010