

November 1, 2012

**Virginia Coastal Zone Management Program  
Semiannual Section B Report on Core Agency Implementation Activities  
For the Period from April 1, 2012 – September 30, 2012**

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## **A. STATE AGENCY MONITORING**

### **1) DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)**

#### **a) DEQ – Virginia Coastal Zone Management Program**

Virginia CZM Program staff continued to work with our partner agencies to implement the Program over the last 6 months. For a full description of staff activities, please refer to the Section A report for Task 1.

#### **b) DEQ – Water Permitting Programs**

##### *DEQ- Virginia Water Protection Permit (VWPP) Program*

The Virginia Water Protection Permit (VWPP) Program is required for water withdrawals and activities in wetlands and surface waters that may or may not require Clean Water Act section 401 water quality certifications. The following table describes the activity for each of these permits. For the VWPP Program, the column “Permits Reissue Pending / Avg Proc. Days” represents water supply permit permits whose applications are currently being processed for reissuance. The processing days cannot be calculated until the permits are actually reissued.

Compared to the October 2010 to March 2011 reporting period, general permits increased and the average processing time decreased<sup>(1)</sup>. The number of individual permits issued during the current reporting period increased slightly to those issued in the previous reporting period, and the average processing time<sup>(1)</sup> remained the same. Any processing time delays were mainly due to untimely applicant response, suspension of the permit process due to inadequate project information or change in project scope or impacts, threatened and endangered species concerns and/or coordination, coordination under the State Program General Permit process, and inadequate mitigation proposals.

The number of individual permits modified during the current reporting period decreased while the number of permit authorizations increased. The average time to process these requests continued to be in line with program guidelines for issuance actions (no regulatory time line for processing changes to general permit authorizations or individual permits).

There were no individual permits reissued during the current reporting period. General permit authorizations are not reissued in the VWPP program.

No applications were denied permit during the current reporting period.

The VWPP program staff conduct inspections on a variety of sites and for a variety of reasons. Inspection data is available from the DEQ Quarterly and Annual reporting made to the Administration division, and is also provided to the Virginia Department of Accounts on a fiscal year basis. This data can be provided if necessary for the purposes of this report.

##### *DEQ-Virginia Pollution Discharge Elimination System (VPDES) Water Permitting Program*

There are a total of 270 individual municipal and industrial CZM area VPDES permits. This number and the numbers in the table above represent typical activity in the program. There is no known reason for increases or decreases in numbers from the last reporting period. There are also numerous facilities registered under general permits in CZM areas including 15 car wash facilities, 69 concrete products facilities, 3 cooling water discharges, 168 single family homes, 25 nonmetallic mineral mining facilities, 8 petroleum and hydrostatic

testing discharges, 3 potable water treatment plants, 50 seafood processors, 384 industrial storm water discharges and 1 coin operated laundry. These represent typical numbers for general permit registrants in CZM areas in Virginia.

**DEQ – VPA Water Permitting Program**

The Virginia Pollution Abatement permit (VPA) is required for facilities that manage wastewater, animal waste, biosolids or industrial sludges in such a manner that they do not have a discharge from the site. For example, an agricultural facility that temporarily stores wastewater to be land applied as part of an irrigation/fertilization program. During the period between April 1, 2012 and September 30, 2012, three new VPA Individual permits were issued in the Coastal Zone Management area; each authorizing the land application of biosolids. One application to modify a VPA Permit authorizing the land application of biosolids was received and the modification completed during the reporting period. An application to modify a VPA permit not related to biosolids was also submitted during the period and is still being processed.

During the period between April 1, 2012 and September 30, 2012, no applications for coverage under the General Permit for Poultry Waste management were submitted in the Coastal Zone Management area. Also, during the period, no applications were received and no coverage was issued, modified or denied under the VPA General Permit for Animal Feeding Operation in the Coastal Zone Management area.

VPDES/VPA/VWP - April 1, 2012 – September 30, 2012										
	Permits Issued / Avg Proc. Days <sup>(1)</sup>		Permits Reissued / Avg Proc. Days		Permits Modified / Avg Proc. Days		Denied / Avg Proc. Days		Permits Reissue Pending / Avg Proc. Days	
VPDES	2	205	33	229	3	44	0	N/A	33**	N/A
VPA	3	141	0	0	1	58	0	N/A	0	0
VPA GP	0	0	0	0	0	0	0	0	0	0
VWP IPs	16	127	1	63	7	54	0	N/A	0	N/A
VWP GPs	115	27	N/A	N/A	23	81	0	N/A	0	N/A

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

\* Information from CEDS database

\*\* This represents existing VPDES individual permits expired but pending through Sept. 30, 2012.

One of these 33 permits is offline and will be terminated at the end of October.

**c) DEQ – Water Program Enforcement and Compliance**

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

Informal measures, such as Warning Letters and Letters of Agreement, are used in those cases where non-compliance is not significant in nature and where compliance can be achieved in a short period of time. For the period April 1, 2012 – Sept. 30, 2012, DEQ issued 138 Warning Letters for violations of VPDES, VPA, VWPP, and Ground Water program requirements (no Letters of Agreements were issued for facilities located in Virginia’s coastal zone during this period).

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation followed by a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Administrative Orders or court orders may be sought. Between April 1, 2012 – Sept. 30, 2012, DEQ issued 58 Notices of Violation for violations of VPDES, VPA, VWPP, and Ground Water program requirements. During the same period, the agency concluded enforcement cases with the issuance of thirteen Consent Orders that assessed a total of \$150,001 in civil charges.

**Table 1**

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Warning Letters	138	N/A
Informal	Letters of Agreement	0	N/A
Formal	Notices of Violation	58	N/A
Formal	Consent Order	13	<b>\$150,001</b>
<b>Total</b>		<b>209</b>	<b>\$150,001</b>

**d) DEQ – Air Permitting Program**

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

Period: April 1, 2012 – September 30, 2012

PERMIT TYPE	NUMBER OF PERMITS ISSUED	AVERAGE PROCESSING TIME (Days)
PSD & NA	2	150
Major	1	90
Minor	48	29
Administrative Amendment	5	63
Exemptions	48	21
State Operating	6	116
Federal Operating (Title V)	1	480
Acid Rain (Title IV)	0	NA
Total Number Permits Issued	<b><u>111</u></b>	

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

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

Definitions:

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

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

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

State Operating= Application for permit written pursuant to 9 VAC 5-80-800.

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

Administrative Amendment = Changes made to the permit to clarify or correct an issued permit. For example, equipment references, improved control equipment, reductions of allowed emissions below the exemption levels, etc.

Exemption = Facilities meeting are exempted from permitting requirements by exemption levels defined in 9 VAC 5-80-11.

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

Acid Rain (Title IV) = tightens the annual emissions limits for SO<sub>2</sub> and NO<sub>x</sub> which are imposed on large higher emitting electric utility plants and sets restrictions on smaller, cleaner plants fired by coal, oil, and gas.

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

Permits pending as of September 30, 2012

PERMIT TYPE	NUMBER OF PERMITS PENDING
PSD & NA	0
Major	0
Minor	19
Administrative Amendment	2
Exemptions	6
State Operating	10
Federal Operating (Title V)	8
Acid Rain (Title IV)	0
Total Permits Pending	<b><u>45</u></b>

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

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

Period: April 1, 2012 – September 30, 2012

PERMIT TYPE	NUMBER OF PERMITS WITHDRAWN	NUMBER OF APPLICATIONS DENIED
PSD	0	0
Major	0	0
Minor	4	0
Administrative Amendment	0	0
Exemptions	5	0
State Operating	1	0
Federal Operating (Title V)	0	0
Acid Rain (Title IV)	0	0
Total Permits Rescinded	<b><u>10</u></b>	<b><u>0</u></b>

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

**e) DEQ – Air Program Enforcement and Compliance**

DEQ continues to apply both informal and formal enforcement measures in its air enforcement program. Reference Table 2, on the following page.

Informal measures include Requests for Corrective Action, Informal Correction Letters, Warning Letters, and Letters of Agreement. These actions are used in those cases where non-compliance is not significant in nature and where compliance can be achieved in a short period of time. During the six-month period beginning April 1, 2012 – Sept. 30, 2012, DEQ issued 52 Requests for Corrective Action, two Informal Correction Letters, and 15 Warning Letters.

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation and negotiation of a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Orders or court orders may be pursued. Between April 1, 2012 – Sept. 30, 2012, DEQ initiated six new formal enforcement actions via issuance of Notices of Violation. Additionally, the Agency issued four Consent Orders; these orders assessed a total of \$32,283.75 in civil charges.

**Table 1**

<b>Measure</b>	<b>Action Type</b>	<b>Count</b>	<b>Total Civil Charges Assessed</b>
Informal	Requests for Corrective Action	52	N/A
Informal	Informal Correction Letter	2	N/A
Informal	Warning Letters	15	N/A
Formal	Notices of Violation	6	N/A
Formal	Consent Orders	4	\$32,283.75
<b>Total</b>		<b>79</b>	<b>\$32,283.75</b>

## **2) VIRGINIA MARINE RESOURCES COMMISSION (VMRC)**

### **a) VMRC – Habitat Management Division**

During the period April 1, 2012 through September 30, 2012 the Habitat Management Division received 1015 applications for projects involving State-owned submerged lands, wetlands or dunes. These applications were for projects such as piers, boathouses, boat ramps, marinas, dredging and shoreline stabilization. As the clearinghouse for the Joint Permit Application all applications were assigned a processing number by the Division and forwarded to the appropriate agencies, including, local wetlands boards, the Norfolk District of the U.S. Army Corps of Engineers, the Department of Environmental Quality, VIMS and others as necessary.

A public interest review was initiated and site inspections were conducted for those projects requiring a permit from the Marine Resources Commission. Likewise, Habitat Management staff also conducted site inspections for all projects requiring a local wetlands board permit and evaluated each local board decision for Commissioner review. Habitat Management staff also conducted compliance inspections on permits issued by VMRC and local wetlands boards. Six notices to comply were issued during the period.

The Habitat Management Staff completed actions on 957 applications received during the period. Action on most applications was completed within 90 days after they were received. As such, a number of the actions taken during the period were for applications received prior to April 2012. Similarly, those applications received near the end of the current reporting period are still under review. Habitat Management Staff also participated in the inter-agency review process involving general permits for Virginia Department of Transportation projects.

In addition to staff actions, the Full Commission considered 41 projects. During the reporting period the Commission considered 28 protested projects or projects requiring a staff briefing, The Commission also approved 13 projects over \$500,000.00 in value.

### **b) VMRC – Fisheries Management Division**

At its April 2012 meeting, the Virginia Marine Resources Commission (VMRC) modified the commercial horseshoe crab quota allocation for waters east of the COLREGS line by gear type. The VMRC established the commercial possession limit for blueline tilefish as 300 pounds (273 pounds gutted weight) and the tilefish possession limit as 500 pounds (455 pounds gutted weight) for any species. VMRC modified the commercial black sea bass possession limit as the combined total of the Virginia landing limit and the North Carolina landing limit. VMRC requested May public hearings to establish the Virginia commercial spiny dogfish quota, commercial daily limits for Spanish mackerel, and recreational and commercial management measures for tautog.

At its May 2012 meeting, VMRC established the commercial spiny dogfish quota as 3,764,723 pounds for the May 1, 2012 through April 30, 2013 season. VMRC established commercial daily landing limits for Spanish mackerel as 3,500 pounds. VMRC established the 2012 tautog management measures as a 16 inch minimum size limit, four fish possession limit, and April 16-July 31 closed season for the recreational fishery, and a 15 inch minimum size limit, and January 18-March 15 and May 1-August 31 closed season for the commercial fishery. VMRC requested a June public hearing to establish the 2012 commercial bluefish quota.

At its June 2012 meeting, VMRC established the 2012 commercial bluefish quota as 1,225,649 pounds. VMRC requested a July public hearing to modify fall Chesapeake Area recreational striped bass management measures.

At its July 2012 meeting, VMRC modified fall Chesapeake Area recreational striped bass management measures as a two fish possession limit, 18 inch minimum size, 28 inch maximum size, with one fish permitted over 28 inches total length. VMRC requested August public hearings to establish regulations for American lobster landed in Virginia, and to consider allowing the recreational harvest of striped bass by spear gun.

At its August 2012 meeting, VMRC established American lobster regulations, in accordance with requirements of the Atlantic States Marine Fisheries Commission, to require mandatory V-notching of egg-bearing females, a closed season of February 1-March 31, and a minimum size limit for all lobsters landed in Virginia as 3 17/32 inches carapace length. VMRC also modified striped bass management measures to allow the recreational harvest of striped bass by spear gun or by spearing.

At its September 2012 meeting, VMRC requested an October public hearing to establish the 2013 recreational and commercial tautog management measures.

### **c) VMRC – Law Enforcement Division**

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

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

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

REPORT FORMAT: FEDERAL FISCAL YEAR AREA: ALL AREAS  
START PERIOD: 10/01/2007  
END PERIOD: 09/30/2012



Category	2007/2008		2008/2009		2009/2010		2010/2011		2011/2012	
	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests
Buyers	10	11	1	1	2	3	1	1	7	7
Casting Garbage/Trash	0	0	0	0	1	1	1	1	1	1
Clams	0	1	1	1	3	5	1	1	3	3
Commercial Fishing License	16	25	6	9	3	6	2	5	7	8
Conchs	9	9	7	7	1	1	0	0	4	4
Crabs	138	172	93	111	65	77	48	59	61	75
Federal Violation	0	6	0	18	1	4	0	0	0	0
FIP Violations	0	0	0	0	0	0	92	100	122	130
Fish	271	319	160	205	114	140	126	148	161	185
Freshwater Fishing without a license	1	1	10	10	13	13	11	13	8	9
Habitat/Wetlands	0	0	0	0	0	0	0	0	0	0
License Tags	3	3	1	2	1	2	2	4	4	10
Mandatory Reporting	0	0	0	0	0	0	0	2	0	0
Misc	1	1	0	0	0	0	0	0	0	0
Non-residents	0	1	0	0	0	0	0	0	0	0
NSSP	3	3	0	0	9	9	0	3	0	0
Other Agencies	435	481	279	322	242	278	274	319	241	263
Oysters	54	72	31	39	56	71	60	74	112	146
Piers	0	0	0	0	0	0	0	0	0	0
Police Powers	61	68	43	53	50	62	91	114	58	65
Removal of Obstructions	4	4	1	1	0	3	1	1	3	3
Resisting officer	2	3	0	0	0	0	0	0	0	0
Shellfish	0	0	1	2	4	4	2	3	12	13
SW Recreational Licenses	309	331	175	196	132	151	167	212	137	154
<b>TOTALS:</b>	<b>1317</b>	<b>1511</b>	<b>809</b>	<b>977</b>	<b>697</b>	<b>830</b>	<b>879</b>	<b>1060</b>	<b>941</b>	<b>1076</b>
<b>PERCENT OF CONVICTIONS:</b>	<b>87.16%</b>		<b>82.80%</b>		<b>83.90%</b>		<b>82.92%</b>		<b>87.45%</b>	

Print Date: Thursday September 20, 2012

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

From April 1, 2012 through September 30, 2012, the VDH shellfish program had 3241 acres of shellfish grounds closed to harvesting. There were 1172 acres of shellfish grounds reopened.

The Department received and reviewed a total of (23) VMRC Permit Applications, and processed as follows:

Six (6) permit applications needed action in the Marina Program.

Seventeen (17) applications were approved based on meeting the requirements of providing adequate facilities.

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

## 4) Department of Conservation and Recreation (DCR)

### a) DCR - Division of Soil and Water Conservation

The Department of Conservation and Recreation (DCR), Division of Soil and Water Conservation (DSWC) administers numerous enforceable and non-enforceable programs that help the Commonwealth of Virginia manage its coastal resources. The following is a summary of key program activities conducted by DCR staff during the period of October 1, 2011 through March 31, 2011.

#### Regulatory Programs

##### **Stormwater Management Program**

During the past six month period, staff assigned to the field within Tidewater localities provided services that include review of erosion and sediment control (ESC) and stormwater management plans, onsite inspections, complaint response, enforcement support, and technical/regulatory training via the classroom and Internet.

DCR staff has continued to work with the 89 entities receiving coverage under the MS4 General Permit, which represents 114 small (Phase II) MS4s, to review local programs and provide technical advice on program implementation.

DCR staff is responsible for implementing the Virginia Stormwater Management Program. For the reporting period, approximately 480 permits were reviewed distributed between the regional offices of Suffolk, Tappahannock, and Richmond with 147, 155, and 178 permits reviewed, respectively.

##### **Nutrient Management**

DCR Nutrient Management Staff have been active in developing, reviewing nutrient management plans, enhancing private sector plan development, and other nutrient reduction activities to achieve the Commonwealth's nutrient reduction commitments of Chesapeake Bay TMDLs. In the coastal zone of Virginia, DCR staff have overseen the development of nutrient management plans covering 300,342 acres during the reporting period. The plan acreage developed by coastal watershed is summarized in the following table:

CZM Basins	Cropland	All Other Hayland	Pasture	Specialty Crop	Turf and Landscape	Total
Albemarle Sound	17,912	18	0	59	60	18,049
Atlantic Ocean	12,557	0	0	39	0	12,596
Chesapeake Bay Coastal	109,162	112	74	12	138	109,498
Chowan	7,190	64	0	37	0	7,291
James	29,014	731	0	0	306	30,051
Potomac	23,945	1,432	745	1,306	1,088	28,516
Rappahannock	38,913	1,063	91	0	8	40,075
York	50,749	2,257	1,095	109	57	54,267
Total	289,442	5,677	2,005	1,562	1,656	300,342

#### Non-Regulatory Programs

##### **Coastal Nonpoint Source Program**

The responsibility of the Coastal NPS Program Manager is to coordinate the Coastal Nonpoint Source Program implementation and administration of grants and grant budgets and provide technical support to Division of Soil

and Water, VDCR relating to coastal zone ecology, management and restoration. The position continues to serve as a liaison between DCR the Center for Environmental Studies at VCU and the VA Coastal Management Program to promote joint, applied research and outreach projects, coastal nonpoint source pollution, coastal zone ecology, management, and restoration.

For the grant reporting period, the Environmental Analyst at the Virginia Commonwealth University serving as the Coastal NPS Program Manager continued to implement the Coastal NPS Program, VNEMO Program and continued to manage the Virginia Healthy Waters Initiative at the Virginia Department of Conservation and Recreation.

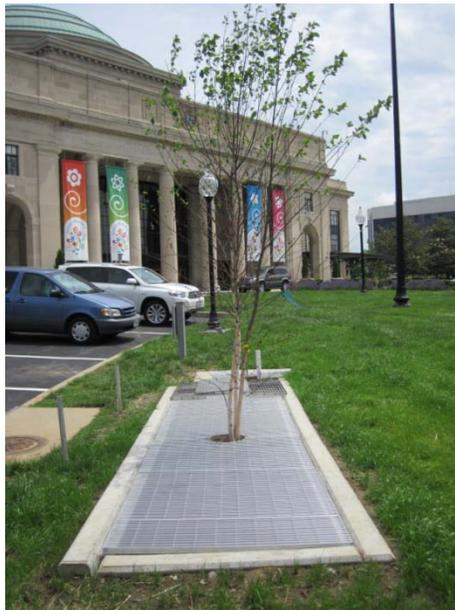
The Coastal NPS Program Manager implemented these programs to support various coastal priorities such as the Sustainable Community Planning Focal Area Projects, the integration of the Chesapeake Bay TMDL Watershed Implementation Plan for local government process, and implement the National Fish and Wildlife Foundation Grant at the Science Museum of Virginia.

NVRC, VCU and UVA/IEN hosted a “Looking back to move forward” workshop sharing with the entire working group and their localities the work and efforts of the previous two years to advance sea level rise communication. This workshop was held in the Spring, 2012 at the Fairfax County Government Complex and was attended by approximately 25 participants.

The Coastal NPS Program Manager continued the management of the +\$2M, NFWF funded, project at the Virginia Science Museum. The Manager continues to share the Project Management role with the Director of Science at the Museum. Construction continued at the Science Museum of Virginia of the bioretention, porous pavement, and the tree well filters. In addition, the installation of the automated stormwater samplers was initiated as was the collection of samples. The initial data collected indicated a lack of effluent from the treatment devices. This lack of effluent, while limiting the ability to effectively evaluate the performance of the treatment structures, indicates a significant reduction of volume of stormwater being added to the combined sewer overflow system and being infiltrated into the substrate. Several workshops and trainings were conducted at the Science Museum including for engineers, local officials, the construction industry as well as a porous pavement certification workshop.



Installation and completion of Bioretention



Installation and completion of tree well filters



Installation of rainwater harvesting system

The VNEMO Program continued to assist the Division of Natural Heritage in the development of an outreach and engagement strategy around VA Ecological Valuable Areas. The Program Manager provided a presentation at the Chesapeake Bay National Estuarine Research Reserve for local officials training for utilization of the database demonstrating the VEVA application.

The VCU Analyst management of the VA Healthy Waters Initiative continued partnership development with the VA Chapter of the Nature Conservancy and the Albemarle-Pamlico National Estuary Program to expand the range of the Healthy Waters program. The Program Manager continued to represent the Commonwealth in the Chesapeake Bay Goal Implementation Team 4 Healthy Watersheds. The Program Manager met with DEQ staff and management to further discuss the redefinition of the term, “healthy” with respect to the program, program expansion, integration of water quality data and possible integration with other programs at DEQ.

#### **b) DCR – Division of Natural Heritage**

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



DCR-DNH staff re-inventory of North Wallops Island Conservation Site

Final Report Submitted to NASA on the Reassessment of Natural Heritage Resources in the North Wallops Island Conservation Site - 4/20/12

DCR Natural Heritage staff submitted to NASA, Wallops Flight Facility, a final report documenting the 2011 status of natural heritage resources within the northern portion of Wallops Island in Accomack County on the Eastern Shore. This site was previously inventoried in 1994-1995. Nine occurrences of natural heritage resources were observed in 2011 including six community element occurrences and three state rare plant species. Rare animal species including Loggerhead Turtles, Piping Plovers, Bald Eagles, and Peregrine Falcons also add to the high biodiversity significance of the site, but these federal and/or state listed species are monitored routinely by other agencies and so were not targeted by DCR. Geomorphologic changes to this barrier island over the last 16 years resulted in major changes in the spatial distribution of some plants and communities, and, for some communities, the composition. Six significant communities were identified, with three of these globally rare: Black Cherry Xeric Dune Woodland (G1G2/S1), Xeric Backdune Grassland (G2/S2), Southern Bayberry Interdune Shrubland (G3G4/S2S3), Interdune Swale (Northern Mixed Grassland Type, G1G2/S1?), Low Salt Marsh (Salt Panne Type, G5/S3?), and Interdune Pond (Narrow-leaved Cattail-Eastern Rose Mallow Type, GNR/SU). The three plant occurrences observed during the 2011 reinventory included two state rare species that were previously documented, southern beach spurge (*Chamaesyce bombensis*, G4G5/S2) and big-headed rush (*Juncus megacephalus*, G4G5/S2), and one species newly found in 2011, the globally rare anomalous eupatorium (*Eupatorium anomalum*, G2G3/S1), the farthest north occurrence known for this perennial herb. One plant species, seaside plantain (*Plantago maritima* var. *juncooides*, G5T5/S1), observed in high numbers in 1994-1995, was not found in the 2011 survey, a disappearance associated with the increased frequency of inundation of its marsh habitat. The highly invasive exotic grass common reed (*Phragmites australis* var. *australis*) is widespread within the site and threatens rare species and communities by displacing native species and degrading habitat; one community, the Interdune Pond, documented in 1994-1995, was found to be particularly degraded in 2011 due to common reed. The report included management recommendations for protection of the natural heritage resources. Inventories of this site allow Wallops Flight Facility personnel to take natural heritage resources into consideration when making decisions concerning land use, siting of facilities, and management/maintenance of areas containing significant biological resources.

### Virginia's Largest Population of Mint Discovered At Chippokes Plantation State Park -7/5/12

While conducting field work for a vegetation mapping project, staff discovered the largest known population in Virginia – and possibly the world – of Yadkin hedgenettle (*Stachys matthewsii*). It has not yet been assigned global and state ranks. It is a narrow endemic known from five counties in the south-central Virginia Piedmont and four counties in the North Carolina Piedmont; it is disjunct to the Coastal Plain in Surry County, Virginia, where populations are associated with soils enriched by calcium from shells exposed along the James River. Although several small populations were already known in the county, the new population at Chippokes contains hundreds, if not thousands, of plants growing out of layers of shell and shell marl exposed on high eroding bluffs subtending the river in the eastern part of the park. Additional survey work will be required to fully survey the population.

### Small Whorled Pogonia Surveys Completed at Fort Belvoir – 7/11/12

The DCR Natural Heritage Field Botanist completed surveys for the globally rare, federal and state listed plant small whorled pogonia (*Isotria medeoloides*, G2/S2/LTLE) conducted from late May to early July 2012 on Fort Belvoir in Fairfax County. This perennial orchid is restricted to the eastern U.S. and Ontario, Canada, and in Virginia ranges from the Coastal Plain to the Cumberland Plateau with most of the Virginia occurrences located in the Coastal Plain and Piedmont. In Virginia, small whorled pogonia is most typically found in deciduous second or third growth successional hardwood forests with fairly sparse ground cover and highly acidic, nutrient-poor, sandy loam soils. Our knowledge of the habitat for this species in Virginia, however, has been expanding in recent years, with plants found in a hemlock-dominated stand, under mixed hardwood-pine canopy, and forests with more nutrient-rich soils. The Fort Belvoir surveys focused on designated areas proposed for new or upgraded water and sewer lines where habitat for this species had been previously mapped. No populations of small whorled pogonia were found. Reduced cover and diversity of herbaceous species, presumably from deer browse, were encountered in many of the areas surveyed.

### Prescribed Burning

#### 2012 DCR Natural Area Preserves Prescribed Fire – 8/17/12

In late winter and spring of 2012, the DCR-Division of Natural Heritage conducted multiple prescribed burn projects totaling 487 acres on four state natural area preserves. At Antioch Pines Natural Area Preserve and Blackwater Ecological Preserve in Isle of Wight County, 324 acres were burned to improve habitat for rare species, maintain pine savanna communities and restore longleaf pine. Natural fires historically occurred in all of these areas and influenced the development of fire-dependent natural communities and species assemblages. Annual, on-going application of prescribed fire on state natural areas is helping to restore and maintain these fire-adapted resources. Strong interagency cooperation between DCR-Natural Heritage, DCR-State Parks, The Nature Conservancy and the U.S. Fish and Wildlife Service has been critical for implementing these burns. In addition, DCR-Natural Heritage assisted with numerous prescribed fires on partner lands, including projects managed by DCR-State Parks, Department of Forestry, U.S. Forest Service, U.S. Fish & Wildlife Service and The Nature Conservancy.

## Natural Area Preserve Stewardship



VCU Students at Magothy Bay marking a new foot trail

### VCU Students help mark new foot trail at Magothy Bay NAP – 4/20/12

VCU is always in the “Top 10” with the Natural Heritage Program. Students enrolled in the VCU Ecological Service Learning course assisted with marking the new foot trail at Magothy Bay NAP. The 1.5 mile-long trail travels through a variety of migratory bird habitats. Visitors can view grassland birds at the beginning of the trail, forest birds as the trail progresses and marsh and shorebirds when the trail emerges at the edge of an extensive salt marsh. An expansive view of the Atlantic Ocean and the southern barrier islands is an added bonus. The efforts of these outstanding Rams will enhance the visitor experience at Magothy Bay NAP.

Students enrolled in the Ecological Service course are required to complete a minimum of 20 hours of ecology - based community service projects as part of the course requirement. Magothy Bay NAP is located in Northampton County on the southern tip of Eastern Shore of Virginia.

### Storm Damage at Crow’s Nest Natural Area Preserve – 7/13/12

On July 11<sup>th</sup> and 12<sup>th</sup>, 2012, DCR Natural Heritage staff cleared downed trees from parking area, roads and trails at Crow’s Nest Natural Area Preserve in Stafford County. This damage was associated with the derecho event of June 30, 2012. Several trees fell within the new Brooke Road parking area and about one dozen trees were cleared from the main access road within the preserve. Staff spent approximately six hours surveying and assessing the extent of storm damage plus 64 man hours cutting and clearing downed woody debris. Additional time will be spent in the coming weeks to survey and assess additional storm damage along the smaller side trails.



Parking Lot at Crow’s Nest

#### Chesapeake Bay Karst Groundwater Connection – 7/13/12

The DCR Natural Heritage Karst Program is featured in the July-August 2012 issue of the Chesapeake Bay Journal, in an article discussing the role of karst in supporting the base flow of the Shenandoah River and other Bay headwater streams. The article emphasizes the importance of groundwater protection and technical investigations in protecting the quality and quantity of water flowing to the Chesapeake Bay from headwaters areas underlain by limestone.

#### Invasive Species

##### Phragmites Infestations Information Meeting – 5/22/12

On Tuesday, May 22, DCR-DNH Stewardship Biologist Kevin Heffernan led a day-long meeting of Virginia land managers who are faced with significant Phragmites infestations. The meeting was held on the VIMS campus in Gloucester Point. Participants included staff from DCR State Parks and Natural Heritage divisions, US Fish & Wildlife Service, National Park Service, VIMS, and Chesapeake Bay National Estuarine Research Reserve. Presentations included recent research news, overview of 2011 Phragmites aerial survey on the York River, and Phragmites as addressed by the Tidal Wetlands Act. Roundtable discussion covered 2011 treatment actions, current goals and strategies, and priority research questions to aid management prioritization. The two prominent questions that came forth were; 1) where are the conservation priority wetlands to protect from Phragmites infestation and, 2) does Phragmites have significant shoreline erosion control function? The group agreed to a cooperative effort to answer these questions.

##### Invasive Species Working Group – 8/30/12

This group met on Thursday, August 30, in Richmond. Chaired by Secretary of Natural Resources Doug Domenech, the Working Group includes Secretary of Agriculture Todd Haymore (vice-chair) and department heads or designees from DCR, DGIF, DOF, VMRC, DOH, VDOT, DEQ, VIMS, Virginia Tech, The Nature Conservancy, Dominion Power, and the Virginia Nursery and Landscape Association. DCR Stewardship Biologist Kevin Heffernan presented the revised invasive species management plan. The new plan was approved. The Working Group also heard reports on new noxious weed regulations proposed by VDACS, the latest distribution information on emerald ash borer, nutria and feral swine surveys, and a hydrilla management program at Claytor Lake. The Working Group also approved a request from the Invasive Species Advisory Committee to write a letter to USDA-APHIS in support of listing wavyleaf basketgrass (*Oplismenus hirtellus* spp. *undulatifolius*) as a noxious weed. Members of the public offered comments, including representatives from the Tri-County Lake Administrative Commission, Friends of Quantico Bay, and Virginia Native Plant Society. The next Working Group meeting will be scheduled for the Spring 2013.

#### Information Management

##### Web Atlas of Virginia's Rare Butterflies, Skippers, Moths, Dragonflies, and Damselflies – 5/22/12

A progress report was sent to the Virginia Department of Game and Inland Fisheries detailing the work on the 'Web Atlas of Virginia's rare butterflies, skippers, moths, dragonflies, and damselflies' completed through the spring of 2012. Over 1700 records have been compiled representing 175 of the 193 species targeted in the atlas. Records have come from VDRC-DNH's Biotics database, collections and field work, museum and private collections, literature and web references, and amateur naturalists' observations. Volunteers have written 93 draft fact sheets. Steps have been made to specify details of the future web site regarding hosting, maintenance, and updating in cooperation with VDGIF. The final web site is scheduled to be available May 2013.

## Outreach and Education

### Fort Belvoir's Earth Day Event – 4/20/12

A DCR Natural Heritage staff member participated in Fort Belvoir's Earth Day 2012 on April 20, 2012. Approximately 100 children and adults participated in the event. The DCR Natural Heritage display had information and pictures of rare, threatened and endangered species found in Fort Belvoir and also included a display about invasive species. The children had an opportunity to make their own dragonfly with supplied materials while hearing about the Natural Heritage Program.

### Fort A.P. Hill's Earth Day Event – 4/19/12

The DCR Natural Heritage Locality Liaison participated in Fort A. P. Hill's Earth Day Celebration on April 19, 2012. Approximately 800 school children, teachers and parents from all over Caroline County took part in demonstrations and visited exhibitors. The DCR - Natural Heritage exhibit included pictures of natural heritage resources in Caroline County, and a map showing conservation sites in the county. A live purple pitcher plant was on display and the children made pitcher plants "fly-catchers" from card stock, while hearing about rare, threatened, and endangered species.

### DCR – New Kent County's Envirothon – 4/28/12

The DCR Natural Heritage Project Review Coordinator participated in New Kent County's Envirothon 2012 Earth Day Celebration on April 28, 2012. Approximately 100 children and adults participated in the event. The DCR Natural Heritage display had information and pictures of rare, threatened and endangered species found in New Kent County, invasive species and a diorama of a Bald Cypress-Water Tupelo Swamp. By placing plants and animals in different habitats, the children learned about significant communities types occurring in New Kent County including the Tidal Freshwater Marsh (Wild Rice-Mixed Forbs Type) found on the Cumberland Marsh Natural Area Preserve.



### Chesapeake Bay Region Natural Area Preserve Volunteer and Neighbor Events – 5/25/12

On May 25, 2012, the DCR Chesapeake Bay Region Steward and Eastern Operations Steward hosted a volunteer meeting for the Chesapeake Bay Region’s Northern Neck Volunteer Stewardship Committee. A group of ten volunteers gathered to meet new staff and to discuss NH staffing updates, invasive species control efforts, element occurrence monitoring, visitor use monitoring and summer maintenance plans. On May 31, the Chesapeake Bay Region Steward gave a presentation about the State Natural Area Preserve system to a gathering of residents of York County’s Edgehill neighborhood at York High School. Edgehill is a subdivision that shares a boundary with Grafton Ponds Natural Area Preserve, which is owned by the City of Newport News and managed by the city’s Water Works Division with assistance from DCR. The meeting was organized by the Water Works Division in an effort to educate and interact with Edgehill residents regarding preserve management issues.

### Belmont-Ferry Farm Trail Day – 6/23/12

On June 23, 2012, DCR Natural Heritage staff participated in the Belmont-Ferry Farm Day, an event to celebrate the opening of the Belmont-Ferry Farm Trail in Stafford County. Approximately 100 people participated and walked the recently opened trail. The DCR Natural Heritage display included information on the future plans for the Crow’s Next Natural Area Preserve and the 25<sup>th</sup> Anniversary of the Virginia Natural Heritage Program. Staff also discussed with participants the value of utilizing native plants within landscaping and issues with invasive species in natural area stewardship.



Belmont-Ferry Farm Day in Stafford County, Virginia

### Savage Neck Dunes Natural Area Preserves Workshop – 7/27/12

Nine Teachers from Booker T. Washington Middle School in Newport News visited Savage Neck Dunes NAP as part of a workshop offered by *Chesapeake Experiences*. As part of the workshop, Eastern Shore Region staff provided an in-depth tour of the preserve, with an emphasis on maritime natural communities and migratory songbird habitat. *Chesapeake Experiences* offers Chesapeake Bay based educational workshops for K-12 teachers. Booker T. Washington Middle School is a Marine Science Magnet School. The insights the teachers gained from the visit will be incorporated into future lesson plans. In October, *Chesapeake Experiences* will partner with the UVA Anheuser Busch Coastal Research Center to provide a fall songbird migration workshop for teachers that will include a field trip to Eastern Shore natural area preserves.



Teachers at Savage Neck Dunes

#### LandScope Chesapeake Presentation – 9/28/12

DCR Natural Heritage staff presented LandScope Chesapeake to 30 individuals at the USF&WS National Conservation Training Center. LandScope Chesapeake is a cooperative effort of the Bay Program and the five states in the watershed. The workshop was designed to inform and gain feedback on improvements to the website. LandScope Chesapeake is an extension of LandScope America, and designed to inform and inspire individuals, organizations and local, state and federal agencies on land conservation priorities and methods in the Chesapeake Bay watershed. <http://www.landscape.org/chesapeake>

#### Land Conservation

#### Blackwater Sandhills, Virginia's 61<sup>st</sup> Natural Area Preserve – 8/17/12

On Friday August 17, the Department of Forestry and Department of Conservation and Recreation placed an open space easement on 2,348 acres owned by Isle of Wight County. This easement was purchased from the county with grant funds from the Forest Legacy program and the Virginia Land Conservation Foundation. The county property has more than five miles of frontage on the Blackwater River, a state scenic river. 815 acres of the 2,348 acre easement area has been dedicated as the Blackwater Sandhills Natural Area Preserve. The project protects old growth bottomland hardwoods along the Blackwater, upland sandhill habitat for future longleaf pine restoration, and 1500 acres of managed forestland. The property will provide numerous outdoor recreation opportunities for the public in the future. The Natural Area Preserve System now contains 51394 acres supporting 388 natural heritage resources.



Blackwater Sandhills Natural Area Preserve

South Quay Natural Area Preserve - 8/10/12

The survey, appraisal, appraisal review and all title work have been completed on the 2,855 acre South Quay Natural Area Preserve acquisition in Suffolk. DCR closing with International Paper has been delayed due to the need for a boundary line agreement between IP and the owner of an in-holding. Positive progress on this issue is reported by International Paper and IP has set a meeting with the property owner for the week of August 20. It is anticipated that closing will occur in September.

Chesapeake Bay Watershed Land Conservation Meeting – 8/17/12

DCR Director Johnson and the Natural Heritage Director attended a meeting with federal, state, local and private land conservation representatives from PA, DE, MD, and VA in Shepherdstown, WV to discuss tools and options for advancing large land conservation projects in the bay watershed. DCR presented on VA's method for tracking land conservation data, a model in the watershed. LandScope America, a web tool which VA helped pilot and develop for the nation will serve as the groups internet and communication platform – LandScope Chesapeake. Resource protection will be balanced with the need for public access to lands and waters as the effort advances. Four pilot focus areas were discussed, tidal James, Chickahominy and lower York; tidal Rappahannock and Piankatank: middle Potomac; lower Susquehanna; with mapping and planning efforts to identify additional areas for team land conservation efforts; as well as the need for development of new tools and methods.

Natural Heritage Resource Protection on VOF Easements – 9/7/12

DCR Natural Heritage staff met with the Virginia Outdoors Foundation to discuss steps to improve conservation for natural heritage resources in future VOF easements, and assistance from DCR for future monitoring of natural heritage resources.

Natural Heritage Data Management Totals for FY2011:

Activity 04-01-12 – 09-30-12

New Mapped Locations (EOs) – 22  
Updated Mapped Locations (EOs) - 6  
New Conservation Sites – 17  
Updated Conservation Sites - 230

Mapped Tracts: 110  
Mapped Managed Areas: 110

Total Number in Database 09-30-12:

Animal Mapped Locations (EOs) – 1179  
Plant Mapped Locations (EOs) – 1217  
Community Mapped Locations – 513  
Conservation Sites – 980 (123 of these sites were drawn for the Bald Eagles, as these EOs were previously attached but now are separated from existing sites)

### c) DCR – Division of Planning and Recreation Resources

Staff has been working on the Virginia Outdoors Plan meeting follow-up.

### d) DCR- Division of Chesapeake Bay Local Assistance

#### Summary

The Chesapeake Bay Preservation Act program remains the most significantly under resourced in the program’s history. This has left a total of four liaisons covering all 84 Bay Act localities. This action has significantly affected the liaisons’ ability to provide the technical assistance to localities that is required by the Bay Act. The long-term result of these changes on this enforceable policy of the Coastal Zone Management Program is not yet known.

During the reporting period, April 1, 2012 – September 30, 2012, continued with the second round of evaluations to determine the level of local government compliance with land use and water quality provisions contained in the regulations pertaining to the Chesapeake Bay Preservation Act. The initial round of compliance evaluations was completed in September of 2010. The Bay Act liaisons have continued to make progress on Advisory Reviews of the local codes and ordinances to identify the extent to which these ordinances address the protection of the quality of state waters. They have now completed these Advisory Reviews for 70 of the 84 Bay Act localities. The following is a summary of other activities for this period.

#### Program Description

The Bay Act requirements fall into three implementation phases. Phase I consists of local governments designating and mapping Chesapeake Bay Preservation Areas (CBPAs) and adopting land use and development performance criteria to protect those features. CBPAs include Resource Protections Areas (RPAs) and Resource Management Areas (RMAs). RPAs are made up of tidal wetlands, tidal shores, nontidal wetlands connected and contiguous to tidal wetlands or perennial streams and a 100-foot fully vegetated buffer. RMAs include lands adjacent to RPAs that are made up of land features such as highly erodible soils, steep slopes and floodplains. Roughly half of all the Tidewater localities have identified their entire jurisdiction as an RMA. Phase II consists of the incorporation of water quality protection measures into local comprehensive plans. Phase III involves

#### Elements of Local Chesapeake Bay program

1. Phase I – Map of Chesapeake Bay Preservation Areas and adoption of management program in local ordinances
2. Phase II – Adoption of water quality measures in Comprehensive Plans
3. Phase III – Review and revision of local codes for inclusion of specific standards that implement water quality performance criteria

- #### Comprehensive Plan Elements (partial list)
1. Location of Chesapeake Bay Preservation Areas
  2. Physical constraints to development
  3. Commercial and recreational fisheries and other aquatic resources
  4. Shoreline and stream bank erosion problems
  5. Existing & proposed land uses
  6. Public and private waterfront access
  7. Protection of potable water supply
  8. Local policy on land use issues relative to water quality protection

the review and revision of local land use codes to include specific standards that implement water quality performance criteria.

#### Advisory Code and Ordinance Reviews

As stated in previous reports, Chesapeake Bay Local Assistance staff initiated Phase III of the Bay Act, requiring localities to review and revise their codes and ordinances for the inclusion of specific standards that minimize impervious cover, minimize land disturbance and maintain indigenous vegetation. The advisory review process, which is the first component of Phase III, began in September of 2009 and uses two checklists as screening tools in

the review the local ordinances. A Plan and Plat Consistency Review Checklist helps determine if a locality has addressed the six plan and plat provisions that must be contained in local ordinances, as they are specifically required by the Regulations. The Checklist for Advisory Review of Local Ordinances determines if there are adequate provisions to address the three performance criteria and contains numerous examples of requirements that may be contained within a locality’s land development ordinances. As of September of 2012, 70 advisory

reviews have been completed and an additional 6 are underway. Completion of the remainder will continue through the second quarter of 2013.

#### Current round of Compliance Evaluations

The updated compliance review elements that are being applied to the current round of compliance relate to specific provisions contained in the Chesapeake Bay Preservation Area Designation and Management Regulations and will be the first time all Bay Act localities will undergo a comprehensive review of the provisions of all provisions of the Bay Act Regulations. Updated review elements include soil & water quality conservation assessment for all agricultural land in local Chesapeake Bay Preservation Areas, a determination as to the status of the water quality provisions of the local comprehensive plans, and an evaluation as to how well local governments are ensuring that impervious cover is minimized, indigenous vegetation is maintained and land disturbance is minimized on approved development projects. Progress on this second round of compliance evaluations continues during the reporting period. Reviews have been completed on seventeen local government programs using this more comprehensive assessment and five reviews are underway and will be presented to the Virginia Soil & Water Conservation Board in December of 2012. As of September of 2012, eight local governments are fully compliant with the current compliance evaluation requirements and 9 other localities are addressing conditions for compliance.

## 5) Department of Game and Inland Fisheries (DGIF)

### Recreational Fisheries

#### *1. Stream Monitoring, Adult Anadromous Fishes*

Weekly boat electrofishing for adult anadromous fish was begun in mid-February 2012 and continued through May on the James, Appomattox and Rappahannock rivers in the fall zones and on the tidal Chickahominy and Mattaponi rivers. On the upper tidal James hickory shad, alewife and blueback herring results were typical. American shad were also found in the tidal James near Richmond and up through the fall zone to Boshers Dam when river flows were at least normal. Chickahominy and Mattaponi collections were typical. American shad CPUE was down significantly in 2012 compared to 2011 in the tidal Rappahannock at Fredericksburg. American shad CPUE at sites upstream of Fredericksburg were lower than average. Hickory shad, alewife and blueback herring CPUEs were typical. Lack of rainfall resulted in low river flow in the Rappahannock having an adverse effect on upstream fish migration.

#### *2. Stream Monitoring, Juvenile Anadromous Fishes*

Sampling effort was greatly reduced due to the loss of two technicians. Juvenile alosine sampling using a bow-mounted push net was conducted from June into July of 2012 on the James (Boshers pool) and Rappahannock (tidal) rivers producing typical numbers of American shad juveniles. Boat electrofishing began in July and continued into September also resulting in the collection of target fish from both rivers at typical catch rates. Electrofishing becomes the gear of choice when the fish reach a size large enough to improve their avoidance of the push net. Oxytetracycline treatment of fry in the hatchery results in a visible ring in the otoliths (earbones) under black light. Otoliths will be extracted from the American shad juveniles and examined under a black light microscope to determine origin. Results will be presented in future reports.

#### *3. Boshers Dam Fishway*

In 2010, we moved from reviewing all recorded video to counting fish in the first 15 minutes and expanding by a factor of four. Statistical analysis on this method using known counts compared to simulated estimates showed this to be a valid approach. The estimate for 2011 was 696 and the hourly passage rate of just over one per hour was the highest on record for the fishway's 13-year history. Due to a loss of the two technicians on the Fish Passage Project the 2012 fishway video review has not yet been completed.

#### *4. Fish Passage Projects*

Harvell Dam is the first dam encountered by migratory fish on the Appomattox River. The current owner, previously opposed to removal, has agreed to the removal option. The DGIF has obtained sufficient funding from the USFWS and NOAA for removal. Currently, the final design is being completed and the permitting phase is about to commence. The low flow season of 2013 is the current target date for removal implementation.

The City of Newport News continued the staged process of replacing Walkers Dam on the tidal Chickahominy River (Lanexa). The impoundment is one of Newport News' drinking water reservoirs. During this reporting period the new double Denil fishway was nearly completed. The new boat lock is in the early stages of construction.

The DGIF continued planning for the removal of Monumental Mills Dam on the Hazel River. The project is currently in the permitting phase. A mitigation plan to deal with historic resources is being developed. Adjacent landowner issues will need to be resolved before this project is implemented. The DGIF also conducted an intensive pre-removal fisheries survey of the Hazel River upstream and downstream of the dam and of the Thornton River that confluences with the Hazel a short distance below the dam.

Nature-like fishway plans for a raised culvert on Claiborne Run (tributary to the tidal Rappahannock at Fredericksburg) were reviewed by DGIF for diadromous fish passage criteria. The fish passage facility will be part of Stafford County's mitigation plan for the construction of Rocky Pen Run Reservoir.

#### **Instream Flow Incremental Methodology (IFIM) Study**

The Department continued working with the Dept. of Environmental Quality and the Appomattox River Water Authority on modifications to the Brasfield Dam (Lake Chesdin) release permit. During this time period, we coordinated with the various entities involved in the project, and reviewed preliminary results from the IFIM study. This work continues.

#### **Wetlands**

##### *1. Mitigation Banking*

VDGIF continues to participate on the Inter-Agency Review Team that oversees stream and wetland mitigation banking and provide input on new banks all over Virginia, including the coastal zone. Numerous proposals have been made for new banks and/or additions to existing banks within the coastal region of Virginia during this reporting cycle. DGIF is also now part of the IRT overseeing the Virginia Aquatic Resources Trust Fund projects.

##### *2. Wetland Restoration*

VDGIF continues to have an active voluntary wetland restoration program. The program assists private, state, local, and federal government landowners to restore wetlands on their property. Landowners receive assistance with site selection, cost-share programs, restoration design, and permit issues. The Virginia Department of Game and Inland Fisheries is actively restoring wetland habitats in Virginia. Partnerships with organizations such as The U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program, The U.S. Department of Agriculture's farm bill programs, Ducks Unlimited, The Chesapeake Bay Foundation, and many others have resulted in additional wetland acres restored. DGIF has implemented the Virginia Migratory Waterfowl Stamp Grant program designed to give grants to non-profit organizations for wetland restoration, enhancement or creation. Grants have been awarded to Ducks Unlimited, The Elizabeth River Project, The Nature Conservancy and many other to restore wetlands in Virginia.

During this reporting period, projects have been completed by The FishAmerica Foundation (Accomack County) and the Nature Conservancy (Isle of Wight County). The Department has been actively working to maintain and enhance habitats on agency owned properties. During this reporting period we have controlled over 500 acres of *Phragmites* on our Princess Anne WMA and our Hog Island WMA. The agency also invested in the long-term management of these properties by upgrading the water control structures at Hog Island, enhancing management capabilities to over 300 acres of impoundment habitat, and restoring berms at Princess Anne WMA enhancing management of over 50 acres of impoundment habitat.

## **Land Acquisition**

VDGIF partnered with the City of Virginia Beach, The USFWS, and others to purchase ~110 acres of wetlands and coastal maritime forest habitat. This property, known as Pleasure House Point, will be owned and operated as a Natural Area by the City of Virginia Beach. The Virginia Department of Game and Inland Fisheries holds a conservation easement on the parcel.

## **Geographic Information Systems/Data Management**

VDGIF continued to maintain spatial datasets of wildlife locations and resources in the coastal zone. VDGIF continues to focus on improving the both the range and quality of our species occurrence data as well as information on VDGIF properties. Staff completed several structural improvements to our observation database from which internal and external users will benefit. Over 1000 new observations for species in the Coastal Zone were added, including some for threatened and endangered species. Several new subscribers were added to the Wildlife Environmental Review Mapping System (WERMS), and two quarterly updates were performed and notifications sent to users. Staff continued work on improving our Bald Eagle Concentration Areas and Roosts dataset (BECAR) in the Coastal Zone, and these efforts will continue. Similarly, the Anadromous Fish Use Areas layer was updated to add expanded streams.

VDGIF worked with partners to implement the Coastal Virginia Ecological Value assessment dataset for conservation planning. The effort to create this dataset was supported through a Coastal Zone grant.

VDGIF completed its regular update to Find Game, which provides maps and information about public hunting opportunities.

## **Sustainable Ecotourism**

### *20<sup>th</sup> Annual Eastern Shore Birding and Wildlife Festival*

The Department of Game and Inland Fisheries continues to be a primary sponsor of this long-standing effort to help local communities on Virginia's Eastern Shore recognize the benefit of ecotourism. DGIF staff serves on the planning committee and organizes all trip, tours and volunteer guides. In addition to ongoing financial support, DGIF increased its contribution to the festival to help secure David Allen Sibley as a keynote speaker. Securing an internationally acclaimed author and illustrator will help to ensure the ongoing success of this effort by raising the profile of the event. This appears to be realized with paid registrations tracking approximately 30% higher than the previous year.

## **Migratory Game Birds**

### *1. Breeding Waterfowl Survey*

Virginia participates in an Atlantic Flyway breeding waterfowl survey in the spring of each year. Breeding data collected in Virginia is combined with traditional breeding survey data from the northern breeding regions to allow the Atlantic Flyway to more effectively manage its waterfowl populations. The survey results are being used to develop Adaptive Harvest Management models specific to the Atlantic flyway.

In Virginia, 165 plots (each 1km x 1km) were surveyed in April/May 2012 to assess the numbers of local-breeding waterfowl. The number of mallard pairs (29,592) increased 65% from last year (10,435). Black duck pairs (234) increased 16% from last year (197). The number of Wood duck pairs (12,575) increased 14% from last year (10,822). The breeding pair estimate for Canada geese (42,211) was very similar to last year (42,901), however the total Canada goose population estimate (109,853) decreased 45% from last year (199,674).

## *2. American Black Duck Nesting and Productivity Surveys*

The evaluation of American black duck nesting ecology continued on several barrier islands on the Eastern shore of Virginia including Lower Bernard Island, Channel Island, Mockhorn Island and Wreck Island. Nest searches were conducted on foot at 2-week intervals during the nesting season. At each nest location, vegetative species, and percent cover was recorded. Clutch size was recorded and incubation stage was determined by candling. Once a nest was located it was revisited at 2-3 week intervals to evaluate hatching success. A nest was considered successful if at least one egg hatched. In 2012, 22 American black duck nests were located and monitored. All nests were found on Lower Bernard Island and had a 50% hatching success rate. Black ducks that initiated nests earlier on the island were much more successful than late initiators due to high spring tides, which flooded nests.

## *3. Resident Canada Goose Banding*

In June of 2012, 812 resident Canada geese were banded in Virginia's Coastal Zone as part of an Atlantic Flyway resident Canada goose monitoring project. Band recovery information is used to evaluate survival, movements, population estimation, migration corridors and for discerning breeding and wintering affiliations. Information from banding studies has helped develop specific management strategies including special hunting seasons, such as those for resident Canada geese. Data collected on resident geese in Virginia during the past 10 years has been used to delineate local goose distribution and density within the state. This information was used to support the September resident Canada goose season that has been conducted in Virginia since 1993. In addition, a special late Canada goose hunting season was initiated in 1997. The objectives of these seasons are twofold: to reduce the number of human goose conflicts, and to provide recreational opportunities for Virginia sportsmen. Band recoveries during these seasons are monitored to evaluate the number of migrant Canada geese harvested.

## *4. Pre-Season Waterfowl Banding*

VDGIF conducted waterfowl banding efforts during August and September of 2012, prior to the fall and winter waterfowl hunting seasons. Birds were captured by "night-lighting" from an airboat in four locations in the Virginia's Coastal Zone. In 2012, there were a total of 259 ducks banded, including 210 wood ducks, 27 mallards, 15 blue-winged teal, 4 green-winged teal, 2 American black ducks and one American black duck x Mallard hybrid. This data provides important information used to manage populations, establish hunting seasons and evaluate other management programs. Specific objectives of pre-season waterfowl banding is to determine: 1) distribution of harvest from breeding and wintering areas, 2) changes in harvest pressure as measured by recovery and harvest rates, 3) annual and long-term survival rates of specific populations. The focal species in Virginia pre-season banding efforts are wood ducks, which breed locally throughout the states.

## *5. Submerged Aquatic Vegetation Survey on Back Bay, Virginia.*

A survey of Submerged Aquatic Vegetation (SAV) was conducted in June 2012 as part of a continuing effort to monitor the density and composition of SAV in Back Bay. The survey is generally conducted in the fall of each year but also occasionally during the summer growing season. The survey consisted of examining bottom samples collected on 6 different transects spaced out across the Virginia portion of Back Bay. Sampling sites were located at 500 meter intervals along transects lines, and three (2 square foot) bottom samples were taken at each sampling site. Plant species were identified and a visual estimate of percent cover was recorded for each species present. SAV was present in 109 (39%) of the 279 samples. The SAV species found (and percent occurrence) included Eurasian milfoil (25%), naiad (21%), wild celery (20%), sago pondweed (7%), chara

(6%), redhead grass (5%), and other (coontail and nitella spp. 1%). SAV abundance in 2011 was below that found in 2009 (60%) but similar to that found in 2010 (37%). The species of SAV found were similar to those reported for 2009 and 2010, but were present in slightly different percentages.

#### 6. *Mourning Dove Call Count Survey*

Each year the Virginia Department of Game and Inland Fisheries cooperates in a multistate project to monitor and evaluate the status of mourning dove populations. In the spring of 2012, thirty-three dove call count routes were conducted along permanent, randomly selected, 20-mile transects in Virginia. All doves seen and heard were recorded. The data was sent to the U.S. Fish and Wildlife Service for analyses. The breeding population index based on doves heard on routes in Virginia was 14.6 in 2012, which is slightly higher than last year (13.7). The number of doves heard on the survey in Virginia has been relatively stable over the past 10-year period, however, a slight declining trend is evident over the 45-year history of the survey. In the Eastern Dove Management Unit (EMU) of the United States (includes most states east of Mississippi River), there was little change in the number of doves heard in 2012 (19.9) as compared to last year (19.6) or in the past 10 year period. However, there was a slight decline in the number of doves heard over the long-term (47 years, 1966–2012). In the Western Management Unit and the Central Management Unit, there has been a decline in both the past 10-year period, and over the long-term (47 years).

#### 7. *Mourning Dove Banding*

As part of the effort to monitor mourning dove populations, The Virginia Department of Game and Inland Fisheries cooperates with 28 states throughout the country to leg-band mourning doves each summer. The project is organized through the various Dove Managements Units and coordinated by the U.S. Fish and Wildlife Service. Banding quotas were established for each sub-regions (groups of states) based on dove distribution and harvest. Virginia is included in the South Atlantic sub-region along with North and South Carolina. The banding quota for Virginia in 2012 was 500 doves and the quota for the sub-region was 2,700 doves. In 2012, a total of 533 doves were banded at 26 different sites across Virginia during the pre-hunting season period from July through August 2012. Doves were banded only with standard USFWS bands. Of the doves banded, 247 (46%) were identified as juveniles (hatch year or HY) and 283 (53%) were identified as adults (AHY or after hatch year). Banding quotas were achieved in Virginia, the South Atlantic Region and the EMU. Data were compiled and sent to the USGS Bird Banding Lab for entry into the national bird banding database.

#### 8. *Woodcock Call Count Survey*

Each spring, The Virginia Department of Game and Inland Fisheries cooperates with other states in the Eastern U.S. in conducting a call count survey to monitor woodcock populations. In the spring of 2012, twelve woodcock routes were conducted along permanent, randomly selected transects in Virginia as part of this annual survey. Each route is 3.6 miles (5.4 km) long and consists of 10 listening points. The routes were surveyed shortly after sunset by observers who drove to each of the 10 stops and recorded the number of woodcock heard peenting (the vocalization by displaying male woodcock on the ground). The numbers of displaying woodcock in 2012 was similar to that from 2011 in the Eastern Management Unit (EMU). In addition, the ten-year trend (2003-2012) shows no significant change in the numbers of woodcock heard on the singing grounds survey in the Eastern Region. This is the ninth consecutive year that the 10-year trend estimate for the Eastern Region was not a significant decline. The long-term trend (1968-2012), however, still indicates a 0.8% decline per year in the Eastern Region and a 1.1% decline in the Central Region. The 2011 recruitment index for the U.S. portion of the Eastern Region (1.68 juveniles per adult female) was 13% greater than the 2010 index and 2% above the long-term regional average. In Virginia, estimates of breeding woodcock have declined 5% over the past 10-year period, and 5.3% over the long term.

## **Invasive Species Monitoring and Management**

### *Nutria Monitoring and Eradication Planning*

A project titled “Support for a Nutria Eradication Program in Virginia” was completed in June 2012. This project was funded through a grant received by the Mid-Atlantic Panel on Aquatic Invasive Species (MAPAIS) and contracted through the Conservation Management Institute (CMI) at Virginia Tech. Cooperating agencies included VDGIF, USDA Wildlife Services, and the US Fish & Wildlife Service. Accomplishments of this project include the following:

- development of a standard online reporting process and corresponding database for nutria observations in Virginia
- creation of a contemporary distribution map for nutria in Virginia based on historic records, reported sightings, and professional opinion
- identification of nutria management zones to guide immediate activities related to control and early detection
- establishment of a multi-agency steering committee comprised of representatives of federal and state agencies from Virginia and North Carolina to guide and coordinate future nutria eradication efforts

Additional efforts are underway to survey for nutria presence in targeted areas and nutria reports continue to be investigated in certain management zones.

## **VDGIF Facilities**

### *1. Boat Landings*

Region 1 Lands and Facilities Staff inspected and maintained 67 boat landings on the Eastern Shore and coastal plain of Virginia. In addition to routine maintenance, staff completely rebuilt the General Vaughn’s Bridge boat landing courtesy pier. The work involved demolishing the existing pier except for the pilings and reconstructing a new pier. The new pier is expected to serve boaters for decades.

### *2. Wildlife Management Areas*

Region 1 Lands and Facilities Staff replaced eight tide gates that control water levels for over 600 acres of managed impoundments at Hog Island Wildlife Management Area in Surry County. The gates are components of Rice Trunk water control structures. These wooden structures had outlived their service lives, which led to a degraded ability to manage the wetland impoundments for wintering and migrating waterfowl and wading birds. The structures were successfully repaired and management was restored.

Region 1 Lands and Facilities staff constructed two new dikes in an existing managed wetland impoundment at Princess Anne WMA in Virginia Beach. The dikes were built under the supervision of bureau staff using contracted earth moving equipment. The new dikes offer increased management potential for wintering and migrating waterfowl and wading birds.

Over 700 acres of pines were harvested at Big Woods Wildlife Management Area in Sussex County. The harvests were thinning operations. The objective of the harvests was to develop pine savannah habitat for red-cockaded woodpeckers and bob white quail. The understory of the thinned areas will be periodically burned to promote herbaceous vegetation.

### *3. Hatcheries*

The King and Queen Fish Cultural Station produced approximately 187,800 walleye fry. The station also produced striped bass and black bass. Striped bass production included both marine striped bass and freshwater striped bass. All fry produced were spawned from brood fish at the station. Approximately 1,725,000 marine striped bass fry were stocked into production ponds on the area. These fry resulted in 888,275 marine striped

bass fingerlings for stocking. Approximately 2.6 million freshwater striped bass fry were shipped from the facility for stocking other state and federal hatcheries for fingerling production.

The hatchery also raised 192,899 Walleye fingerlings, 34,609 Bluegill fingerlings, 36,014 Redear fingerlings, and 793 lbs. of forage minnows.

## **Nongame Species Monitoring and Research**

### *1. Delmarva Fox Squirrels (ongoing research, continued from previous reports)*

Chincoteague National Wildlife Refuge harbors the only known self-sustaining population of federally endangered Delmarva fox squirrels (*Sciurus niger cineris*) in the state of Virginia. Based on a mark-recapture study conducted in the fall of 2000 and in the spring of 2001, the Refuge's current Delmarva fox squirrels (DFS) population is estimated to be between 166 and 209 animals (Pednault-Willet 2002). An attempt to establish a second population was made in 1982 and 1983 through the relocation of 24 squirrels to the Brownsville Farm owned by The Nature Conservancy's Virginia Coast Reserve (VCR). It is believed that this population no longer exists. No other populations have been translocated to the Commonwealth.

One of the recovery objectives for the DFS is to restore populations throughout its historic range, which includes Virginia's Eastern Shore. However, many of the forests that may serve as suitable translocation sites on the lower portion of the Delmarva Peninsula are privately owned. DGIF was awarded LIP funding to develop and implement a Safe Harbor Program that would provide private landowners with legal assurances that they will not be held accountable if translocation efforts fail and funding to conduct habitat management activities on their lands that would benefit future introductions of DFS. In June 2007, DGIF entered into a contractual agreement with a locally owned firm (hereafter referred to as contractor) to fulfill the project objectives.

During this reporting period, the contractor transformed the existing DFS Safe Harbor Landowner Forest Management Plan into a DFS Forestry Stewardship Plan (Plan) designed to serve as a template for Virginia landowners willing to have DFS introduced on to their property once the species becomes federally delisted as recommended in most recent DFS Five-Year Status Review. In addition to outlining general forest management actions that will benefit DFS and other wildlife, the Plan conforms to the land conservation and management requirements of the VA Eastern Shore Land Trust, which will enable private individuals who own suitable DFS habitat and wish to place a conservation easement on their property gain additional conservation credits by having DFS released on their land. The Plan requires additional parameters to be assessed, such as forest health (e.g., susceptibility to fire, insect infestation and disease), and statements of action of how each would be addressed. The Plan also prompts for landowner educational and recreational objectives and contains easement language with specific references to relevant regulatory codes.

Because of the significant delays experienced in securing commitments from landowners with suitable DFS habitat resulting from concerns about possible federal ESA restrictions, VDGIF requested a second no-cost project extension which was denied because USFWS is no longer in a position to provide administrative support to on-going LIP-funded projects. Thus, the current DFS LIP project must be closed out by December 31, 2012. VDGIF hopes to redirect the remaining funds towards the purchase of a potential translocation site that was qualitatively evaluated several years ago for its suitability to support DFS. It is located in Northampton County, approximately 25 miles south of the nearest viable DFS populations in Worcester County, Maryland. The Level Ponds tract, encompassing approximately 480 acres, contains a mix of uplands, and estuarine and palustrine forested habitats. The preliminary suitability assessment revealed that this property and adjacent privately owned properties, including those owned by the Conservation Fund, may collectively serve as a suitable translocation site if appropriate forestry restoration and management actions are employed.

Fortunately, the eventual delisting of DFS eliminates the need for a federal safe harbor program to conduct DFS translocations on private lands in Virginia. Moreover, a new statute adopted by the Virginia General Assembly in 2011 amends the state's Endangered Species Act by enabling VDGIF to designate a population of a state listed species (species that are also federally listed are excluded from this provision) as "experimental", through appropriate regulatory channels. This will allow for the deliberate introduction of the species into currently unoccupied areas for the purpose of enhancing the long-term survival of the species or population. Any regulation designating an experimental population shall require a conservation plan specific to the species under consideration, specify the circumstances under which taking of an individual member of an experimental population will be exempt from the prohibitions and penalties authorized under the State Endangered Species Act, and describe the geographic extent of the experimental population. This statute will offer Virginia the necessary latitude to conduct DFS reintroductions once federal delisting occurs.

During this reporting period, VDGIF staff developed several proposed conservation and management actions that may be undertaken by the Commonwealth following the delisting of the species. These will be submitted to the USFWS for inclusion in the final delisting package and consist of the following elements:

1. Prepare a DFS conservation plan as required by Virginia's "Experimental Population" statute.
2. Identify and engage key stakeholders (i.e., VA Dept. of Forestry, VESLT, Eastern Shore Soil and Water District, VA Dept. of Conservation and Recreation and owners of private lands with suitable DFS habitat by holding 3-5 stakeholder meetings to garner support for and encourage DFS translocations on private lands once the species becomes federally delisted.
3. Work with committed stakeholders to develop a sound approach for future DFS translocations on private lands. This effort will focus on gaining participation from landowners with suitable DFS habitat who already have or wish to place a conservation easement on their land.
4. Secure written commitments from at least two private landowners stating their willingness to allow DFS to be translocated on their land and to follow management recommendations outlined in the forestry stewardship plans that meet the needs of landowners while maintaining suitable DFS habitat in the long term.

If successful, this shift in the project's direction will fulfill VDGIF's commitment to enhancing DFS populations on the lower Delmarva Peninsula and ensure that adequate conservation measures are in place to support these populations in the long term. Moreover, allowing the project to continue through post de-listing will reflect Virginia's proactive commitment to manage and conserve DFS in the Commonwealth.

## Literature Cited

Pednault-Willet, K.D. 2002. Population size and habitat use of the Delmarva fox squirrel following infestation of the southern pine beetle at Chincoteague National Wildlife Refuge. Master's thesis. University of Maryland Eastern Shore, Princess Anne, MD. 160 pp.

### 2. *American Oystercatcher*

The American Oystercatcher (*Haematopus palliatus palliatus*) is ranked nationally as a species of high conservation concern (Brown *et al.* 2008) and in Virginia it is considered a species with a high conservation need (VDGIF 2005). In addition, oystercatchers are considered an important indicator species for barrier island/salt marsh communities. Given the large ecological overlap with other species in these habitats, including Piping Plovers (*Charadrius melodus*), Wilson's Plovers (*Charadrius wilsonia*), and many colonial nesting seabirds, the implementation of science-based conservation measures for American Oystercatchers at key wintering, migration, and breeding sites will also provide benefits for a number of other coastal species (Schulte *et al.* 2007).

In 2012, VDGIF staff involvement with oystercatcher monitoring efforts was limited to assisting with the annual breeding survey because of a major shift in focus to long-legged wading birds.

Oystercatcher surveys have been ongoing for 12 years. The first survey was conducted by a private VDGIF contractor in 2000 and focused specifically on oystercatchers; all subsequent surveys have been carried out in conjunction with the annual Piping Plover/Wilson's Plover surveys. Sites covered have consistently included the barrier islands located along

the seaward margin of Virginia's Eastern Shore, the southern tip of the Delmarva Peninsula (i.e., Wise Point), three inland sites on the western shore of the Chesapeake Bay (i.e., Craney Island, Grandview Beach and Plum Tree Island National Wildlife Refuge), and the Atlantic facing beaches south of Virginia Beach (i.e., False Cape State Park and Back Bay National Wildlife Refuge). It should be noted the annual surveys only encompass a portion of oystercatcher breeding habitat in Virginia and therefore do not reflect statewide totals.

A preliminary total of 444 American Oystercatcher breeding pairs were recorded along the barrier island chain during the 2012 survey. Survey results from the western shore are still pending. The number of barrier island pairs increased by 20% compared to 2011 results and represents the highest island total documented since 2000.

The 2012 end-of-season total, which includes additional pairs discovered during productivity studies on the barrier islands is still pending.

### Literature Cited

Brown, S., T. Simons, S. Schulte, F. Sanders, B. Winn, B. Truitt, A. Wilke, S. Johnston, S. Melvin, and the American Oystercatcher Working Group. 2008. A business plan for the conservation of the American Oystercatcher: A Ten Year Plan to Secure a Keystone Coastal Species. Submitted to the National Fish and Wildlife Foundation, Manomet MA, 02345.

Schulte, S., S. Brown, D. Reynolds, and the American Oystercatcher Working Group. 2007. Version 2.0. American Oystercatcher Conservation Action Plan for the United States Atlantic and Gulf Coasts. 41 pp.

### 3. Seabirds

In 2012, VDGIF staff assisted with several seabird counts on the barrier islands and seaside marshes and results from these efforts are still pending. We also coordinated this year's Atlantic coast Least Tern (*Sterna antillarum*) breeding survey in Virginia, an effort that began in 2006. The annual survey window for the southern mid-Atlantic states (MD – NC) was changed to June 1 – 15 to better capture peak incubation periods. Least Terns are one of the more difficult seabird species for which to obtain accurate breeding population estimates. They are highly ephemeral (abandon one site in favor of another in rapid succession and often several times during a single breeding season), patchy in distribution within colonies, and eggs are small and well-camouflaged making them difficult to see. Thus, the information gathered by participating Atlantic coast states are viewed as trend data rather than actual population estimates and efforts are made by the states to maintain a similar level of effort from year to year within in the survey window. Several methods have been used to survey Least Terns and they include walk-through nest counts, perimeter incubating pair counts and perimeter adult counts within 250 m of the colony. Preliminary results from a study examining the accuracy and precision of each of these techniques suggest that incubating adults yield the most accurate counts with the least amount of disturbance to the birds (Matthew D. Hillman, pers. comm.) As such, 2012 survey participants were encouraged to use this method in colonies where it was most feasible.

In 2012, Virginia's Least Tern breeding population increased an estimated 48% over last year's total and represents the second highest total during this seven-year period. This increase was reported despite the fact that two western shore colony sites experienced tidal inundation in early June and largely failed. In addition, peak incubation period for many of the colonies occurred early this year (i.e., during the first week in June or before), which resulted in an underestimate of pairs for several sites where adults were scattered tending mobile chicks at the time of the survey. The 2006 – 2012 estimates continue to exhibit a slightly increasing statewide trend in the number of breeding pairs.

In all years, over 50% of the breeding pairs occurred on the barrier islands and. The barrier island chain is the most pristine and undisturbed habitat utilized by Least Terns in the Commonwealth. Inshore beaches located along the western shore of the Chesapeake Bay (i.e., Sandy Point, Rigby Island, Bethal Beach, New Point Comfort and Grandview Beach) have supported between 10% - 30% of the statewide breeding population. In 2012, the percentage dropped substantially. Only one colony at Bethal Beach and two at Grandview were active at the time of the survey and fewer than 30 pairs were observed breeding at each site. The remaining sites were either flooded or showed signs of recent overwash and were devoid of Least Terns on the day of the survey.

Between 2006 and 2011, Craney Island Dredge Material Disposal Site in Portsmouth, VA, which is owned and managed by the US Army Corps of Engineers (USACOE), supported between 1% and 12% of the statewide Least Tern breeding population (Table 1). In 2012, the percentage nearly doubled and the two colonies combined accounted for large percentage of the increase in the statewide population. The increase is likely a reflection in increased protection and predator management efforts by the USACOE.

Least Terns were first discovered nesting on rooftops in coastal Virginia in 2007. Roof top colonies have been reported throughout the southeast for several decades and have been anticipated for many years in the Commonwealth. In 2012, 13% of the statewide population occurred on two rooftops. Past efforts to determine fledge success have shown low success in most years relative to other sites. This year's attempt to measure fledge success at the Patrick Henry Mall in Newport News in late June revealed that the entire colony had abandoned the site and thus we were unable to access breeding productivity. According to mall personnel, the colony at Lynhaven Mall abandoned the site shortly after the survey and following several consecutive heavy rain events. Poor fledge success on rooftops is common because the birds are subject to avian predation, primarily by raptors, severe heat stress and rapid flooding events following heavy downpours.

#### *4. Long-legged Wading Birds*

This year, VDGIF staff initiated a three-year study to measure the reproductive success of wading birds (herons, egrets and ibises) in several different habitat types (i.e., barrier islands, seaside saltmarshes, and Chesapeake Bay marsh islands) and develop methods for obtaining more accurate breeding population estimates for long-legged waders. To date, this suite of species has not been monitored effectively or with the intensity necessary to accurately assess their breeding status in coastal Virginia. What little is currently known about the breeding status of wading birds is largely based on three data points derived from the 1993, 2003 and 2008 coast-wide colonial waterbird surveys. The intent of this study is to intensify focus on this suite of species to establish a baseline for measuring future changes in colony size, species configuration, location and reproductive rates in habitats threatened by sea level rise.

In 2012, we studied six species of wading birds in eight mixed-species colonies on Virginia's coastal fringe. We began visiting colonies in early April and found some already had birds on eggs. Because of the early start to the breeding season, we did not have an opportunity to properly develop methods beforehand. Thus we decided to treat this season as a trial run and considered the establishment of methods that accurately measure reproductive success as our primary objective. We were unable to monitor three of the eight sites entirely because they encompassed sections of very dense vegetation, which made it impossible to access and mark nests in those areas. As soon as we became aware of this limitation, we immediately began to search for a commercially-made portable elevated blind that offered enough vantage to view nests from afar and performed well in a salt marsh environment. We quickly learned that such a blind did not exist. We made arrangements to have a 15 ft. tall aluminum blind custom made locally; one that could be disassembled in small enough sections to transport in a boat and be hand-carried to and from colonies over uneven marsh terrain. Unfortunately, by the time the blind was constructed and ready for use, close to a third of the breeding season was over and we did not have opportunity to put it to full use.

In 2012, we physically marked nests with 4-6cm dia. x 1cm thick wooden discs cut from fallen tree limbs. The first several hundred markers placed on nests were left unpainted to minimize the potential for drawing in predators. We soon discovered they were difficult to find as shrubs began to leaf out and birds defecated on the markers. A decision was made to spray discs with florescent orange paint; this greatly improved our ability to find new nests and did not appear to influence wading bird nesting behavior or attract predators. We also replaced many of the unpainted discs marking still-active nests with painted markers.

The metric used to estimate the reproductive success of long-legged wading birds is the number of nestlings surviving to 15 days post-hatch per monitored pair (after 15 days of age, most nestlings are large, very mobile and begin to wander great distances from the nest sites, making it increasingly difficult locate them). Fast growing nestlings can become mobile within the first week post-hatch and will temporarily leave the nest structure when threatened. To ensure we assigned nestlings to the correct nest, we tested two marking media. We applied non-toxic food coloring dye on the dorsal plumage of 6 nestlings  $\leq$  7 days post-hatch and sprayed a small patch of non-toxic paint on the dorsal plumage of 17 nestlings  $\leq$  7 days post-hatch. Neither coloring technique proved effective because the marks quickly wore off as the nestlings grew. This outcome greatly decreased our ability to assign nestlings to the correct nest and greatly reduced our confidence in this year's productivity estimates. Next year we plan to band nestlings.

### *2012 Methods and Preliminary Results*

We conducted searches for nests containing at least one egg and recorded nest contents in new and previously found nests every 5 - 14 days during laying, incubation, hatching, and nestling periods. Upon the first visit to a new nest, we placed a marker labeled with the nest ID  $\leq 1.0$  m above the nest structure and recorded species, ID code, substrate, height and location within the colony. We continue to monitor nests until the estimated age of nestlings reached  $\geq 15$  days post-hatch or were abandoned by the adults. We calculated hatch success only among those nests for which the number eggs hatched was known. Results from productivity analyses are pending and will not be included in this report.

We monitored 575 breeding pairs from April 19 – August 22, 2012 and marked a total of 602 nests (including 24 second nesting attempts) from April 19 – July 25, 2012. Table 2 presents the number of pairs and nesting attempts monitored by site and species this year.

We determined hatch success for 86% (n = 520 pairs) of all nests monitored, including re-nesting attempts. We calculated hatch success by dividing the number of nests that successfully hatched at least one egg by the number of nests with known hatch success (i.e., those nests for which we were 100% certain either hatched or did not hatch at least one egg). Hatch success among all colonies ranged from 60% – 97% of the nests hatching at least one egg. Tables 3 – 10 present hatch rates for each the colonies, by species. Great egrets and snowy egrets exhibited the highest hatch success of all the monitored species while glossy ibis experienced the lowest (Table 11). Although further analyses on hatch success are still pending, we speculate that great and snowy egrets fared well because they nested higher in the vegetative substrate whereas glossy ibis tended to nest on the ground, making them more susceptible to tidal inundation.

### *5. Sea Turtles and Marine Mammals*

During this reporting period, minimal resources were devoted to marine mammals, with the Department's primary role being to assist the Virginia Marine Mammal Stranding Network, which is administered by the Virginia Aquarium & Marine Science Center's Stranding Program (VAQS). During this project year, VDGIF involvement was restricted to reporting all marine mammal strandings encountered on the barrier islands to VAQS who, in turn, deployed their staff to work up the animals as required by their funding sources.

VDGIF continued to maintain the state's sea turtle nesting database. From 1970 – 2012, a total of 151 Loggerhead (*Caretta caretta*) nests, one Green Sea Turtle (*Chelonia mydas*) nest and one Kemp's ridley (*Lepidochelys kempii*) nest have been documented in Virginia, the majority of which have occurred on the southern mainland beaches near the NC/VA border. A record number of sea turtle nests were reported in Virginia in 2012. Ten loggerhead nests were deposited at False Cape State Park and Back Bay NWR (southern mainland beaches); four on Assateague Island, two on Wallops Island. In addition, the state's first Kemp's ridley nest was laid at Dam Neck Naval Base this year. Thus far, eight of the 10 loggerheads on the southern mainland beaches hatched successfully, as did the Kemp's ridley nest. Results for the two remaining loggerhead nests are still pending. Three of the four nests on Assateague Island hatched with varying degrees of success; the fourth nest failed to produce any hatchlings. One of the two nests on Wallops Island was predated by a fox and results for the second nest are still pending.

VDGIF staff continued to respond to sea turtle strandings on the remote barrier and bay islands and conducted necropsies on fresh to moderately decomposed carcasses. During this reporting period, the Department documented six Loggerhead strandings and one Kemp's ridley stranding; all were recovered from the barrier island/seaside lagoon system. The 2012 statewide stranding total thus far is 173: 142 loggerheads; 27 Kemp's ridleys; three green turtles; and one leatherback.

VDGIF continues to administer and manage the large multi-state NMFS Section 6 funded sea turtle project entitled the *Virginia/Maryland Sea Turtle Conservation Initiative*. The three-year project seeks to collect a comprehensive set of data on the life history, abundance and distribution sea turtles in the Chesapeake Bay and Virginia's ocean waters. In March of 2011 VDGIF contracted with the Virginia Aquarium and Marine Science Center to complete most of the work. During this reporting period, many components of this multi-faceted project were initiated and results from these efforts are summarized in the attached report entitled *2012 Jan-Jun NMFS Progress report.pdf*.

## 6. Endangered and Threatened Birds

### A. Piping Plover and Wilson's Plover Population Estimates and Distribution

The 27<sup>th</sup> Annual Virginia Plover Survey (VPS) was conducted from June 1 - June 9, 2012 to obtain statewide breeding population estimates for the federally threatened Piping Plover (*Charadrius melodus*) and the state endangered Wilson's Plover (*Charadrius wilsonia*). Results from the VPS are used to determine the size and distribution of the Piping Plover and Wilson's Plover breeding populations in the state and, together with other state and provincial survey data, are used to develop a range-wide annual population estimate for Atlantic coast Piping Plovers. In Virginia, both species of plovers share similar nesting habitats, which include ocean-facing beaches, dunes, and over-washed sand flats, as well as several inland sites along the shores of the Chesapeake Bay and associated river systems. The Commonwealth is part of the Atlantic coast Piping Plover southern recovery unit and represents the northern limit of the Wilson's Plover breeding range.

VPS participants examined all suitable nesting habitats in coastal Virginia to locate breeding pairs of Piping Plovers and Wilson's Plovers. Seventeen ocean-facing sites were included in the survey covering an estimated 194 km of Virginia ocean-facing coastline along with two inshore sites on the western shore of the Chesapeake Bay (Grandview Beach and Plum Tree Island National Wildlife Refuge) and a dredge material disposable site on the James River (Craney Island).

During the 2012 survey a total of 207 Piping Plover breeding pairs and 19 unpaired single adults (lone adults that did not appear to be defending a territory, mate, nest or brood) were observed along Virginia's barrier island chain (Table 1). This year's survey pair total is Virginia's highest since the species' listing in 1986 and represents a 16% increase from the number of pairs documented during the 2011 VPS (n = 179). This year's Piping Plover distribution was confined to the barrier islands (Assateague Island to Fisherman Island) with the majority of birds occurring on the northern barrier islands (Assateague Island to Cedar Island; Table 1). No Piping Plovers were documented at ocean-facing sites south of the Chesapeake Bay (i.e., Back Bay NWR and False Cape State Park) or on the western Shore of the Bay and the James River; a trend that has been ongoing since 1997. The 2012 end-of-season breeding pair total, which includes additional pairs discovered during productivity monitoring efforts following the breeding survey, was 244 pairs (Table 1). This reflects a 30% increase from last year's end-of-season pair total of 188 pairs and represents the highest breeding pair total documented in Virginia since annual surveys began in 1986 (Figure 1).

There were 30 Wilson's Plover breeding pairs and two single adults recorded during the 2012 VPS (Table 1). This year's pair total reflects a 36% increase over last year's total of 22 pairs, which was the lowest number recorded since formal surveys began in 1988 (Figure 2). Wilson's Plover breeding activity was confined to the northern barrier islands (Assateague Island – Cedar Island); a trend that has been ongoing since 2006. In prior years, one or two pairs were observed intermittently on the southern islands (Parramore Island to Fisherman Island) and from 1975 – 1990 as many as 30 adults were observed on this portion of the barrier island chain during the breeding season (VDGIF unpubl. data).

### B. Piping Plover Productivity

Staff from The Nature Conservancy's Virginia Coast Reserve, Chincoteague National Wildlife Refuge, Eastern Shore of Virginia National Wildlife Refuge, Wallops Flight Facility and VDGIF monitored 98% (n = 239 pairs) of the statewide Piping Plover population in 2012. This year's preliminary statewide productivity estimate stands at 1.00 fledged young per pair (Figure 3). It should be noted that this estimate is subject to change as data are still being compiled and analyzed. With that said, the 2012 estimate represents the first decrease in reproductive rates since 2008, but is slightly above 0.93 fledged young per pair, the value necessary to maintain a stable population within the southern recovery unit.

This year's site specific productivity estimates are presented in Table 2. Again, these data are preliminary as proofed results and summaries for each of the islands are still pending. In general, however, most sites that experienced low productivity or a substantial drop from the previous year's estimate reported relatively good hatching success, but a high rate of brood loss. In addition, most egg loss was attributed to tidal inundation versus predators.

In 2012, VDGIF staff documented the first successful fledging of Piping Plover young on Parramore Island (Table 2). This site has never been monitored for productivity before because annual nesting activity is intermittent and its long length makes monitoring logistically difficult. We have always assumed Piping Plovers and other ground nesting avian species do not fare well on Parramore because it harbors an extremely large raccoon population and a number of red fox. This year, VDGIF staff had an opportunity to occasionally observe two of the four pairs recorded during the plover

survey. We discovered that both pairs fledged at least one young (Table 2), indicating that Piping Plovers can produce young at sites with extraordinary ground predator populations if suitable habitat is available.

### C. Wilson’s Plover Productivity

VDGIF staff resumed Wilson’s Plover productivity studies on Metompkin Island in 2012. Six of the eight pairs documented during the plover survey were monitored for breeding success. All six pairs fledged at least one young which yielded a productivity estimate of 1.83 fledged young per pair.

### 7. Atlantic Slope Freshwater Mussel Propagation

The VA Department of Game & Inland Fisheries continued its cooperative Atlantic Slope freshwater mussel propagation facility with the U.S. Fish & Wildlife Services’ Harrison Lake National Fish Hatchery in Charles City, which marks the 5<sup>th</sup> year of production and 6<sup>th</sup> year of operation at the VA Fisheries and Aquatic Wildlife Center (VFAWC). Propagation started in February and ended in early October resulting in the production of nearly 450,000 juvenile mussels from eight species (Table 1), which was short of our target number of 650,000. This was due to difficulty in finding gravid females for some species and lower than expected juvenile production from other species since larvae did not look as viable as past years. However, we did expand our propagation coverage from the Nottoway River watershed to include the Appomattox, Pamunkey and Mattaponi River watersheds. While most of the species propagated at VFAWC are not listed as threatened or endangered but listed as a species of greatest conservation need in Virginia’s Wildlife Action Plan or as a species of concern by the USFWS, we did continue to work with the state endangered green floater (*Lasmigona subviridis*) to develop successful grow-out techniques. We continued to release propagated mussels from our 2011 stock, with nearly 2,900 tagged mussels released in the lower Nottoway River, Southampton County. Most of the mussels released were the tidewater mucket (*Leptodea ochracea*, 2,817) with a “few” eastern pondmussels (*Ligumia nasuta*, 61). The remaining 2011 mussels will likely be released by early November 2012 but any remaining mussels will be released in spring 2013. All mussels were or will be tagged for future monitoring of survival and reproduction.

Aside from propagation, we completed move in into our new 1,000 square-foot building in April. This increased the mussel propagation facility capacity to nearly 1,500 square feet.

**Table 1. Juvenile freshwater mussels produced at VFAWC in 2012**

<b>Species</b>	<b>Source Location</b>	<b>Juveniles Produced</b>
<i>Alasmidonta undulata</i>	Nottoway River	<b>73</b>
<i>Anodonta implicata</i>	Nottoway River	<b>932</b>
	Pamunkey River	<b>31,407</b>
<i>Lampsilis cariosa</i>	Nottoway River	<b>1,592</b>
<i>Lampsilis radiata radiata</i>	Nottoway River	<b>67,210</b>
	Blackwater River	<b>25,820</b>
	Mattaponi River	<b>4,897</b>
<i>Lasmigona subviridis</i>	Tye River	<b>120,547</b>
<i>Leptodea ochracea</i>	Nottoway River	<b>98,289</b>
	Appomattox River	<b>25,088</b>
	Mattaponi River	<b>1,511</b>
<i>Ligumia nasuta</i>	Nottoway River	<b>66,023</b>
<i>Villosa constricta</i>	Johns Creek	<b>3,151</b>
	Swift Run	<b>2,465</b>
		<b>448,972</b>

## 8. Common Snapping Turtle Project

This study is being conducted by Virginia Commonwealth University in coordination and cooperation with the Virginia Department of Game and Inland Fisheries to assess the sustainability of the common snapping turtle (*Chelydra serpentina*) under various levels of commercial harvest pressure, which almost exclusively occurs in the Coastal Plain rivers.

Overharvesting is a systematic problem in aquatic and marine systems worldwide (Jackson et al. 2001), resulting in well documented population collapses of well over 90 fish species, such as the Atlantic cod (*Gadus morhua*) and yellowfin tuna (*Thunnus albacores*), followed by slow to no recovery even after harvesting pressure has been lifted (Hutchings 2000). The damage caused by overharvesting of marine fauna has also been felt by turtle populations, which have declined as a result of high mortality due to bycatch when commercially harvesting fish; e.g. loggerhead (Crouse et al. 1987) and leatherback sea turtles (Lewison et al. 2004). Many turtle populations have suffered overharvesting for the purpose of human consumption, particularly in Asia and South America (Klemens and Thorbjarnarson 1995, Eisemberg et al. 2011), but also in a number of well known North American species including the alligator snapping turtle (*Macrolemys teminickii*) (Pritchard 1989, Behler 1997).

The common snapping turtle has recently become the focus of intense harvest in the Eastern United States, due to increased demand from the Asian food and aquaculture markets, causing an increase in turtle prices and prompting many states to tighten restrictions on harvest (Miller 2009, Cain 2010). Virginia has relatively loose regulations on the commercial harvest of common snapping turtles, including no limit on number taken, which has attracted watermen displaced by tighter regulations in neighboring states. There are currently no data on whether Virginia snapping turtle populations are sustainable under current harvesting pressure. In this study we propose to assess the sustainability of common snapping turtle populations under current harvest regimes through a detailed demographic survey.

The common snapping turtle, *Chelydra serpentina*, is a relatively large-bodied and long-lived species with weights up to and over 50 pounds and an estimated life span in the wild of nearly 40 years (Galbraith and Brooks 1989). Common snapping turtles reach sexual maturity, in both sexes, at a curved carapace length (CCL) of roughly 8.4 inches. This length corresponds to an age estimate of between 11 and 17 years. Eggs are laid once per year in late April to early May, on land in preferably sand or soft soil, with an average clutch size of 27 eggs (Congdon et al. 1994). Hatchling mortality in snapping turtles commonly exceeds 90%, and in some studies has been much higher (Brooks et al. 1991). Low reproductive effort and late sexual maturation result in long generation times, which were estimated to be around 25 years in the E.S. George Reserve in southeastern Michigan (Congdon et al. 1994). Quick population rebounds following overharvesting have only been documented in species that mature at an early age, such as the herring (*Clupea harengus*) (Hutchings 2000). Common snapping turtles in the E.S. George Reserve were estimated to have a population doubling time of approximately 2,000 years (Congdon et al. 1994). Virginia has a warmer climate than Canada and Michigan, thus, the common snapping turtle may have shorter generations, faster doubling times, and therefore shorter recovery periods in this region; however this has not been evaluated and recovery times would likely still be very long.

In 2010 over 98,000 pounds of common snapping turtles, *Chelydra serpentina*, were reported as commercial harvest from Virginia waterways. This is likely an underestimation of the total harvest as there is an indication that not all watermen are fully reporting their harvests, and private harvest is not required to be reported. Based on annual state reports, the 2010 harvest nearly doubled the harvest from 2009 and represents a 400% increase in recorded harvest since 2000. This is likely due in part to tightening of turtle fishing laws in neighboring states, which has resulted in increased pressure on Virginia's snapping turtle populations. For example, North Carolina imposed a moratorium on commercial fishing of snapping turtles until the sustainability of harvest could be studied (Miller, 2009). Restrictions in Maryland include increasing the minimum size limit from 9.5 inches CCL to 11 inches CCL, and limiting harvesting to tidal waters only (Cain, 2010). Greater demand for

turtles along with the restrictions in neighboring states have likely increased market prices for snapping turtles and caused a 400% increase in the sale of out of state fishing licenses in Virginia over the past ten years. These factors, combined with a relatively weak U.S. economy, have likely contributed to the boom in snapping turtle harvesting to levels that raise serious questions about the sustainability of Virginia's snapping turtle populations.

The goals of this project are to characterize the demography, habitat use, and home ranges of snapping turtle populations in Virginia and to assess their sustainability under current and projected harvesting conditions. We will construct a data-driven population model of the snapping turtle parameterized from demographic data collected in this study and mined from the literature. The model will be used to run population viability analyses under various scenarios of harvest intensities and state regulations. This project will provide critical information on the current state of Virginia snapping turtle populations, and will provide direction for future regulations and conservation efforts.

The following is a summary of the first year of this 3-year investigation:

### 1. Mark-Recapture of Common Snapping Turtles

Beginning on July 17, 2012 Mark-Recapture was conducted on 3 Virginia waterways; Totuskey creek, the Walkerton area of the Mataponi River, and Morris creek. These three sites each represent a different historic level of commercial harvesting of snapping turtles. The process consisted of setting out 20 hoop nets daily, Monday – Thursday, baited with a combination of sardines and chicken blood and then returning the next morning to clear the traps and reset them. Snapping turtles were marked with a unique numbered tag attached to the posterior margin of the marginal scutes, demographic measurements were taken for each individual and then the individual was released. In addition, all by-catch turtle species were marked with a unique shell notch, measured and released. Over the nine trapping weeks, amongst the three sites, 97 turtles total were trapped, measured, marked and released. Forty-two of these turtles were common snapping turtles.

### 2. Telemetry study on home range and habitat usage of the common snapping turtle

On Morris creek, which has historically had little or no commercial harvest 14 turtles were fitted with radio transmitters in order to study their movement and habitat usage within the site. Periodically, these turtles will be tracked and their locations recorded for future use. In addition to providing information on home range usage, the telemetry information can be used to differentiate turtles that have been removed from the system permanently through death, harvest etc. from those who have emigrated out from the system which would directly affect the sustainability of the turtle within the system.

### 3. Future work

This study will be conducted over three years, with this being the first year. Trapping will begin again in May of 2013. At the conclusion of the study we should have data on the state of snapping turtle populations within these three bodies and quantitative evidence of the effect that commercial trapping is having on the turtle populations and whether or not commercial trapping is sustainable long term.

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## **B. FEDERAL CONSISTENCY**

During the second half of FY 2011, the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 146 development projects and management plans for consistency with the Virginia Coastal Zone Management Program (VCP). This represents 88% of the total amount of projects (166) reviewed during this period. Major state projects accounted for 20 projects, 86 were federal actions, and 40 were federally funded projects (predominantly local government projects). The 86 federal projects included 56 federal agency activities, 2 Outer Continental Shelf (OCS) activities, 18 federal licenses and approvals, and 7 U. S. Department of Housing and Urban Development (HUD) mortgage insurance projects, 2 Health Resources and Services Administration grants and 1 USDA Rural Development assistance (i.e. 10 projects submitted as a residual category pursuant to the federal consistency regulation (15 CFR 930.31(c)). All federal consistency determinations and federal consistency certifications were completed within the established legal deadlines.

Events/Meetings: On July 25, 2012, OEIR staff attended a meeting held by the Army National Cemeteries in the Visitors' Center belonging to Arlington National Cemetery (ANC) regarding the progress of a Master Plan and Programmatic Environmental Assessment (EA) for the ANC. Approximately 30 people attended, representing Army consultants, the National Park Service, the National Capital Planning Commission, Arlington County, private non-profit organizations, and VDOT as well as DEQ-OEIR staff. The master plan is intended to extend the useful life of the Cemetery by addressing short- and long-term needs and projects, capital investments, and design criteria for landscapes, facilities, and signage. Part of the master plan will govern the Navy Annex site, which has been transferred from the Navy to the Army for Cemetery expansion. OEIR recently responded to an "Informational Document" prepared by the Cemetery and indicated interest in reviewing the Master Plan and Environmental Assessment. OEIR shared the Document with reviewing agencies. At the meeting, OEIR staff gave brief explanations of the environmental and federal consistency review processes and expressed continuing interest in the Cemetery expansion planning effort. The Cemetery staff intends to publish a draft EA in January 2013 and a final in March or April. OEIR recommends that the federal consistency determination be included in the NEPA document if practicable.

OEIR attended a public meeting held by the U.S. Fish and Wildlife Service (FWS) on August 8, 2012, in Richmond. The FWS developed a Comprehensive Conservation Plan and Environmental Assessment (CCP/EA) to guide the management of Presquile National Wildlife Refuge for the next 15 years. The Refuge occupies an island in the James River downstream from Richmond, nearest to southern Chesterfield County, covering 1,329 acres. Three FWS staff shared the power-point presentation on the plan, its mandate, and some of the considerations going into the planning effort. The new plan, mandated by a 1997 law, must be completed by October 2012.

OEIR participated in OCRM conference call on June 26, 2012 regarding the Atlantic Wind Connection project and compliance with the CZMA. Atlantic Grid Holdings, LLC (AGH) proposes to build a 790-mile subsea HVDC transmission system known as the Atlantic Wind Connection (AWC) project off the Mid-Atlantic coast (NY, NJ, DE, MD and VA) in state and federal waters. The system is designed to enable multiple offshore wind farms to connect to the onshore electricity grid.

OEIR made a presentation to select members of DEQ Leadership Team on May 1, 2012 describing the responsibilities of the office (including federal consistency) and legal basis for the different programs.

The OEIR continues to maintain a website for Federal Consistency Reviews and can be accessed through DEQ's main webpage or found at <http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview.aspx>. The webpage is updated weekly.

Table 1 depicts federal projects in Tidewater Virginia reviewed from April 1, 2012 through September 30, 2012.

<b>TYPE OF FEDERAL PROJECTS REVIEWED*</b>	<b>NUMBER OF PROJECTS COMPLETED</b>	<b>REVIEW PERIOD</b>
*Direct Federal Actions	66	30-60 Days
** Federal Activities (approvals & permits)	18	90 Days
***Federally Funded Projects	40	30 Days
Outer Continental Shelf	2	45-60 Days
<b>TOTAL</b>	126	<b>30-90 DAYS</b>

\*Includes -- HUD Mortgage Insurances reviewed as FCD residual category of Subpart C of the Regulations.

\*\*These projects do not include all permits issued pursuant to Section 404 of the Clean Water Act administered by the U.S. Army Corps of Engineers. Such permits are reviewed by the regulatory agencies under a separate interagency coordinated review process (coordinated by the Norfolk District U.S. Army Corps of Engineers).

\*\*\* These include federal assistance to local government reviewed under subpart F.

**SIGNIFICANT FEDERAL PROJECTS REVIEWED FOR CONSISTENCY WITH THE VCP from 4/1/2012 to 9/30/2012**

**I. Federal Agency Projects**

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

DEQ completed a coordinated review of a Tier I Final Environmental Impact Statement (EIS) submitted by the Federal Railroad Administration (FRA) and the Virginia Department of Rail and Public Transportation (DRPT). FRA and DRPT have selected a Preferred Alternative for the Richmond to Hampton Roads Passenger Rail Project based on analysis from the Tier I Draft EIS, which was reviewed under DEQ 09-227F, and public comments. The Preferred Alternative is the Build Alternative 1 described in the Tier I Draft EIS. The Tier I Final EIS, submitted for review, generally describes the potential environmental consequences of the Preferred Alternative. The Preferred Alternative would provide higher-speed rail service south of the James River from Richmond to Hampton Roads and conventional speed rail service north of the James River from Richmond to Hampton Roads. State reviewers indicated that the Tier I Final EIS does not provide sufficient detail to enable an adequate review of potential wetland impacts and that information on wildlife and federal consistency provided in response to the Tier I Draft EIS was not incorporated into the Tier I Final EIS. In addition, the Virginia Department of Transportation and Richmond Regional Planning District Commission indicated that the Tier I Final EIS includes outdated transportation plans and socioeconomic data, and recommended that the Tier II EIS incorporate the most accurate or current information. The City of Williamsburg identified omissions of Colonial Williamsburg as well as adjacent historic sites in the Tier I Final EIS' list of architectural resources eligible or listed in the National Register of Historic Places. The Commonwealth's review of the Tier I Final EIS recommends correction of this list to include the resources identified by the City of Williamsburg. In response to reviewers' comments on the Tier I Draft EIS, the Tier I Final EIS states that the Tier II EIS will provide a more detailed analysis of the Preferred Alternative. Reviewers indicated that this additional

information as well as recommended habitat and species surveys may enable more specific comments on potential impacts to wildlife, water quality and wetlands, architectural or archaeological resources, contaminated sites, protected plants and animals, and consistency with the Virginia Coastal Zone Management Program.

Expansion of the U.S. Army Intelligence and Security Command Headquarters Facilities – DEQ completed the coordinated review of an Environmental Assessment submitted by the Department of the Army (Army) for the renovation and expansion the U.S. Army Intelligence and Security Command Headquarters (HQINSCOM) Facilities at U.S. Army Garrison Fort Belvoir in Fairfax County. The project would add approximately 890 workers to the HQINSCOM building, from approximately 1,650 to a total of approximately 2,540. The proposed action includes: renovating the existing 234,000-square-foot HQINSCOM Nolan Building; constructing a new 382,000-square-foot addition; constructing a 1,420-space parking structure; reconfiguring and reconstructing the surface parking lots (586 surface parking spaces); constructing new utilities and a new stormwater management/best management practice pond; and constructing roadways, sidewalks and landscaping. Based on DEQ’s coordinated review of the EA the proposal is unlikely to have significant effects on ambient air quality, important farmland, forest resources, water quality and wetlands. It is unlikely to adversely affect historic resources or species of plants or insects listed by state agencies as rare, threatened, or endangered. However, DEQ was unable to complete its review of a Federal Consistency Determination (FCD) contained in the EA and submitted under the Coastal Zone Management Act. The legal deadline for completing the FCD review was September 28, 2012. Unresolved issues associated with potential project impacts to Chesapeake Bay Resource Protection Areas were identified by the Department of Conservation and Recreation. DEQ recommended the Army coordinate with DCR to address the concerns. The Army is currently coordinating with DCR to resolve the matter. DEQ requested a 15-day deadline extension and plans to complete the Commonwealth’s response to the FCD by October 13, 2012

Joint Base Fort Myer-Henderson Hall– DEQ completed the coordinated review of a draft Programmatic Environmental Assessment (PEA) submitted by the Department of the Army for the implementation of a Real Property Management Plan (RPMP) at Joint Base Fort Myer-Henderson Hall (JBM-HH) in Arlington County and at Fort McNair in Washington, D.C. The RPMP provides JBM-HH with a planning framework, tools, and direction to enable the utilization and development of the land within the installations’ boundaries through 2030 in a manner that allows the continued expansion of JBM-HH. The PEA identifies existing physical, natural, and cultural resources and potential impacts that would occur to these resources as a result of the implementation of the RPMP. The PEA further establishes mitigation measures and procedures to offset impacts and ensures compliance with all applicable laws and regulations, while ensuring the safety and efficiency of federal and state missions. Specific projects are not addressed in the RPMP or in the PEA. However, locations and development types are identified. The PEA includes a Federal Consistency Determination (FCD) stating that the proposed action is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program. In regard to federal consistency, DEQ on behalf of the Commonwealth concurred with the FCD. DCR reiterated Resource Protection Area (RPA) definitions stemming from the Coastal Lands Management enforceable policy and stated the requirements applicable to developments in RPAs. DGIF provided guidance on management of activities in or near streams, including time-of-year restrictions on in-stream work in Four Mile Run. Along with DCR, DGIF indicated that bald eagles nest near project areas, and both agencies recommended consultation by the Army to ensure bald eagle protection. With regard to other environmental considerations, DGIF recommended measures to protect wetlands and streams from impacts of construction activities, including a time-of-year restriction on land clearing or tree cutting to protect migratory songbirds. DHR recommended that the Army continue to consult with DHR and other agencies in developing a Programmatic Agreement on protection of historic structures during RPMP implementation. DEQ-DLPR presented findings on various types of waste sites and gave recommendations for obtaining further information, as well as for consultation regarding petroleum release sites. DEQ-DLPR gave general guidance on other matters including asbestos and lead-based paint precautions

and consultation. VDOT expressed interest in coordination relative to impacts on roads outside the JBM-HH boundaries.

Camp Peary Range 37 Shoreline Stabilization – DEQ completed the coordinated review of an Environmental Assessment and Federal Consistency Determination submitted by the Department of the Navy (Navy) for the stabilization of the shoreline along Range 37 at Camp Peary in York County. The shoreline consists of vegetated tidal wetlands experiencing erosion and undercutting, as well as non-vegetated wetland areas. The proposed action involves the construction of a hybrid living shoreline, construction of an offshore breakwater/sill system, beach nourishment, and tidal wetland vegetation plantings. The breakwater/sill system will consist of four structures placed a maximum of 101 feet channelward of mean low water (MLW). No bank grading is proposed in conjunction with the proposed action due to the potential presence of unexploded ordnance and small arms ammunition that may be present within the bank and bluff due to historic training activities. Based on DEQ's coordinated review of the EA the proposal is unlikely to have significant effects on ambient air quality, important farmland, forest resources, water quality and wetlands. It is unlikely to adversely affect historic resources or species of plants or insects listed by state agencies as rare, threatened, or endangered. In addition, based on the Navy's consistency determination and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ concurs that this proposal is consistent, to the maximum extent practicable, with the VCP provided all applicable permits and authorizations are obtained with respect to wetlands impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements.

Repair and Stabilize the York River Shoreline to Protect the Colonial Parkway – DEQ completed the coordinated review of an Environmental Assessment and Federal Consistency Determination submitted by the National Park Service (NPS) for the repair and stabilization of the York River shoreline at Colonial National Historical Park to protect the Colonial Parkway in York County. The repair of the existing shoreline protection system and the installation of new structures within park property would commence near the confluence of Felgates Creek and the York River and continue downstream to the boundary with the U.S. Coast Guard Training Center in Yorktown. Actions needed to achieve these goals include the rehabilitation or installation of a combination of shoreline treatments, including: rock revetments; rock spurs; continuous and gap sills; pocket beaches; and shore-attached breakwaters. Based on DEQ's coordinated review of the EA the proposal is unlikely to have significant effects on ambient air quality, important farmland, forest resources, water quality and wetlands. It is unlikely to adversely affect historic resources or species of plants or insects listed by state agencies as rare, threatened, or endangered. In addition, based on the NPS' consistency determination and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ concurs that this proposal is consistent, to the maximum extent practicable, with the VCP provided all applicable permits and authorizations are obtained with respect to wetlands impacts, encroachments upon subaqueous lands, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and Section 106 of the National Historic Preservation Act.

Atlantic Fleet Training and Testing –DEQ completed the coordinated review of a Draft Environmental Impact Statement/Overseas Environmental Impact Statement submitted by the Department of the Navy (Navy) that evaluates the potential environmental effects associated with military readiness training and research, development, test and evaluation activities conducted within the Atlantic Fleet Training and Testing (AFTT) Study Area. The Study Area is in the western Atlantic Ocean and encompasses the waters off the east coast of North America and the Gulf of Mexico. Virginia offshore and inland coastal waters in the Study Area includes the Virginia Capes (VACAPES) Range Complex and the lower Chesapeake Bay. The VACAPES Range Complex spans 270 miles along the coast from Delaware to North Carolina from the shoreline to 155 nautical miles (nm) seaward and includes special use airspace with associated warning and restricted areas, and surface and subsurface sea space of the VACAPES Operations Area (OPAREA). It also includes established mine

warfare training areas located within the lower Chesapeake Bay and off the coast of Virginia. The DEIS/OEIS analyzes potential impacts on environmental resources resulting from activities under the alternatives. Resources evaluated include sediments and water quality, air quality, marine habitats, marine mammals, sea turtles and other marine reptiles, birds, marine vegetation, marine invertebrates, fish, cultural resources, socioeconomic resources, and public health and safety. Based on comments from reviewers, the Commonwealth of Virginia has no objection to the proposed action, provided the Navy complies with all applicable laws and regulations. The proposal is unlikely to have significant effects on ambient air quality, water quality, and wetland resources of the Commonwealth. The Commonwealth's response recommends that the Navy coordinate closely with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the Virginia Department of Game and Inland Fisheries to ensure that impacts on protected species including sea turtles, whales and marine mammals are adequately avoided and minimized.

300 Area Water Upgrades at Fort Belvoir –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Army (Army) for upgrades to the drinking water system serving the 300 Area on the Fort Belvoir South Post. Fort Belvoir's water utility partner, American Water (AW), will replace 19,750 linear feet of existing waterline with high-density polyethylene (HDPE) and polyvinyl chloride (PVC) pipe. The new pipe will be installed parallel to the existing pipe (which will be abandoned in place) using open cut and Horizontal Directional Drilling (HDD) to minimize impacts to Resource Protection Areas, wetlands and streams. All connection points, service tie-ins and fire hydrants will be open cut and will be located to minimize the disturbance of concrete and asphalt surfaces. The total work area is anticipated to be 276,500 square feet, which includes material and equipment staging area, area where pipes will be fused together and strung out, and the disturbed soil area. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to subaqueous land impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and the requirement of the Virginia Waterworks Regulations (12 VAC 5-590 *et seq.*).

Woodlawn Chapel and Franklin Road Water Upgrades at Fort Belvoir –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Army (Army) for upgrades to the drinking water system serving Woodlawn Chapel and Franklin Road on the Fort Belvoir Main Post. Fort Belvoir's water utility partner, American Water (AW), will replace 7,884 linear feet of existing waterline with high-density polyethylene (HDPE). The new pipe will be installed parallel to the existing pipe (which will be abandoned in place) using open cut and Horizontal Directional Drilling (HDD) to minimize impacts to Resource Protection Areas, wetlands and streams. All connection points, service tie-ins and fire hydrants will be open cut and will be located to minimize the disturbance of concrete and asphalt surfaces. The total work area is anticipated to be 171,994 square feet, which includes material and equipment staging area, area where pipes will be fused together and strung out, and the disturbed soil area. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to subaqueous land impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and the requirement of the Virginia Waterworks Regulations (12 VAC 5-590 *et seq.*).

Power Distribution Upgrades at Little Creek/Fort Story –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Navy (Navy) for the construction of a base power distribution line and substations at Joint Expeditionary Base (JEB) Little Creek/Fort Story in the City of Virginia Beach. The project provides two new utility main substations on the east and west sides of the base for 34.5/13.2 kilovolt (KV) electrical distribution. The new substations will be powered by a new 115/34.5

KV substation on the west side of the base to be owned and constructed by Dominion Virginia Power. In addition, two new 34.5 KV submarine power distribution cables will be installed under the harbor to run from the west side 34.5 KV substation/switchgear house to the new east side 34.5KV/13.2KV substation. The submarine power cables will be installed by horizontal directional drill (HDD) method to avoid direct impacts to resources located on subaqueous lands. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to subaqueous land impacts, surface water and wetland impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and Section 106 of the National Historic Preservation Act.

Expansion of Sector Engineer Facility, Portsmouth– DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Coast Guard for the expansion of the Sector Engineer Facility at the Coast Guard Base Support Unit in Portsmouth. The expansion consists of construction of a 4,100-square-foot building, removal of 2 existing trailers, and capping utilities in place. The new building would provide space for 10 offices, an open administrative space accommodating 23 personnel, filing space, copy room, rest rooms, mechanical room, kitchen, electrical room, and storage room. The Coast Guard stated that the project is consistent with the Virginia Coastal Zone Management Program (VCP). DEQ concurred, reminding the Coast Guard of obligations under the Chesapeake Bay Preservation Act administered by DCR and the City of Portsmouth. Where a project is proposed in a Resource Protection Area, but on land that is already impervious (an Intensely Developed Area, according to the City), the project is permitted as a redevelopment project provided that erosion and sediment control and stormwater management requirements are addressed and a water quality impact assessment (WQIA) is submitted. If these conditions are met, this project would be consistent with the Chesapeake Bay Preservation Act. The City indicated that the project is not inconsistent with its Comprehensive Plan or its Zoning Ordinance. The City also supports the project and expressed its pride in its "Coast Guard City" designation. DEQ also reflected the DCR guidance that the project would not affect natural heritage resources, but the Coast Guard should coordinate with DGIF and the Fish and Wildlife Service because three bird species with legal status can be found within two miles of the project site. DEQ otherwise provided normal guidance on erosion control, air pollution control, and the need for direct consultation with DHR for historic resources protection.

Shoreline Restoration and Protection Project –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Navy (Navy) proposes to implement a restoration and protection project at the Joint Expeditionary Base (JEB) at Little Creek/Fort Story in the City of Virginia Beach. Sand would be replenished and stone breakwaters would be constructed along 1) approximately 2,500 linear feet of shoreline at the Omaha Beach training area; 2) approximately 1,300 linear feet of shoreline across from the DPW building; and 3) approximately 370 linear feet of shoreline north and east of Building 734 at the northern terminus of Leyte Road. Six stone breakwaters would be constructed parallel to the beach at the DPW building and three stone breakwaters at Building 734. Approximately 750,000 cubic yards of sand would be obtained from the Sandbridge Shoal borrow area, located in the Atlantic Ocean approximately 12 miles southeast of the project location. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to subaqueous land impacts, wetland impacts, dune impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements, potential wildlife impacts and potential impacts to cultural resources.

Anti-Terrorism/Force Protection Upgrades –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Navy (Navy) for the construction of anti-terrorism/force protection upgrades at the Naval Special Warfare Development Group (NSWDG) Compound at Naval Air Station Oceana, Dam Neck Annex in the City of Virginia Beach. The upgrades would include renovation of the main Entry Control Point (ECP), renovation of the “back gate” ECP, and relocation of the Visitor Control Center. Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to wetland impacts, dune impacts, erosion and sediment control, stormwater management, and air emissions. In addition, the project must comply with applicable solid and hazardous waste requirements, potential wildlife impacts and potential impacts to cultural resources.

Construction of a Stormwater Wetland – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Navy (Navy) for the removal of a 200-foot section of degraded stormwater culvert pipe that empties into Upper Machodoc Creek and the construction of a one-acre stormwater wetland in its place at Naval Support Facility Dahlgren (NSFDL) in King George County. The proposed action will result in an improvement in stormwater leaving the base and will enable NSFDL to meet evolving stormwater management regulations including the Chesapeake Bay Total Maximum Daily Load (TMDL) for nitrogen, phosphorus and sediments. Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed stormwater wetlands project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and approvals are obtained with respect to proposed impacts to state subaqueous lands, wetlands, erosion and sediment control, stormwater management, and impacts to Chesapeake Bay Preservation Areas. In addition, the Navy must ensure the project complies with applicable solid and hazardous waste management regulations and protected species regulations related to potential impacts to the bald eagle.

Revision and Reissuance of the Regional Permit 20 – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by The U.S. Army Corps of Engineers Norfolk District for the revision and reissuance of the Regional Permit 20. Regional Permit 20 (11-RP-20) authorizes the creation of artificial reefs and dredging of old shellfish reefs, when the material will be used to create new or enhance old reefs owned, operated or managed by the Commonwealth of Virginia. The intent of the Regional Permit is to provide a streamlined permitting process for listed activities that do not adversely affect general navigation and the aquatic environment. The permit is authorized by the Secretary of the Army and the Chief of Engineers to create artificial reefs and to dredge historical shellfish reefs when the material will be used for the construction of new reefs in waters of the Commonwealth of Virginia and waters of the United States provided the project complies with the provisions and conditions set forth in the permit. State agencies administering the enforceable policies did not identify any impacts that adversely affect any of the Commonwealth’s coastal uses or resources under their jurisdictions. Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed stormwater wetlands project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The State Water Control Board provided unconditional Section 401 Water Quality Certification to the 11-RP-20 in a February 12, 2012 letter to the Corps.

Reissuance of State Programmatic General Permit – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Army Corps of Engineers (Corps) Norfolk District for reissuance of the State Programmatic General Permit (12-SPGP-01) for Virginia. The 12-SPGP-01 authorizes the discharge of dredged or fill material in non-tidal waters, of the United States, including wetlands, associated with certain residential, commercial, and institutional developments and linear transportation projects within the geographical limits of the Commonwealth of Virginia and under the regulatory jurisdiction of the Corps-Norfolk District. These projects must have no more than minimal individual and cumulative impacts and meet listed terms and conditions. The use of 12-SPGP-01 is restricted to those projects that have avoided and

minimized impacts to waters of the U.S., including wetlands, to the maximum extent practicable. In 2002, the Corps authorized the Commonwealth, through DEQ, to administer the SPGP for work in non-tidal waters and wetlands of the Commonwealth. The Corps reauthorized the program in 2007 (07-SPGP-01) for five years which expires on May 31, 2012. The proposed reissuance is for a five-year period beginning June 1, 2012 to July 1, 2017). Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the 12-SPGP-01 is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided that, prior to construction, applicants obtain all required permits and approvals for activities that impact the enforceable policies and that applicants also adhere to all the applicable conditions of these policies.

Dulles Corridor Metrorail Project, Phase 2 – The Federal Transit Administration (FTA), Metropolitan Washington Airports Authority (MWAAA), and Washington Metropolitan Area Transit Administration (WMATA), in cooperation with the Federal Aviation Administration (FAA), have prepared an Environmental Assessment (EA) to analyze design refinements for Phase 2 of the Dulles Corridor Metrorail Project, which is intended to extend the existing Metrorail system from the East Falls Church station approximately 23.1 miles to the vicinity of State Route 772 in Loudoun County. Phase 1, under construction, is to extend approximately 11.7 miles along the Dulles Airport Access Highway to Wiehle Avenue, and include five stations. Phase 2 would be approximately 11.4 miles long, including six stations. The EA addresses changes in the Locally Preferred Alternative for Phase 2; this alternative was evaluated in a Final Environmental Impact Statement in December 2004 and an amended Record of Decision in November 2006. DEQ's review indicated that additional surface water impacts of the new alternative would be consistent with those permitted by NRO in 2011, mechanical equipment may require air pollution control permits, and waste should be managed in accordance with applicable regulations. DCR indicated that Chesapeake Bay Preservation Area performance criteria might apply, but there is an exemption for public rail lines, not including stations. DCR indicated, in regard to natural heritage resources, that the area is habitat for yellow lampmussel and wood turtle. VDOT contributed transportation planning considerations and questions on land development. DEQ will coordinate the review of the FCD for this proposal.

Shoreline Protection System at NAS Oceana –DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the Department of the Navy. The FCD is for repairs to an existing shoreline protection system at Naval Air Station Oceana, Dam Neck, in the City of Virginia Beach. The shoreline protection system was installed in 1996 and consists of a constructed sand dune reinforced by a buried stone core with beach replenishment on the seaward side. Winds and storm damage have caused the beach portion of the shoreline protection system to lose a significant amount of sand. The action proposed in the FCD is necessary to reconstruct the shoreline protection system and mitigate the sand loss. The FCD states that the project would be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). DEQ's response recommends that the Navy ensure consistency with state laws to control and manage sediment and stormwater as well as laws that regulate impacts to dunes and subaqueous lands.

Perimeter Trail, Parking Lots, Walking Trail at TISCOM Facility –The Coast Guard's Telecommunications and Information System Command (TISCOM), based outside the Alexandria city limits, proposes to replace, in kind, the security perimeter trail and re-pave an existing parking lot. The project would also include construction of a new parking lot (0.17 acre) and a walking trail (0.19 acre, 2,100 linear feet) at the TISCOM facilities along Waesche Drive and near Telegraph Road in southern Fairfax County. The new lot and trail would be constructed with permeable paving materials; two of the four project sites are currently impervious and there would be no increase in the impervious area from the repaving proposed while the other two project sites would create two new potentially impervious areas. The FCD states that the project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ concurred, and presented a number of reviewing agencies' comments. DCR indicated that the Coast Guard would need to meet performance criteria under the Chesapeake Bay Preservation Act in areas analogous

to Resource Protection Areas. Fairfax County indicated that the Dogue Creek stream valley touches the east side of the project area, and recommended careful use of pervious surfaces to reduce stormwater runoff. DCR indicated that seven plant and bird species of concern appear in conservation sites near the project, and provided guidance on protection of these species. DEQ gave guidance on air pollution control requirements applicable to asphalt paving; on working in waterways; and on dealing with waste sites and handling wastes.

Tactical Vehicle Training Course Upgrades at Fort Story – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of the Navy (Navy) for the proposed Tactical Vehicle Training Course Upgrades at Joint Expeditionary Base, Little Creek in Virginia Beach. Should the clearing activities occur in areas that are analogous to Resource Protection Areas, then this proposal may need to include additional mitigation requirements in order to be consistent with the Chesapeake Bay Preservation Act and the regulations. Based on the comments submitted by reviewers, DEQ conditionally concurred that the proposal is consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management Program. The conditions are that the Navy: (i) obtain all approvals not yet secured that are applicable to the enforceable policies; (ii) adhere to all the conditions of the (a) Virginia Water Protection permit, (b) Virginia Erosion and Sediment Control and (d) Stormwater Management laws and regulations; and (iii) carry out the subsequent activities consistently with the Coastal Lands Management enforceable policy governed under the Chesapeake Bay Preservation Act and the regulations that implement the Act. In accordance with the Federal Consistency Regulations at 15 CFR Part 930, section 930.4, this conditional concurrence is based on the Navy obtaining necessary authorizations prior to any ground disturbance. If the requirements of section 930.4, sub-paragraphs (a)(1) through (a)(3) are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, section 940.43.

Dam Neck Main Entry Control Point – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of the Navy (Navy) for the construction of a main gate entry control point (ECP) at the Naval Air Station (NAS) Oceana at Dam Neck Annex in the City of Virginia Beach. The ECP will include concrete anchored cable reinforced security fencing, truck and vehicle inspection lane, hardened guard house with elevated control lane island, and head facilities. In addition, the project includes realignment of multiple inbound lanes, a truck inspection station, relocation of the existing military working dog facility, installation of electronic security systems, relocation of the existing water pump station, and inbound/outbound lane canopy with security lighting, permanent passive barriers and raised traffic median. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to proposed impacts to wetlands, erosion and sediment control, stormwater management, and air emission. In addition, the project must comply with applicable solid and hazardous waste requirements and the appropriate federal requirements and state recommendations for the protection of the loggerhead sea turtle, peregrine falcon and bald eagle.

Modification of Restricted Airspace over A.P. Hill: DEQ completed a coordinated review of an environmental assessment (EA), including a federal consistency determination (FCD), submitted by the Department of the Army. The EA addresses modification of restricted airspace over Fort A.P. Hill in Caroline County. The current restriction extends to an altitude of 5,000 feet above mean sea level (MSL). The proposed restricted area would be divided into three shelves: a) surface to 4,500 feet MSL, b) 4,501 feet MSL to 7,500 feet MSL, and c) 7,501 feet MSL to 9,000 feet MSL. The EA describes the Proposed Action or Preferred Alternative (described above) and the No Action Alternative. The change in airspace would not alter the frequency or type of training currently conducted at Fort A.P. Hill. However, the Preferred Alternative would allow the Army to use all of the existing firing points within Fort A.P. Hill, spreading the use of artillery across the installation. One of the criteria in choosing how to modify the airspace was that the altitude and area should be limited to avoid existing Federal Aviation Administration (FAA) routes for commercial air traffic. The Department of Aviation (DOAv) requested details about how the proposed modification would affect instrument approach procedures at several

major airports in Virginia. The FAA and Army provided additional technical information in response to the DOAv inquiry. According to the FCD included in the EA, the project would be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program (VCP).

Star-Spangled Banner National Historic Trail The National Park Service (“Service”) has published a single management plan for the Star-Spangled Banner National Historic Trail (in Virginia, Maryland, and the District of Columbia) and for the Star-Spangled Banner Scenic Byway (in Maryland). As a trail management plan, the CMP includes findings and recommended actions required by the National Trails System Act, as amended.

Two alternatives are presented:

- Alternative 1 contemplates current management in regard to resource protection, partnerships for trail maintenance and enhancement of recreation opportunities, and use of existing trail resources and sites.
- Alternative 3, the preferred “War of 1812 in the Chesapeake” alternative, contemplates more ambitious efforts at interpretation and education, trail enhancement, signage, and provision of visitor services, as well as protection of trail resources.
- Alternative 2, “Chesapeake Campaign of Summer 1814,” was dismissed following early public review and comment.

DEQ concurred with the federal consistency determination, reflecting the agreement or lack of objection of agencies and offices administering the VCP enforceable policies. DEQ-PRO recommended that environmentally preferable actions and methods be pursued. The Department of Conservation and Recreation (DCR) expressed preference for the preferred alternative.

Special Operations Urban Combat DEQ completed a coordinated review of an environmental assessment (EA) submitted by the Virginia Department of Military Affairs (DMA) for the construction of and training at an urban combat training facility at Fort Pickett located in Nottoway County. The property on which the project is proposed is managed by the Virginia Army National Guard (VAANG). VAANG leases the land from the Department of Defense. The U.S. Navy Naval Special Warfare (NSW) division will have primary use rights for the site for 18 to 22 weeks per year. NSW will construct and use the proposed facility and plans to develop the site in phases from Fiscal Year 12 to Fiscal year 18. The project’s purpose is to provide enhanced training value to satisfy timely training and pre-deployment certifications for the assault unit level training by the Navy Sea, Air and Land forces (SEALs). DMA submitted the EA to fulfill the requirements of the environmental impact report law. The proposed project site consists of approximately 125 acres of a primarily wooded property. The central portion of the site is without trees and has been previously disturbed. Currently, a concept plan is available for the Special Operations Urban Combat Site (SOUC) site. The SOUC site will be constructed to provide a densely urban environment, with tall buildings, narrow roads and long primary attack corridors to mimic typical third world urban terrain. Reviewers from natural resource agencies did not identify any adverse impacts that cannot be mitigated. However, the Department of Forestry (DOF) finds that this project may have a significant impact to the overall forest resources of the Commonwealth and recommends mitigation. DEQ’s review also includes recommendations to conduct a wetlands delineation in appropriate areas as construction progresses, remove all batteries and fluids from junk vehicles (which will be placed in a simulated junk yard) prior to being located on the SOUC site, and coordinate as appropriate with the Department of Conservation and Recreation, Virginia Department of Agriculture and Consumer Services and the U.S. Fish and Wildlife Service to ensure compliance with protected species legislation.

Management of Mammal Damage in Virginia USDA-APHIS-WS (“WS”) intends to continue its current integrated approach to mammal damage management in Virginia. WS responds to requests for assistance to reduce and prevent damage associated with mammals to four categories of impact areas: agricultural resources,

natural resources, property, and human safety threats. These arise from the adaptation of some species to habitats altered by humans. The new EA addresses changes in the need for action and the affected environment since a more limited EA was developed in 2000. It describes a preferred alternative and two other alternatives in some detail. Brief summary statements follow:

- Alternative 1, the proposed action, would continue an adaptive integrated approach, using lethal and non-lethal techniques. WS would respond to requests by (1) taking no action, if warranted; (2) providing technical assistance to reduce damages caused by mammals; or (3) providing technical and operational assistance, by a variety of means, to a property owner or manager experiencing damage.
- Alternative 2, provision of technical assistance only.
- Alternative 3, no action.

DEQ concurred with the consistency determination and, on behalf of DCR, recommended that impacts to threatened and endangered species be avoided. On behalf of DHR, DEQ indicated that the proposed activities would not affect any known architectural or archaeological resources. DEQ provided sources of additional information on wildlife and natural heritage resources. On behalf of DGIF and in response to the EA, DEQ recommended continued coordination, as needed, with DGIF.

Safety Zone, Naval Helicopter Association The Coast Guard intends to establish a safety zone in support of the Naval Helicopter Association Reunion Helicopter Demonstration along the Elizabeth River in Norfolk. The U.S. Navy is the event sponsor. The event will take place abeam the USS Wisconsin and Half Moon Cruise Ship Terminal on May 16, 2012 from 6 PM to 6:05 PM. The safety zone is for the safety of life on navigable waters immediately before, during, and after the event; access will be restricted during the event. DEQ concurred with the federal consistency determination and conveyed the comments from other agencies that no permits would be required. On behalf of DHR, DEQ indicated that the proposed event will not affect any known architectural or archaeological resources.

Management of Vulture Damage in Virginia – DEQ completed the coordinated review of a Supplemental Environmental Assessment (SEA) and Federal Consistency Determination (FCD) submitted by the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program, in cooperation with the U.S. Fish and Wildlife Service (USFWS) and the Virginia Department of Game and Inland Fisheries (DGIF) for the implementation of management measures to reduce black vulture (*Coragyps atratus*) and turkey vulture (*Cathartes aura*) damage to property, agricultural resources, and threats to public health and safety in the Commonwealth of Virginia. The need for action to manage damage and threats associated with vultures in Virginia arises from requests for assistance received by USDA to reduce and prevent damage associated with vultures to agricultural resources, property, and threats to human safety. The proposed action includes the use of non-lethal and lethal methods in an integrated approach to resolving requests for assistance associated with vultures in the Commonwealth. Based on DEQ's review of the SEA and FCD the proposal is unlikely to have significant effects on ambient air quality, water quality, wetlands, important farmland and forest resources. It is unlikely to adversely affect species of plants or insects listed by state agencies as rare, threatened, or endangered. In addition, DEQ concurs that the proposal is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program.

Pierside Testing of a Signal Analysis System – DEQ completed the coordinated review of a Negative Determination submitted by the Department of the Navy (Navy). Undersea Defensive Warfare Systems Program Office (PMS 415) of the Naval Sea Systems Command proposes to conduct testing of a Signal Analysis System (SAS) at Naval Station Norfolk, Northrop-Grumman Newport News Shipyard and Norfolk

Naval Shipyard. A pier-side test event would include a transducer element check and an Outboard Transducer Array Assembly (OTAA) self-test. An OTAA is an acoustic sensor and transmitter. Four OTAAs which make up the SAS are installed on the submarine (two on each side). The test would consist of 116 transmissions per OTAA, with very short individual pulses. During the reception test, a portable commercial transducer would be deployed off a small boat or from a pier and would transmit to the system OTAAs to verify receipt of incoming signals from the deployed transducer. The number of tests at any of the three proposed test locations would not exceed two test events per year. Based on DEQ's review of the Negative Determination and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program since the proposed activity would have no effect on the policies. The Navy must ensure the proposed activity complies with Section 106 of the National Historic Preservation Act.

Reissuance of Nationwide Permits and Virginia Regional Conditions – DEQ completed the coordinated review under the Coastal Zone Management Act Federal Consistency Regulations of the U.S. Army Corps of Engineers (Corps) reissuance of 48 of the 49 existing Nationwide Permits (NWP), general conditions and definitions, with some modifications. The Corps also issued two new NWPs, three new general conditions, and three new definitions. The Corps issues NWPs to authorize certain activities that require Department of the Army permits under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899. Authorizations apply to activities such as aids to navigation, utility lines, bank stabilization, road crossings, stream and wetland restoration, residential developments, mining, commercial shellfish aquaculture, and agricultural. The NWPs are intended to protect the aquatic environment and the public interest while effectively authorizing activities that have minimal individual and cumulative adverse effects on the aquatic environment. In addition, it is sometimes necessary to add regional conditions to NWPs to address state water quality standards and to be consistent with state coastal zone management plans. Accordingly, the Corps Norfolk District submitted regional conditions for Virginia that are applicable to specific NWPs. The NWPs and regional conditions are issued for a period of five years. The reissued NWPs and regional conditions are effective beginning March 19, 2012 to March 18, 2017. Based on the comments submitted by review agencies, DEQ conditionally concurs that the NWPs and Virginia Regional Conditions are consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP) provided that, prior to construction, applicants shall obtain all required permits and approvals not yet secured for the activities to be performed that are applicable to the VCP's enforceable policies including: 1) any VMRC and/or the local wetlands board approval for work in waters of the United States; 2) local approval for projects subject to the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management Regulations as locally administered; and 3) any Virginia Water Protection General or Individual Permit for activities that would otherwise qualify for unconditional or conditional §401 Clean Water Act Water Quality Certification (excepted category). The Commonwealth requests that the Corps forward to DEQ pre-construction notifications for any activities that fall into an excepted category for individual review of certain activities. In addition, it is recommended that the Corps continue to work with the Department of Game and Inland Fisheries on the development of an agreement providing for the agency's review and comment on NWPs to ensure impacts to aquatic resources are addressed and to ensure consistency with the fisheries management enforceable policy of the VCP.

Emergency Repairs to South Fork Timber Bridge – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Federal Highway Administration (FHWA), Eastern Federal Lands Highway Division (EFLHD), in cooperation with the National Park Service (NPS), for emergency repairs to the South Fork Timber Bridge at the Prince William Forest Park in Prince William County. The project will include replacement of seven timbers that make up the timber truss bridge. To replace the timber members, eight temporary support structures would be constructed that would temporarily impact the stream. Material for the support structures would be lowered to the stream from the bridge deck. No mechanized equipment will be used in the stream bed, and dewatering of the stream will not be required. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the

maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and approvals are obtained with respect to proposed impacts to state subaqueous lands, wetlands, erosion and sediment control, stormwater management, air impacts and impacts to Chesapeake Bay Preservation Areas. In addition, the FHWA must ensure the project complies with applicable solid and hazardous waste management regulations and Section 106 of the National Historic Preservation Act.

Widening of Russell Road, Marine Corps Base, Quantico –The U.S. Marine Corps proposes to widen the two-lane Russell Road to four lanes between the Marine Federal Credit Union and the Marine Corps Combat Development Command Headquarters on the Quantico Marine Base in Prince William County. A left-turn lane to Building 3300 would also be added. The purpose of the project is to improve peak-hour traffic on the road, which leads to the Base from Interstate 95 and U.S. Route 1. DEQ concurred with the federal consistency determination, giving guidance on avoidance and mitigation of environmental impacts from several agencies. DGIF indicated that Chopawamsic Creek and the Potomac River are both anadromous fish use areas, and recommended a 100-foot buffer around wetlands and along the sides of streams. DCR reported that there is a conservation site for protection of an endangered plant and the bald eagle in the vicinity of Chopawamsic Creek. DEQ provided guidance on mitigation of impacts for any work taking place in or near streams and wetlands. DCR provided guidance on non-point source pollution control highlighting erosion and sediment control, stormwater management, and general permit requirements. DCR indicated, with regard to Chesapeake Bay rules, that there is a conditional exemption for public road projects, provided that the project be in compliance with erosion control and stormwater management requirements or local water quality criteria at least as stringent, that the road be designed to minimize or prevent encroachment into Resource Protection Areas and minimize adverse effects on water quality, and that local governments may exempt all public roads or just those constructed by VDOT. DEQ also provided guidance on protection of air quality from open burning and fugitive dust, and the possible need for permits for fuel-burning machinery, including portable generators.

Heritage Center Parkway –The U.S. Marine Corps proposes to construct an access road, called the Heritage Center Parkway, approximately 0.3 mile in length as a separate entry to the Semper Fidelis Chapel from U.S. Route 1 near the Quantico Marine Base. Ingress to this road would be built about 0.4 mile south of the existing main entry to the Base. The project would include a museum overlook, ten parking spaces, and wheelchair-accessible sidewalks about 300 feet south of the Chapel. The Marine Corps anticipates that the Virginia Department of Transportation and Prince William County would provide turn lanes on Route 1 to allow access to the Parkway. DEQ concurred with the federal consistency determination, giving guidance on avoidance and mitigation of environmental impacts from several agencies. DGIF indicated that an anadromous fish use area was in the vicinity of the project, and provided some general guidance for project work in or near streams. DEQ provided guidance on mitigation of impacts for any work taking place in or near streams and wetlands. DCR provided guidance on non-point source pollution control, highlighting erosion and sediment control, stormwater management, and general permit requirements. DCR indicated, with regard to Chesapeake Bay rules, that there is a conditional exemption for public road projects, provided that the proponents comply with erosion control and stormwater management requirements or local water quality criteria at least as stringent; that the road be designed to minimize or prevent encroachment into Resource Protection Areas and minimize adverse effects on water quality; and that local governments may exempt all public roads or just those constructed by VDOT. DCR agreed with a Marine Corps recommendation that forest clearing should be limited in order to prevent the introduction of invasive vegetation species. DEQ also provided guidance on protection of air quality from open burning and fugitive dust, and the possible need for permits for fuel-burning machinery, including portable generators.

Presquile National Wildlife Refuge – DEQ completed the Commonwealth's coordinated review of a Comprehensive Conservation Plan (CCP), Environmental Assessment and Federal Consistency Determination (FCD) submitted by the U.S. Fish and Wildlife Service (Service). Pursuant to a legal mandate, the Service prepared the CCP to direct its management of the Refuge for the next 15 years. The Refuge occupies an island

covering 1,329 acres in the James River about 20 miles south of Richmond. Two alternatives are explained and analyzed:

- Alternative A, “Current Management,” would continue current management, including current planned, funded, and approved management actions, priorities, and projects.
- Alternative B, “Focus on Species of Conservation Concern,” would combine actions determined to best achieve the purposes, vision, and goals of the Refuge and respond to issues raised in the public scoping effort.

Based on comments from agencies administering all nine enforceable policies of the VCP, DEQ concurred with the determination that the project is consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management Program. Several of the comments gave guidance on the agencies’ respective permitting or CCP approval requirements in case of future activities, and others indicated no effects or no jurisdiction. In discussing other considerations, DEQ mentioned DHR’s need for continued consultation regarding historic resources. DEQ cited DCR’s identification of the sensitive joint vetch, the bald eagle, and the Atlantic sturgeon as species requiring consultation with DGIF or the Service’s Virginia Field Office, as well as surveys by DCR. DEQ’s response reflected DGIF’s earlier suggestion concerning continued management of grassland as such, but indicated no objection to its succession to forestland; the proximity and status of hazardous waste facilities and provided guidance on addressing wastes; and VDH information on drinking water sources and recommendations for drinking water supply approvals.

Field Carrier Landing Practice Operations – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of the Navy (Navy) for improvements to the airfield at the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center Wallops Flight Facility in Accomack County for use as a “touch-and-go” landing facility to simulate aircraft carrier landings. The proposed action would support Field Carrier Landing Practice operations for E-2/C-2 squadrons operating from Naval Station Norfolk Chambers Field in Norfolk, Virginia. The improvements include painting simulated carrier boxes on the existing runway, installing flush-deck lighting, installing five concrete pads (12 feet x 24 feet, 14 feet x 14 feet, 6 feet x 6 feet, 3 feet x 3 feet, and a 3-foot diameter circle), installing electric lines, telephone lines and an Improved Fresnel Lens Optical Landing System, and constructing a Landing Signal Officer workstation. In addition, the Navy is considering the use of the Emporia-Greenville Regional Airport in Greenville and Southampton Counties, Virginia. The Navy is preparing an Environmental Assessment (EA) to evaluate the potential environmental consequences of the proposed action at each facility. Based on DEQ’s coordinated review of the FCD and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ concurs that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained with respect to erosion and sediment control, stormwater management, and air emissions. In addition, the project must comply with applicable solid and hazardous waste requirements and Section 106 of the National Historic Preservation Act.

#### USCG Marine Event Permits

OEIR reviewed 17 marine events permits for the USCG from April 1, 2012 through September 30, 2012: A list of all the projects reviewed follow.

Marine Event Permit for Richmond Rox Endurance Marathon – DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the Coast Guard to issue a CG-4423 Marine Event permit to Richmond Sports, LLC, the event sponsor for the “Richmond Rox Endurance Marathon.” The event is scheduled to take place on September 23, 2012 between 7:00 a.m. and 9:00 a.m. It is a 1.2-mile swim in the James River in Richmond, part of a triathlon. The Coast Guard stated that the event would be conducted in a manner consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program and DEQ concurred. DEQ conveyed VMRC comments, which were that no

permit would be required provided buoys are removed after the race. DEQ-PRO indicated that the proposed event would have no effect on its water permitting, air permitting, or waste management responsibilities. DEQ gave general waste management guidance.

Poquoson Seafood Festival Workboat Race –DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the U. S. Coast Guard. The Coast Guard intends to issue a DG-4423 Permit for Marine Event to the City of Poquoson, the event sponsor, for the Poquoson Seafood Festival and Workboat Race, to be held on Back River near Messick Point on September 30, 2012 from 1:00 p.m. to 4:00 p.m. The Coast Guard will also promulgate a Special Local Regulation for the establishment of a temporary safety zone for the event. The safety zone will include all waters of the Back River in Poquoson, bounded as follows:

- to the north by a line drawn along latitude 37-06-30 N;
- to the south by a line drawn along latitude 37-06-15 N;
- to the east by a line drawn along longitude 076-18-52 W; and
- to the west by a line drawn along longitude 076-19-30 W.

The Special Local Regulation is promulgated to promote safety of life on the navigable waters just before, during, and after the marine event. The Coast Guard stated that the proposed activities are consistent with the Virginia Coastal Zone Management Program (VCP). DEQ concurred that the event would be consistent with the VCP. VMRC indicated that they had no jurisdiction; DHR indicated that the event would not give rise to impacts on historic resources. Other agencies had no comments.

Permit for Marine Event, Hampton Cup Regatta– DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.s. Coast Guard. The Coast Guard intends to issue a marine event permit to the event sponsors of the 86<sup>th</sup> Hampton Cup Regatta, to be held in Mill Creek, adjacent to Fort Monroe on August 11 and 12, from noon to 5:00 p.m. each day. The event sponsors are the City of Hampton, the Hampton Cup Regatta Racing Club, and the Phoebus Civic Association. The event will take place in an area bounded as follows: To the north, a line drawn along latitude 37-01-00; to the east, a line drawn along longitude 076-18-30; to the south, a line parallel with the shoreline adjacent to Fort Monroe; and to the west, a line parallel with the Route 258 (Mercury Boulevard) Bridge. The Coast Guard indicates that the event sponsors will place buoys to mark the racecourse, for a limited time. They are not for general navigational use, and will not display characteristics prescribed for the latter. Docks are already provided along the shoreline. A hydroplane race will take place involving about 75 boats, hydroplanes, and runabouts. The Coast Guard stated that the event will comply with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ concurred with the determination.

Sand Bridge Fireworks Show –DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the Coast Guard for promulgation of regulation for the establishment of a temporary safety zone for the Sand Bridge July 4<sup>th</sup> Fireworks Show, to be enforced between 8:00 p.m. and 10:00 p.m. on July 4, 2012. The safety zone will include all waters of Back Bay, in Virginia Beach. The purpose of the safety zone is to protect mariners and spectators from the hazards associated with fireworks displays, such as accidental discharge, dangerous projectiles, and falling hot embers or other debris. The Coast Guard stated that the proposed activities will have no effect on coastal uses or coastal resources of the Commonwealth and are consistent with the Virginia Coastal Zone Management Program (VCP). Because of the short time frame for review, DEQ concurred with the federal consistency determination but reminded the Coast Guard that agencies administering applicable enforceable policies of the VCP would contact the Coast Guard if the activities were found to be inconsistent with the enforceable policies of the VCP, which are under their jurisdiction. In addition, responding to endangered species information (roseate tern) provided with the FCD, DEQ recommended appropriate coordination with the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries under federal and state law.

Gilmerton Bridge Center Span Float-in – DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the Coast Guard for promulgation of a regulation for the establishment of a temporary safety zone for the Gilmerton Bridge Center Span Float-in. The safety zone would cover a stretch of the Elizabeth River between Eastern Branch at the Campostella Bridge (in Norfolk) to Southern Branch at the Gilmerton Bridge (in Chesapeake), and it would be temporary and moving. The time would also be indefinite (beginning on July 31, 2012 at 6:00 a.m. and ending on August 9, 2012 weather and project completion permitting). The safety zone would facilitate removal of the existing bascule span of the Gilmerton Bridge and installation of a new center lift span. The safety zone will involve limiting access to the area for public safety purposes (FCD, page 1). DEQ concurred with the Coast Guard’s determination that the proposed activities will have no effect on coastal uses or coastal resources of the Commonwealth and are consistent with the Virginia Coastal Zone Management Program.

Ocean Park Civic League July 4<sup>th</sup> Fireworks Show – DEQ completed a coordinated review of a federal consistency determination (FCD) submitted by the Coast Guard for promulgation of a regulation for the establishment of a temporary safety zone for the Ocean Park July 4<sup>th</sup> Fireworks Show, to be enforced between 9:00 p.m. and 10:00 p.m. on July 4, 2012. The safety zone will include all waters of the Chesapeake Bay near Chicks Beach (west of Lynnhaven Inlet). The purpose of the safety zone is to protect mariners and spectators from the hazards associated with fireworks displays, such as accidental discharge, dangerous projectiles, and falling hot embers or other debris. The Coast Guard stated that the proposed activities will have no effect on coastal uses or coastal resources of the Commonwealth and are consistent with the Virginia Coastal Zone Management Program (VCP). Because of the short time frame for the review, DEQ concurred with the federal consistency determination but reminded the Coast Guard that agencies administering applicable enforceable policies of the VCP would contact the Coast Guard if the activities were found to be inconsistent with the enforceable policies of the VCP administered by them. In addition, responding to threatened species information (piping plover) provided with the FCD, DEQ recommended appropriate coordination with the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries under federal and state law.

Chincoteague Volunteer Fire Company Wild Pony Swim – The Coast Guard intends to promulgate a regulation and issue a marine event permit for a safety zone, to be enforced on July 25 and July 27, 2012 from 5:00 a.m. to 2:00 p.m. each day. The event is the Chincoteague Fire Company Wild Pony Swim. The event will take place on the Assateague Channel between the eastern side of Chincoteague Island and the western side of Assateague Island. The Coast Guard will place 11 yellow unlighted buoys to mark the limits of the swim zone, and five orange and white “No Wake” zone buoys to assist with spectator watercraft speed. The buoys will be established for a limited duration and will not appear the same as for Intracoastal Waterway markers. Vessel traffic will be restricted during the event. A Special Local Regulation, #11, has been established to promote safety of life on the navigable waters before, during, and just after the event. The Coast Guard anticipates approximately 500 spectator boats and as many as 50,000 spectators along the shoreline, and that approximately 150 to 175 Assateague ponies will make the swim. The Coast Guard states that the proposed activities will be consistent with the Virginia Coastal Zone Management Program. DEQ concurred. The VMRC indicated no impacts on subaqueous lands, and no permit required. DEQ-TRO indicated that no water permits (point source (VPDES) or Virginia Water Protection (VWP)) would be required. DHR indicated that historic structures and resources would not be affected.

Richmond-Essex Counties Fourth of July Fireworks Event: The Coast Guard intends to promulgate a regulation for the establishment of a temporary safety zone for the Richmond-Essex Counties Fourth of July Fireworks Event, to be enforced between 9:00 PM and 10:00 PM on June 30, 2012. The safety zone will include all waters of the Rappahannock River within a 400-yard radius of approximate position 37-57-12N/076-49-12W on the south shoreline at Jones Point, about 2 miles downstream of the U.S. Route 360 bridge near Tappahannock. The purpose of the safety zone is to protect mariners and spectators from the hazards associated with fireworks

displays, such as accidental discharge, dangerous projectiles, and falling hot embers or other debris. The Coast Guard stated that the proposed activities are consistent with the Virginia Coastal Zone Management Program. DEQ concurred with the determination. VMRC indicated that no permit would be required, and that subaqueous lands under its jurisdiction would not be affected by the event. DHR indicated that the event would have no impacts on historic structures or archaeological resources listed in or eligible for the National Register of Historic Places or the Virginia Landmarks Register.

Isle of Wight Fourth of July Fireworks Event: The Coast Guard intends to promulgate a regulation to establish a temporary safety zone for the Isle of Wight Fourth of July Fireworks Event, to be enforced between 9:00 PM and 10:00 PM on July 3, 2012. The safety zone will include all waters of the Pagan River within a 420-foot radius of approximate position 36-59-18N/076-37-45W near Smithfield. The purpose of the safety zone is to protect mariners and spectators from the hazards associated with fireworks displays, such as accidental discharge, dangerous projectiles, and falling hot embers or other debris. The Coast Guard states that the proposed activities will be consistent with the Virginia Coastal Zone Management Program. DEQ concurred with the determination. VMRC indicated that no permit would be required. DHR indicated that the event would have no impacts on historic structures or archaeological resources listed in or eligible for the National Register of Historic Places or the Virginia Landmarks Register.

USCG Safety Zone, Town of Cape Charles, Fireworks: The Coast Guard intends to promulgate a regulation to establish a safety zone for the Town of Cape Charles Fireworks Show, scheduled for July 4, 2012 from 9:00 p.m. to 10:00 p.m. The safety zone is needed to protect mariners and spectators from fireworks display hazards such as accidental discharge, falling embers or debris, or dangerous projectiles. The safety zone will include all waters of Cape Charles Harbor within a 375-foot radius of 37-15-46 N/076-01-30W. The Coast Guard stated that the event will have no effect on the enforceable policies of the Virginia Coastal Zone Management Program (VCP). DEQ concurred with the consistency determination, reporting reviewing agencies' assessments that the event would have no impacts on, and require no permits under, the enforceable policies of the VCP. At the suggestion of VMRC, DEQ contacted the Health Department and the owner of a nearby oyster ground lease; the Health Department indicated no concerns and the owner made no comments.

Rocketts Landing Spring Regatta - The Coast Guard proposes to issue a CG-4423 Permit for Marine Event to the Virginia Commonwealth University Crew Club, the event sponsor for the Rocketts Landing Sprint Regatta, to be held in the James River in Richmond on June 23, 2012 between 9 AM and 2 PM. Approximately 40 boats, all scull type without mechanical propulsion, are expected to participate. Rocketts Landing Boat House will serve as the entry point; the race will take place between positions 37-30-02 N/077-25-16 W and 37-31-12 N/077-25-02 W. DEQ concurred with the federal consistency determination and conveyed the comments from other agencies that no permits would be required. DEQ recommended that buoys, if placed in the waterway during the event, should be removed afterwards.

Safety Zone for Yorktown Parade of Sail - The Coast Guard intends to establish a special local regulation and issue a CG-4423 Permit for Marine Event to the York County Recreation, Parks, and Tourism for the Yorktown Parade of Sail. The event, involving approximately 200 boats, will take place on June 2, 2012 from noon to 2 PM in the York River just east of the Coleman Memorial Bridge between York and Gloucester Counties. The safety zone is for the safety of life on navigable waters immediately before, during, and after the event. The safety zone will include all waters of the York River bounded by the north and south shores, bounded to the west by the Coleman Bridge and to the east by a line from the U.S. Coast Guard pier to Gaines Point in Gloucester County. The Coast Guard stated that the establishment of the safety zone and the event will have no effects on Virginia's coastal uses or coastal resources. DEQ concurred with the federal consistency determination. According to the responses of state agencies, there were no permit requirements, no coordination requirements, and no concerns relative to environmental quality arising from the proposed events.

Safety Zone for 12<sup>th</sup> Annual Hampton Blackbeard Festival - The Coast Guard intends to issue a CG-4423 Permit for Marine Event to the City of Hampton and the Virginia Air and Space Center, the event sponsors for the 12<sup>th</sup> annual Hampton Blackbeard Festival. The event, involving a few pirate ships re-enacting pirate ship battles, will take place on June 1-3, 2012 from noon to 4:30 PM on the Hampton River between Settlers Landing Road Bridge and the Hampton Yacht Club Docks. Buoys will be placed to mark spectator vessel anchorages; these are established for a limited time and not for general navigational use; they will not display the characteristics prescribed for later or Intracoastal Waterway systems. The Coast Guard stated that the establishment of the safety zone and the event will have no coastal effects. DEQ concurred with the federal consistency determination. According to the responses of state agencies, there were no permit requirements, no coordination requirements, and no concerns relative to environmental quality arising from the proposed events.

Safety Zone for Cavalier Golf and Yacht Club Independence Day Fireworks, - The Coast Guard intends to promulgate a regulation to establish a safety zone for the Cavalier Golf & Yacht Club Independence Fireworks show. The show is to be held on July 1, 2012 from 9 PM to 11 PM. The safety zone is needed for the protection of mariners and spectators from hazards associated with the fireworks display, such as accidental discharge of fireworks, dangerous projectiles, and falling debris or hot embers. Entry to, or movement within the safety zone, will be prohibited during the enforcement period. The safety zone will include all waters of Broad Bay within a 400-yard radius of approximate position 36-52-08 N/076-00-46W. Broad Bay is on the shoreline of Virginia Beach near the Cavalier Golf & Yacht Club. The Coast Guard indicated that the establishment of the safety zone and the event will have no effects on Virginia's coastal uses or coastal resources. DEQ concurred with the federal consistency determination. According to the responses of state agencies, there were no permit requirements, no coordination requirements, and no concerns relative to environmental quality arising from the proposed events.

Chesapeake Bay Workboat Race – The Coast Guard intends to establish a special local regulation and issue a CG-4423 Permit for Marine Event to the Chesapeake Bay Watermen's Association for the 2012 Chesapeake Bay Workboat Race. The race is to be held on June 24, 2012 from 11 AM to 5 PM in the Back River near Messick Point, in the city of Poquoson, Virginia. The safety zone is for the safety of life on navigable waters immediately before, during, and after the event. The coordinates of the safety zone will be:

- A line to the north along 37-06-30 N,
- A line to the south along 37-16-15 N,
- A line to the east along 076-18-52 W,
- A line to the west along 076-19-30 W.

DEQ concurred with the federal consistency determination. VMRC indicated that jurisdictional impacts would be reviewed during the Joint Permit Application process. DEQ-TRO expressed no opinion on whether its point source and wetlands permit programs would apply to the proposed event. DHR indicated that the event would have no impacts on historic structures or archaeological resources.

- A line to the north along 37-06-30 N,
- A line to the south along 37-16-15 N,
- A line to the east along 076-18-52 W,
- A line to the west along 076-19-30 W.

DEQ concurred with the federal consistency determination. VMRC indicated that jurisdictional impacts would be reviewed during the Joint Permit Application process. DEQ-TRO expressed no opinion on whether its point source and wetlands permit programs would apply to the proposed event. DHR indicated that the event would have no impacts on historic structures or archaeological resources.

Memorial Day Rocketts Red Glare Fireworks Show: DEQ reviewed the proposed promulgation of a regulation to establish a safety zone along the lower James River in Richmond for a “Memorial Day Fireworks Show” to be held on May 27, 2012 from 8:00 PM to 10:00 PM. The safety zone, an area with a 420-foot radius from the position 36-57-21 N/076-15-00 W, will protect mariners and spectators from the hazards associated with the fireworks display. Entry into the safety zone will be prohibited during the show. DEQ concurred with the federal consistency determination, and recommended that the event sponsors ensure the safe disposal of fireworks waste. DEQ indicated that the event would have no effects on DEQ regulatory programs in air pollution control, water pollution control, wetlands protection, or management of solid or hazardous wastes.

Mattaponi Madness Drag Boat Event The Coast Guard intends to promulgate a Special Local Regulation and issue a marine event permit to the Mattaponi Volunteer Rescue Squad, the event sponsor, for the Mattaponi Madness Drag Boat Event. The event is scheduled to take place on August 25 and 26 from 10:00 a.m. to 6:00 p.m., along the Mattaponi River adjacent to the Rainbow Acres Campground in King and Queen County. The event sponsors will place three buoys and a starting platform in the River. Approximately 30 boats are expected to participate in the drag boat race. The Coast Guard stated that the event will be conducted in a manner consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). DEQ concurred since none of the enforceable policies of the VCP would be adversely affected. DCR indicated that although there are natural heritage resources in the vicinity of the event, the scope of the event and the distance to the resources make it unlikely that the resources will be affected. DCR provided sources of extra information on natural heritage resources and wildlife resources.

## **II. Residual Category**

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

Layton Hall Apartments –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Department of Housing and Urban Development (HUD) for the construction of the proposed Layton Hall Apartments in the City of Fairfax. HUD proposes to provide mortgage insurance under CFR Section 221(d)(4) to Red Mortgage Capital, LLC for the construction. The Section 221(d)(4) program provides mortgage insurance for multifamily rental housing for moderate-income families. The project site currently consists of eleven 3-story apartment structures containing a total of 110 residential dwelling units constructed in 1961 on 7.804 acres of land. The site includes a playground, picnic areas, storage shed, landscaped regions, and asphalt parking areas. The existing apartment buildings will be demolished for the construction of a seven-building, 325-unit multi-family apartment complex. Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to wetlands impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and local requirements for the connections to water and sewer systems.

White Stone Volunteer Fire Department, New Firehouse Construction –DEQ completed a coordinated review of an federal consistency determination (FCD) for the U.S. Department of Agriculture-Rural Development’s (USDA-RD) proposal to provide funding under the Community Facilities Direct and Guaranteed Loan Program to the White Stone Volunteer Fire Department, a private non-profit organization, for the construction of a new fire house. The project site is located at 579 Chesapeake Drive (state route 200, near its intersection with state route 3) in the Town of White Stone, which is in Lancaster County, Virginia. The Community Facilities Program can make and guarantee loans to develop essential community facilities in rural areas and towns of up to 20,000 in population. Loans and guarantees are available to public entities such as municipalities, counties, parishes, boroughs, and special-purpose districts, as well as to non-profit corporations and tribal governments.

The White Stone Fire Department proposes to build a firehouse and parking lot on a previously cleared field. The fire house, a one-story structure, would cover approximately 11,963 square feet and consist of a general purpose room, kitchen, two larger rest rooms and two smaller ones, a general purpose room, and a truck bay. A parking lot for 56 spaces is also proposed, with overflow parking on surrounding grass. USDA-RD stated that the project would be consistent with the Virginia Coastal Zone Management Program (VCP). DEQ concurred with the USDA federal consistency determination. DCR provided comments and reminders on erosion control, stormwater management, and Chesapeake Bay requirements, and recommendations on consultation regarding the peregrine falcon, a listed species found within two miles of the project site. DGIF indicated that it has no concerns regarding that species. DEQ reminded the USDA of air pollution control requirements and waste management requirements. With regard to fisheries and wetlands, DEQ and DGIF recommended avoidance of impacts to forests, streams, and wetlands, and incorporating green space into project design.

Claiborne Square Phase II –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the Better Housing Coalition (BHC) which intends to apply for Low Income Housing Tax Credits (26 U.S.C. § 42) through the U.S. Department of Treasury and unspecified funding from the U.S. Department of Housing and Urban Development (HUD) for the construction of Claiborne Square Phase II, an elderly assisted living complex in the City of Petersburg. Phase I consisted of the construction of a one-story 45,991-square foot, 47-unit complex on 1.896 acres, including a stormwater management facility, parking lots, sidewalks and landscaped areas (previously reviewed under DEQ# 09-221F). Phase II will consist of the construction of ten single family, 2 and 3-unit attached dwellings and 8- and 10-unit apartment dwellings along with an access drive and two common parking lots. In addition, stormwater management facilities will consist of detention and bio filtration Best Management Practices (BMPs). Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to anticipated erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements, potential impacts to historic resources under Section 106 of the National Historic Preservation Act, potential impacts to the green floater a listed species under the Virginia Endangered Species Act and local City of Petersburg ordinances pertaining to water and sewer connections.

Ironbound Square Redevelopment –DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD) which intends to provide funding under the Self-help Homeownership Opportunity Program (SHOP) to the Peninsula and Greater Williamsburg Habitat for Humanity for the Ironbound Square Redevelopment Project in James City County. The project involves the redevelopment of two vacant lots (Lot 2 and Lot 37) totaling 0.32 acres with single-family residential structures, approximately 1,315 square feet in size. One project site (Lot 2) was formerly developed and utilized for residential purposes until 2011, when the dwelling was demolished. The other project site (Lot 37) had been utilized as wooded land until 2011 when the site was cleared. The structures will include three bedrooms, two full bathrooms, a living room, dining room, and kitchen areas. Wooden decks are proposed on the exterior of each house, and landscaped areas and asphalt-paved driveways are also proposed. Based on DEQ’s review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to anticipated erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and local James City County ordinances pertaining to water and sewer connections.

The Grove at the Arboretum – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD) which intends to provide mortgage insurance through the Condominium Ownership Mortgage Insurance program to The Dragas Companies for the construction of The Grove at the Arboretum, a proposed residential development located off

Green Tree Road in the City of Chesapeake. The project involves the construction of 112 two-story condominiums, pool, clubhouse, pond and walking trails on a 10.75-acre site. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to possible wetland impacts, erosion and sediment control, stormwater management, and air emissions. In addition, the applicant must comply with applicable solid and hazardous waste requirements, local water and sewer authorizations, and impacts to the local road network.

Pine Tree Apartments – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD), which intends to provide mortgage insurance under HUD Section 221(d)(4) to Berkadia Commercial Mortgage, LLC, for the construction of the proposed Pine Tree Apartments in the City of Petersburg. The Section 221(d)(4) program provides mortgage insurance for multifamily rental housing for moderate-income families. The proposed Pine Tree Apartments, a mixed-use community, includes the construction of a two-building, 48-unit multi-family apartment complex. The existing property consists of approximately 2.08 acres of undeveloped wooded land. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to erosion and sediment control, stormwater management, air emission and any impacts to locally designated Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and meet local requirements for connection of the facility to local water supply and sanitary sewer systems.

Hanover Habitat for Humanity Single Family Home – DEQ completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD) which intends to provide funding under the Self-help Homeownership Opportunity Program (SHOP) to the Hanover Habitat for Humanity. The project will consist of the construction of a 1,500 square foot residence on 1.77 acres of undeveloped property located on Pleasant Grove Road. Other project activities include the installation of a water supply well, septic system and landscaping to include an entrance driveway. Based on DEQ's review of the FCD and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to erosion and sediment control, stormwater management, air emission and any impacts to locally designated Chesapeake Bay Preservation Areas. In addition, the applicant must comply with applicable solid and hazardous waste requirements and authorizations to construct an onsite septic system and domestic water well.

Alexandria Neighborhood Health Services-Renovation of Clinic – DEQ completed a coordinated review of a federal consistency determination (FCD) submitted as a residual category of Subpart C of the federal consistency regulations. The Alexandria Neighborhood Health Services, Inc., a non-profit organization (ANHSI), has applied to the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, for grant funds to aid in undertaking renovation of the interior of its existing clinic located at 2 East Glebe Road in Alexandria. The purpose of the renovation is to provide a more efficient space for providers and patients of ANHSI. Capital Projects Management Firm is assisting ANHSI in developing this project. HRSA has requested that ANHSI obtain DEQ's concurrence with its FCD. DEQ concurred based on the scope of the project which is limited to interior renovations and therefore would not affect the enforceable policies of the Virginia Coastal Zone Management Program. DEQ provided guidance for coordination that might be necessary, prior to the renovation, if asbestos-containing materials, lead-based paints, or historic resources are present. DEQ also gave guidance and coordination information for energy and water conservation, pollution prevention, and pest control.

Renovation of 2809 North Avenue Building – DEQ completed the coordinated review of a federal consistency determination submitted by the Capital Area Health Network (Network), a non-profit organization. The Network has applied to the Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, for grant funds to aid in undertaking renovation of a building at 2809 North Avenue in Richmond. The Network plans to renovate the building in order to continue as well as to enhance its provision of medical services to the residents of the area. The 14,000-square foot building sits on approximately 2.5 acres of land with an adjoining parking lot. The Network proposes to reconstruct the interior of the building, ensuring that no asbestos is present, and preserve and update the building exterior. Paving of the parking lot is planned once renovation of the building is complete. HRSA requested that the Network obtain DEQ's concurrence with its FCD. DEQ concurred with the FCD. DEQ provided general guidance on asbestos and lead-based paint precautions and consultation; energy conservation; water conservation; consultation with DHR in case the building (built before 1970) is old enough to merit consideration for National Register of Historic Places; and management of wastes.

### **III. Federal Activities (Permits, Licenses and Approval)**

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

Queens Sound Public Boat Ramp and Access Road – DEQ completed a coordinated review of a federal consistency certification (FCC) submitted by Accomack County for improvements along a road to the Queens Sound public boat ramp, operated by the county. The county submitted the FCC because it must obtain a permit from the U.S. Army Corps of Engineers. The county plans to repair an eroded road embankment with riprap stone revetment, affecting 225 feet of shoreline. The proposed project area is partially vegetated with emergent wetlands. Approximately 878 square feet of the emergent wetland will be affected. Based on a review of the FCC and the comments submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained.

Obstruction Removal-Tree Clearing–DEQ completed the coordinated review of a Short Environmental Assessment Form for Airport Development Projects for obstruction removal (tree clearing) at the approach to Runway 33 (including the Geslois and Horton properties) at the Stafford Regional Airport in Stafford County. The Airport Layout Plan (ALP), which was last updated in 1993, denotes a 50:1 approach on the Runway 33 end (south side) of the runway. In order to achieve this 50:1 Precision Approach, the obstructions to the 50:1 approach surface as well as the Threshold Siting Surface must be removed. This will allow the glideslope, which provides vertical guidance to approaching aircraft, to be turned on. Property and aviation easements on the Geslois and Horton properties have been acquired to enable the Airport Authority to remove Federal Aviation Regulation (FAR) Part 77 tree obstructions from approximately 38.7 acres of land in the approach to Runway 33. It has been determined that 0.056 acres of wetland will be affected by the obstruction removal project. Any tree removal within this 0.056-acre area will not include the removal of stumps to minimize the ground disturbance. Based on DEQ's review of the EA and the comments submitted by review agencies, DEQ has no objections to the proposed project provided it complies with all applicable permits and authorizations with respect to impacts to wetlands and water quality, erosion and sediment control, stormwater management, impacts to Chesapeake Bay Preservation Areas, air emission, and solid and hazardous waste management. Virginia Department of Forestry (DOF) finds that this project will impact the forest resources of the Commonwealth since the plan requires the clearing of 37.8 acres of timberland which will result in the conversion of land from forestland to grassland. This conversion will create the loss of commercially valuable timberland and the associated environmental benefits and services provided by forestland. DOF recommends voluntary mitigation for the loss of this forestland.

Bravo Concourse Security Checkpoint Expansion –DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by the Norfolk Airport Authority for the expansion of the existing Bravo Concourse Security Checkpoint at the Norfolk International Airport in the City of Norfolk. The

proposed project will include the expansion of the existing four-lane checkpoint from an area of 9,000 square feet to an area of 17,500 square feet to provide additional space to accommodate existing Transportation Safety Administration (TSA) screening equipment and to provide room for the long-term growth and expansion of the checkpoint. The improvements will take place over the existing concrete service yard. Demolition will include the removal of the existing checkpoint and concrete pavement within the service yard to accommodate the relocation of utilities. Construction will include erection of steel framing and components, relocation of utilities, replacement of concrete pavement within the service yard, and expansion of the service yard by approximately 0.06 acre for relocation and consolidation of existing trash and recycling containers. Based on DEQ's review of the FCC and the comments submitted by review agencies, DEQ concurs that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and the requirements of Section 106 of the national Historic Preservation Act.

Columbia Gas Transmission Line Improvements DEQ completed a coordinated review of a federal consistency certification (FCC) submitted by Columbia Gas Transmission. Columbia Gas Transmission is applying to the Federal Energy Regulatory Commission (FERC) for a license to make improvements to an existing gas pipeline located in Isle of Wight County. A tap and 27 feet of 2-inch pipe will be installed at a measurement station. In addition, measurement, flow control and gas conditioning equipment will be installed. The site is within a maintained right-of-way. Approximately 1,600 square feet of land will be disturbed. According to the FCC, the project would be consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP) (formerly called the Virginia Coastal Resources Management Program). Based on a review of the FCC and the comments submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained.

Columbia Gas Transmission Line – DEQ completed the coordinated review of federal consistency certification (FCC) for Columbia Gas application to the Federal Energy Regulatory Commission (FERC) for a license to relocate a gas line to support a facility at Historic Sully Way in Fairfax County. Approximately 2,600 feet of 20-inch diameter pipe will be installed in a new 30-foot wide right-of-way. Approximately 9.6 acres of land will be disturbed. The project site is under construction by a commercial developer and is void of trees. According to the FCC, the project would be consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Based on the comments submitted by reviewers, DEQ concurred with the FCC.

Richmond International Airport 2010 Master Plan Projects –DEQ completed the coordinated review of an Environmental Assessment (EA) and Federal Consistency Certification (FCC) submitted by the Capital Region Airport Commission (Airport Commission) for the implementation of a number of 2010 Master Plan projects at Richmond International Airport (RIC) in Henrico County. Projects that are required to continue to comply with Federal Aviation Administration (FAA) design standards include: Taxiway 'M' reconstruction and realignment; Runway 16/34 rehabilitation; and obstruction removal. A project needed to replace and/or improve existing physical infrastructure at or near the end of its useful life includes improvements to airfield drainage. Projects required to accommodate forecast demands include Concourse A expansion, Remain-Over-Night (RON) area expansion, belly cargo relocation, employee parking expansion, FBI Complex, and East Side roadway and utilities project. Based on the information in the EA and comments from reviewers, the Commonwealth has no objection to the proposal provided activities are performed in accordance with regulatory requirements and recommendations affecting air quality, water quality, important farmland, wetlands, historic structures, archaeological resources, wildlife, or forest resources. In addition, DEQ, on behalf of the Commonwealth concurs that the proposed projects are consistent with the enforceable policies of the Virginia Coastal Zone Management

Runway 33 Obstruction Removal –DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by the Stafford Regional Airport Authority for the removal of obstructions to the approach to Runway 33 at the Stafford Regional Airport in Stafford County. To achieve this 50:1 Precision Approach to Runway 33, the obstructions to the 50:1 approach surface as well as the Threshold Siting Surface must be removed. Property and avigation easements have been acquired to enable the Authority to remove Federal Aviation Regulation (FAR) Part 77 tree obstructions from approximately 38.7 acres of property in the approach to Runway 33. It has been determined that 0.056 acre of wetland will be impacted by the obstruction removal project. Any tree removal within this 0.056-acre area of wetland will leave the stumps in place to minimize the ground disturbance. In non-wetland areas, obstruction removal will entail the removal of the trees and stumps. Based on DEQ's review of the FCC and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to anticipated wetland impacts, erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements, potential impacts to historic resources under Section 106 of the National Historic Preservation Act and local grading permit issued by Stafford County.

Hummel Airport AWOS Installation DEQ reviewed the proposed installation of an Automated Weather Observing System III (AWOS-III) at the Hummel Airport, which is at 310 Plainview Road, Topping (near Saluda), in Middlesex County. As defined by the Federal Aviation Administration, AWOS is a suite of weather sensors which measure, collect, and disseminate weather data to help meteorologists, pilots, and flight dispatchers prepare and monitor forecasts, plan flight routes, and provide necessary information for correct take-offs and landings. As part of this project, the existing weather station will be dismantled, and the new AWOS-III installed at the same location. The Middlesex County Airport Committee has submitted a federal consistency certification that finds the proposed project consistent with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ concurred with the federal consistency certification, pointing out applicable requirements relative to erosion and stormwater controls and air quality requirements pertaining to open burning and fugitive dust control. In addition, DEQ indicated the interest of the Department of Historic Resources in direct consultation with the applicant or the Federal Aviation Administration. Airport planning consultation was offered by the Department of Aviation as part of the review.

Security Gates and Fence Improvements –DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by the Capital Region Airport Commission (Airport Commission) for improvements to security gate and fencing at the Richmond International Airport in Henrico County. The proposed improvements include upgrades to three perimeter security gates and two sections of security fence. Project elements include: Gate N5-remove existing swing gate, install new automatic slide gate, install fiber optic control, add area lighting and security cameras; Gate N15-relocate existing automatic gate, approximately 50 feet west, reconnect existing fiber optic control, and add area lighting and security camera; Gate S5-upgrade existing automatic gate, install fiber optic control from the AMF to gate, add area lighting and security cameras; South Fence-remove approximately 5,000 feet of existing fence and install a new 8-foot Aircraft Operations Area (AOA) fence along Portugee Road between the Airport Maintenance Facility and the Army National Guard facility; and North Fence-remove approximately 1,600 feet of existing fence and install a new 8-foot AOA fence. Based on DEQ's review of the FCC and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and Section 106 of the National Historic Preservation Act.

Richmond International Airport 2010 Master Plan Projects –DEQ completed the coordinated review of an Environmental Assessment (EA) and Federal Consistency Certification (FCC) submitted by the Capital Region

Airport Commission (Airport Commission) for the implementation of a number of 2010 Master Plan projects at Richmond International Airport (RIC) in Henrico County. Projects that are required to continue to comply with Federal Aviation Administration (FAA) design standards include: Taxiway 'M' reconstruction and realignment; Runway 16/34 rehabilitation; and obstruction removal. A project needed to replace and/or improve existing physical infrastructure at or near the end of its useful life includes improvements to airfield drainage. Projects required to accommodate forecast demands include Concourse A expansion, Remain-Over-Night (RON) area expansion, belly cargo relocation, employee parking expansion, FBI Complex, and East Side roadway and utilities project. Based on the information in the EA and comments from reviewers, the Commonwealth has no objection to the proposal provided activities are performed in accordance with regulatory requirements and recommendations affecting air quality, water quality, important farmland, wetlands, historic structures, archaeological resources, wildlife, or forest resources. In addition, DEQ, on behalf of the Commonwealth concurs that the proposed projects are consistent with the enforceable policies of the Virginia Coastal Zone Management

LN VM-109 Gateway Project – DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by Columbia Gas Transmission, LLC (Columbia) for the construction of the LN VM-109 Gateway Project in Chesterfield County. The project consists of the installation of 1.3 miles of new 24-inch outside diameter (OD) natural gas pipeline as an extension to the existing Line VM-109. The new loop will be installed parallel to an existing 24-inch natural gas pipeline (Line VM-108) within the existing, maintained 60-foot wide right-of-way (ROW). Additional project components include two access roads, one proposed staging area, and two proposed wareyard/pipeyard areas. The new loop is designed to provide an additional 15 thousand decatherms per day (MDth/d) of transportation capacity to existing Points of Delivery with Columbia Gas of Virginia and Virginia Natural Gas from Columbia's existing interconnect with Transcontinental Gas Pipe Line Corporation at Boswells Tavern. Based on DEQ's review of the FCC and the comments submitted by review agencies, DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and authorizations are obtained with respect to surface water and wetland impacts, erosion and sediment control, stormwater management, air emission and any impacts to locally designated Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements and Section 106 of the National Historic Preservation Act.

Middle Peninsula Regional Airport: Eastern Corporate Complex – DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by the Middle Peninsula Regional Airport Authority ("Authority"). The Authority proposes to lease land at the Middle Peninsula Regional Airport (formerly the West Point Municipal Airport) to a company that will construct a headquarters building complex and aviation hangar. The company, Fulcrum, will undertake aircraft maintenance and provide integration of specialized weaponry and avionics and other services for military and civilian special operations personnel. The projects will include two clear-span hangars, an office, a shop, and a storage building as well as two aprons and taxiways for airplane parking, automobile parking, and an access road. The complex will cover approximately 5.07 acres of land area. The Authority states that the proposed project will be in compliance with the enforceable policies of Virginia's Coastal Zone Management Program (VCP). DEQ concurred with the federal consistency certification after resolving issues raised by state agencies. On the basis of comments from the Department of Conservation's Division of Stormwater Management, Local Implementation (the office which administers the Chesapeake Bay Preservation Act for DCR), DEQ indicated to the Authority that the information originally submitted was insufficient in that it did not indicate exact project placement in relation to Chesapeake Bay Resource Preservation Areas (RPA) and did not include an on-site delineation of wetlands and related RPA features such as a required buffer. The Authority submitted additional information and made commitments not to construct within the RPA. DCR interpreted these commitments to mean no land disturbance, installation of impervious cover, or any clearing within the RPA. The best management practices outfall, being a water-dependent use, is the only exception to this RPA commitment.

Staples Mill Marketplace –DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by Staples Mill Marketplace, LLC for the construction of the Staples Mill Marketplace project in Henrico County. The U.S. Army Corps of Engineers (Corps) is reviewing an application from Staples Mill Marketplace, LLC for a Section 404 Clean Water Act individual permit for proposed jurisdictional impacts to Waters of the United States (WOUS) from the proposed construction of the project. The project is located adjacent to the intersection of Staples Mill Road and Hungary Spring Road and will include the construction of: two anchor retail tenants; five road front parcels; associated parking; and Best Management Practices (BMPs) for the treatment of stormwater runoff. The 31.07-acre site is currently undeveloped and contains approximately 8.02 acres of non-tidal jurisdictional WOUS. The proposed work will result in permanent impacts to 5.55 acres of palustrine forested wetlands (PFO), 192 linear feet (LF) (0.01 acres) of stream channel, and 696 LF (0.05 acres) of jurisdictional ditch, as well as 0.34 acres of temporary impacts to PFO. Based on DEQ’s review of the FCC and the comments submitted by review agencies, DEQ concurs that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided construction complies with the conditions of its Virginia Water Protection Permit (#11-0526) and all applicable permits and authorizations are obtained with respect to erosion and sediment control, stormwater management, air emission and impacts to Chesapeake Bay Preservation Areas. In addition, the project must comply with applicable solid and hazardous waste requirements.

Security Perimeter Road Improvements –DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by the Capital Region Airport Commission for improvements to a security perimeter road at Richmond International Airport located in Henrico County. The proposed project will include improvements to the existing perimeter road and construction of approximately 10,000 feet of new security roadway section. The project elements include constructing a new perimeter security roadway from the eastside apron, south, around the Runway 25 RSA/ROFA to the existing service road located south of the Runway 16 LOC, paving the existing perimeter road from ARNG taxiway to Gate S2 constructing a new perimeter security roadway on the west side of Taxiway “L” from old Taxiway “S”, south, to ARNG taxiway, repairing pavement as needed and overlaying the existing service road (old Taxiway “S”) from Taxiway “L” to Airport Maintenance Facility (AMF), installing roadway drainage as needed and installing roadway marking and signage as needed. In addition, the improvements include the installation of new 8-foot AOA fence (approximately 1,400 feet) adjacent to the new perimeter road (East Fence Installation). Based on DEQ’s review of the FCC and the comments submitted by review agencies, DEQ concurs that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided construction complies with all applicable permits and authorizations with respect to erosion and sediment control, stormwater management, and air emission. In addition, the project must comply with applicable solid and hazardous waste requirements.

Princess Anne WMA Canal Maintenance Dredge - DEQ completed a coordinated review of a federal consistency certification (FCC) submitted by the Department of Game and Inland Fisheries (DGIF). The FCC is for a project at the entrance to Back Bay from the Princess Anne Wildlife Management Area (WMA) boat launch facility. The project site is located in the City of Virginia Beach. The project includes dredging and replacement of jetties at the canal entrance to Back Bay to protect the mouth of the canal and improve safety of navigation for hunters and fishermen. DGIF will use funds from the U.S. Fish and Wildlife Service to implement the project.

DGIF has obtained permission from an adjacent property owner to dispose of dredge material within an approved upland area. According to the FCC, the project would be consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). The resource agencies that are responsible for the administration of the enforceable policies of the VCP generally agree with the findings of the FCC. Based on our review of the FCC and the comments submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained.

Pipeline Improvements by Columbia Gas Transmission –DEQ conducted a coordinated review of a federal consistency certification (FCC) submitted on behalf of Columbia Gas Transmission. Columbia Gas is applying to the Federal Energy Regulatory Commission (FERC) for a license to make improvements to an existing gas pipeline within an existing compressor station located in the City of Hopewell. A tap and 25 feet of a 6-inch pipe will be installed at the station. In addition, measurement, flow control and gas conditioning equipment will be installed. Approximately 1,600 square feet of land will be disturbed. No wetlands, streams or trees will be affected by the proposed project. According to the FCC, the project would be consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). Based on a review of the FCC and the comments submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained.

#### **IV. Federal Funds**

DEQ completed the review of 40 projects from April 1, 2012 to September 30, 2012 that were submitted under 15 CFR, Part 930, Subpart F for federal financial assistance to local governments. The projects break out as follows:

- 17 home rehabilitations/weatherizations
- 5 multifamily apartment redevelopments
- 2 demolitions of blighted property
- 3 community park improvements
- 2 wastewater collection system improvements
- 2 VIMS EPA grant applications
- 1 community center rehabilitation
- 1 land acquisition for housing
- 1 new home construction
- 1 downtown improvement
- 1 local hazard mitigation
- 1 Trail Grant project
- 1 Land and Water Conservation Fund project
- 1 water line construction
- 1 drainage improvement

Use of Voluntary Public Access HIP Funds – DEQ completed a coordinated review of final programmatic environmental assessment (PEA) submitted by the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) with the Department of Game and Inland Fisheries (DGIF) as a sponsoring agency. The PEA proposes the use of funds to increase the amount of land available for access by the public for wildlife-dependent recreation, such as hunting, fishing and wildlife watching, and improve habitat on privately held lands. The USDA FSA and DGIF plan to use Voluntary Public Access and Habitat Incentive Program grant funds of \$1.42 million during a three-year period to expand the Virginia Public Access Lands for Sportsmen program. The funds would provide annual incentive payments to eligible private landowners for negotiated leases, improve habitat on portions of newly enrolled land, contract an annual survey as a basis for targeting funds and expand the outreach program. In part, the funds would be used to fund riparian and in-stream restoration on private lands. Based on comments submitted by reviewers, DEQ has no objection to the proposed action in the PEA. DEQ encourages the USDA FSA to submit site-specific documents for review to ensure compliance with the National Environmental Policy Act and the Virginia Coastal Zone Management Act.

#### **OCS Activities**

Gamesa G11X Offshore Wind Turbine – DEQ completed the coordinated review of a Federal Consistency Certification (FCC) submitted by Gamesa Energy USA, LLC, in joint development with Newport News Shipbuilding, for the installation and operation of the Gamesa G11X Offshore Wind Turbine in the near shore

and subaqueous tidelands of the Lower Chesapeake Bay near the Town of Cape Charles in Northampton County. The project consists of the installation and operation of a single 5-megawatt offshore wind turbine generator (WTG) prototype and supporting infrastructure. The WTG electric transmission system includes a 3.2-mile-long submarine cable installed approximately 6 feet below the seabed that will connect to a shore-based transition vault to be constructed on industrial land at the Cape Charles Harbor Pier. From the vault, a buried upland cable system will extend 0.6 mile along an existing railroad right-of-way to a newly constructed substation. There the power will be interconnected to an existing A&N Electric Cooperative 25-kilovolt overhead electric transmission line for distribution through the existing electric grid. Based on DEQ's review of the FCC and the comments submitted by review agencies, DEQ concurs that the proposed WTG project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided: (i) it complies with the conditions of the permit issued by the Virginia Marine Resources Commission and (ii) all applicable permits and approvals are obtained with respect to proposed impacts to wetlands, erosion and sediment control, stormwater management and impacts to Chesapeake Bay Preservation Areas. In addition, Gamesa must ensure the project complies with applicable solid and hazardous waste management regulations, protected species regulations related to potential impacts to the bald eagle, loggerhead sea turtle and Kemp's ridley sea turtle, and impacts to the airspace navigation system regulated by the Federal Aviation Administration.

Geological and Geophysical Exploration on the Atlantic Outer Continental Shelf – DEQ completed the coordinated review of a Draft Programmatic Environmental Impact Statement (PEIS) submitted by the Department of Interior (DOI) Bureau of Ocean Energy Management (BOEM) that evaluates potential environmental effects of multiple Geological and Geophysical (G&G) activities in the Mid- and South Atlantic Planning Areas of the Outer Continental Shelf (OCS). The PEIS examines G&G survey activities for three program areas (oil and gas, renewable energy, and marine minerals) during the 2012-2020 time period, evaluates impacts to Atlantic resources that could occur as a result of G&G activities, and identifies mitigation and monitoring measures to avoid, reduce, or minimize impacts. The following types of G&G activities are evaluated in the PEIS: various types of deep penetration seismic air gun surveys used almost exclusively for oil and gas exploration and development; other types of surveys and sampling activities used only in support of oil and gas exploration and development, including electromagnetic surveys, deep stratigraphic and shallow test drilling, and various remote sensing methods; high-resolution geophysical (HRG) surveys used in all three program areas to detect geohazards, archaeological resources, and certain types of benthic communities; and geological and geotechnical bottom sampling used in all three program areas to assess the suitability of seafloor sediments for supporting structures (e.g., platforms, pipelines, cables, wind turbines) or to evaluate the quantity and quality of sand for beach nourishment projects. Based on comments submitted by reviewers DEQ finds the activities are unlikely to have significant adverse environmental impacts provided G&G exploration activities are performed in accordance with the following recommendations:

- Coordinate G&G exploration activities with the commercial and recreational fishing industries to include public outreach on any temporary area closures and other anticipated impacts to mitigate any unforeseen or unnecessary economic hardships to the fisheries industries.
- Consider time-of-year restrictions in near-shore waters for activities that would affect known spawning migrations of anadromous or catadromous fish species.
- Continue to research potential G&G exploration impacts on marine mammals, sea turtles and marine/coastal birds and develop and implement Best Management Practices to avoid and minimize impacts.
- Coordinate with the National Marine Fisheries Service, the Virginia Department of Game and Inland Fisheries, and the United States Fish and Wildlife Service to ensure compliance with protected species legislation due to the legal status of these species.
- Exclude State Natural Area Preserves from proposed activities within the Mid- Atlantic planning area and provide coastal buffers to prevent direct and indirect impacts from exploration activities.

In addition, future federal activities affecting Virginia's coastal resources or coastal uses (e.g., OCS lease sales, renewable energy competitive lease sales, and marine minerals negotiated competitive agreements) must be consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management Program (VCP) (pursuant to Section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended, and *Federal Consistency Regulations*, 15 CFR Part 930, Subpart C, section 930.32). Federally licensed or permitted OCS activities (e.g., G&G permits, renewable energy non-competitive permitted activities, and negotiated non-competitive marine minerals agreements) must be consistent with the affected state's federally approved coastal zone management plan (Subpart E, sections 930.70 *et seq.*). These activities offshore of Virginia require the submission of a federal consistency document (i.e. consistency determination or consistency certification) that includes an analysis of the activities in light of Virginia's coastal zone management program (VCP), and a commitment to comply with the VCP.

## C. PROGRAM CHANGES

A revised scope of work regarding program change support was negotiated with ELI and approved by NOAA during the reporting period. The new scope focuses on updating the portions of Virginia's fish and wildlife enforceable policies that do not involve threatened or endangered species (TES), so that this updated set of policies can be advanced independently of any other code sections that do involve state-listed TES. ELI is also working to document the issue by evaluating the outcomes of TES recommendations produced through the current environmental review process and evaluating opportunities for improved state TES protection under the current policies for federal consistency, including a comparison with nearby states. The ELI grant agreement for FY 10 Task 91 was extended until 03/31/2013 in order to accommodate this re-prioritization.

## D. SECTION 312 EVALUATION PROGRESS

### 1. Coastal Policy Team

**PROGRAM SUGGESTION:** The Coastal Policy Team should establish a strategic planning effort for the team and the VCZMP. The strategic plan could also set annual objectives and some measurable goals or performance measurement criteria to help gauge success.

**RESPONSE:** It seems we already have multiple strategic planning processes in place: 1) Every three years the Coastal Policy Team goes through a process (sometimes associated with our biennial Partners Workshop) to identify a new "focal area" for the small amount of funds (~\$350-500,000 per year) that we have available after our required continuing grants are covered; 2) Every five years the Coastal Policy Team engages in the Section 309 Coastal Needs Assessment & Strategy Development process – a strategic plan for prioritizing and developing new policies; 3) At almost every CPT meeting (2-3 times per year) the group discusses the next priority for incorporating new state laws or regulations into the Virginia CZM Program.

Given the limited resources we have, both in staff time and available dollars, it's not clear that sufficient benefit would derive from adding on yet another strategic planning process. We would like to discuss the need for this further with NOAA in the event that there is some aspect of strategic planning that we are neglecting but do or could have the resources to address.

## **2. Grants Management**

**PROGRAM SUGGESTION:** Prior to development of the application for 2007 grant award funds, the VCZMP should consider ways to diversify match used for the CZMA cooperative agreement and to ensure mechanisms are in place to spend federal funds within the 18-month time frame of the award.

**RESPONSE:** While it is understandable that NOAA would like to see the CZM funds that DEQ retains for its own staff be matched task by task, it is not realistic to expect in this economic climate that the Commonwealth can afford to allocate new funds to the Virginia CZM Program. Like most states, Virginia has been through several rounds of state budget cuts and more are expected. State revenues have continued to decline. Fortunately, the WQIF funds that are used to match DEQ tasks have been maintained and the Commonwealth is actually spending millions more dollars on sewage treatment plant upgrades than are captured as match for our CZM awards. Also in light of Congress' failure to fund the Coastal Nonpoint Program, these sewage treatment plant upgrades funded with matching dollars are one of the few water quality projects the Virginia CZM Program has.

## **3. Water Quality**

**PROGRAM SUGGESTION:** With the 'devolution' of local road planning, operations, and maintenance from the Virginia DOT to the local level, the VCZMP should consider using nonpoint program funding to support targeted assistance for the "Roads, Highways, and Bridges" nonpoint program management measures. The VCZMP and the nonpoint program manager should work to establish priorities for the nonpoint program and identify and develop for implementation some projects for whenever and whatever funding becomes available.

**RESPONSE:** Congress continues to fail to appropriate funding for the Coastal Non-Point program. In the event that funding for special initiatives for the water quality and non-point source program becomes available, the Virginia CZM Program will work to identify opportunities for targeted assistance to local governments for the "Roads, Highways, and Bridges" nonpoint program management measures." To date, Virginia CZM continues to use Section 309 and 306 funds to support the Coastal Networked Education for Municipal Officials (NEMO) program in Virginia. Through this support, Virginia CZM works with the Coastal Non-point Manager to prioritize non-point program activities and identify additional opportunities to expand and enhance the efforts of Coastal NEMO.

## **4. Coastal Hazards**

**PROGRAM SUGGESTION:** The VCZMP and its Commonwealth, regional, and local community partners should consider development of a coastal community resiliency initiative through existing partnerships and programs (e.g., SAMPS, directed technical assistance) as a further means to address coastal hazards. Existing research data and results and recent development of infrastructure (i.e., data layers and geospatial information) such as Coastal GEMS could be translated and disseminated through training programs and workshops for local government decision-makers as part of this effort.

**RESPONSE:** Virginia has used the concept of focal areas since 1999 in order to concentrate financial and policy efforts on a particular resource or geographic region for a three-year period. The Sustainable Community Planning Focal Area, was chosen after extensive input from partner agencies and through discussions of the Coastal Policy Team. As a result, Virginia CZM resources, including staff time and grants, were directed at state agencies and coastal planning district commissions to help coastal localities plan for adaptation to climate change and to protect blue and green infrastructure. In addition, the Hampton Roads PDC received a FY 11 competitive PDC grant to continue its work on climate change adaptation in the region. Also, for FY 11 and FY 12, the Accomack-Northampton Planning District Commission included climate adaptation in its Technical Assistance grants. The Virginia CZM program has also supported numerous shoreline management planning initiatives, including the use of living shorelines as a means of preserving wetlands in the

face of rising sea levels. Coastal GEMS is an important means of communicating information on resiliency-related topics, and a number of local government training sessions have been conducted by Virginia CZM staff (see Suggestion 6). Each of these initiatives, but especially climate change adaptation, addresses the NOAA suggestion for a community resiliency initiative.

## **5. Federal Consistency**

**PROGRAM SUGGESTION:** The Coastal Policy Team should consider using federal consistency as a tool for identifying opportunities to review state policies or influencing new state policy based upon new situations presented in federal consistency determinations.

**RESPONSE:** In response to this suggestion, the Coastal Policy Team asked Virginia CZM staff to evaluate options for protecting endangered species through federal consistency. The Virginia CZM Program contracted with the Environmental Law Institute (ELI) to prepare routine program change submissions and then to address concerns raised about the expansion of authority regarding endangered species. The Virginia CZM Program is currently evaluating how to best move forward with this issue and has a contract in place with ELI to assist with this effort.

## **6. Public Participation and Outreach**

**PROGRAM SUGGESTION:** The Virginia Coastal Zone Management Program should evaluate the numerous educational and outreach markets it serves and consider a stronger focus on the local and coastal decision-makers. The planning district commissions, Sea Grant, the Chesapeake Bay-Virginia NERR Coastal Training Program, and the federal staff of the Chesapeake NEMO program could provide coordination and assistance.

**RESPONSE:** In early 2008, Virginia CZM released an improved version of Coastal GEMS (version 2). Since that time, numerous data layers have been developed and added to GEMS to make the system even more-user-friendly to planners and to make the connections between land and water resources more visible. For example, several data layers were synthesized to create a single, comprehensive Land Priority Conservation Areas (PCA) dataset that allowed PDCs and local planners to use a single layer for comprehensive planning versus the multiple layers previously available. In FY 2010 the recently completed Estuarine Priority Conservation Areas layer was incorporated into an updated PCA dataset to create a synthesis map now called the Coastal Virginia Ecological Value Assessment (Coastal VEVA) – giving localities and state agencies a single layer depicting all known blue and green infrastructure within Virginia’s coastal zone. This FY 2010 grant is also focusing on training for elected officials and local planning staff on the value and use of this new data layer. The NEMO Coordinator as well as staff from DCR, DGIF VCU and VIMS are all involved in this effort. To ensure that local/coastal decision makers are aware of the Coastal GEMS tool and its capabilities VA CZM staff continues to offer Coastal GEMS training. Most recently, training was provided to local planners during a Richmond Regional PDC meeting (FY10) and Hampton Roads PDC meeting (FY11). An FY10 grant to VCU’s Center for Environmental Studies is currently underway to create a version 3 of the Coastal GEMS application that will take advantage of new web based mapping software to provide an enhanced user experience.

Virginia CZM’s “focal area” during the fiscal years 2008 -2010 was “Sustainable Communities: Protecting Blue-Green Infrastructure and Adapting to Climate Change.” Representatives from each of Virginia’s eight coastal planning district commissions helped refine this “focal area” during the 2007 Coastal Partners Workshop where the need for more education for local planners and decision-makers was identified as a high priority. Community planning occurs at the local government level and grants to the coastal PDCs continue to be the most effective and efficient means for the Virginia CZM Program to provide education and training to local planners and officials. The 2011 and 2012 focal area continues competitive grants for the PDCs. This has allowed them to prioritize internally their needs for local training efforts – some have continued in this area while others have chosen to undertake public access projects. The PDCs are coordinating with Virginia NEMO

and support for NEMO is helping to provide direct technical assistance to those localities requesting it. The focal area projects have resulted in better-informed local planning staff and decision-makers and better protection and management of important coastal resources through adoption of local plans and ordinances. Coastal GEMS has also become a trusted source of information for local planners.

Since Virginia's coastal planning district commissions are in an excellent position to provide local planners and officials regularly scheduled training on coastal resource management issues through their quarterly meetings, Virginia CZM continues to ask each coastal PDC to provide four training opportunities each year as a deliverable of their technical assistance funding. These trainings, on topics related to Virginia CZM goals and initiatives, have been ongoing for the last few years and are generally well attended across the eight coastal PDCs.

Virginia CZM staff continues to take advantage of several opportunities to improve coordination with our NOAA "sister" programs, Chesapeake Bay National Estuarine Research Reserve (CBNERRS) and Sea Grant. Virginia CZM staff participates in Virginia Sea Grant strategic planning sessions and evaluations and Virginia CZM and CBNERRS staff occasionally holds "collaboration meetings." The Director of Virginia Sea Grant and Manager of CBNERRS are members of the Coastal Policy Team and Virginia CZM staff serves on the CBNERRS Coastal Training Steering Committee. These are all important venues for identifying common goals, priorities and programs. Virginia Sea Grant and CBNERRS communication staff will collaborate with Virginia CZM to use the program's multi-media messaging and communication strategy framework as a tool to facilitate collaboration on shared issues and projects. Virginia CZM staff is also coordinating with Virginia Sea Grant and CBNERRS staff to develop an online "Story Development Forum" to be more proactive in collaborating on coastal management stories, consistent messaging and improved visibility and credit for our programs' efforts and investments. In June, Virginia CZM Office staff participated on a Sea Grant communication focus group. In May, Virginia CZM collaborated with Virginia Sea Grant and other NOAA partners to offer a tour of the NOAA Okeanos research vessel. In June, Virginia CZM collaborated with CBNERRS on a CZMA 40<sup>th</sup> anniversary event at VIMS highlighting the programs' shared accomplishments, which resulted in media coverage and increased visibility for NOAA, the CZM and both programs.

Virginia CZM staff has been engaged in ongoing coordination with state CZM partners on communication, marketing and education efforts. The 2012 Virginia Coastal Partners Workshop in December will focus on engaging stakeholders in coastal management and identifying next steps on coastal issues including improving stakeholder education and participation. Virginia CZM staff continues to coordinate with partners marketing native plant use, including funding and guidance on implementation of a new native plant social marketing campaign in Northern Virginia coordinated by the Northern Virginia PDC, and guidance on development of a Virginia Native Plant Society initiated campaign on the Northern Neck. Virginia CZM has sponsored printing of the new Flora of Virginia, and staff is encouraging use of Flora-based native plant lists in new regional campaigns. The Virginia Resource Use Education Council (staff has represented the Virginia CZM on the council) presented the annual Otter Award to the Virginia CZM Program for its many years of support to environmental education.