

October 29, 2010

**Virginia Coastal Zone Management Program
Semiannual Section B Report on Core Agency Implementation Activities
For the Period from April 1, 2010 – September 30, 2010**

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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 to October 2009 to March 2010 reporting period, more general permit authorizations were issued during the current reporting period, with the average processing time⁽¹⁾ decreased. Any 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 issued and the average processing time⁽¹⁾ increased during the current reporting period as compared to the previous report. Any delays were largely due to threatened and endangered species concerns and/or coordination, incomplete applications, suspension of the permit process due to inadequate project information, and hearings/State Water Control Board meetings required.

About the same number of permits and permit authorizations were modified during this reporting period, and 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).

Three individual permits were reissued during the current reporting period. General permit authorizations are not reissued in the VWPP program.

No applications were denied a 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 261 individual municipal and industrial CZM area VPDES permits. This number and the numbers in the table above represent typical activity in the program. Over

time, the number will possibly decrease by several more since DEQ now has a general permit for water treatment plants and most of these facilities will let their individual permit expire and apply for the general permit. Other than that, there is no particular 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, 73 concrete products facilities, 7 cooling water discharges, 81 single family homes, 22 nonmetallic mineral mining facilities, 4 petroleum and hydrostatic testing discharges, 58 seafood processors, 422 industrial storm water discharges and 1 coin operated laundry. Industrial storm water permits are currently under reissuance, therefore the numbers do not reflect the expired industrial storm water general permits. Others 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, 2010 and September 30, 2010, seven VPA Individual permits were issued in the Coastal Zone Management area, each authorizing the land application of biosolids. In addition, 8 VPA permit applications were received during that time. Those applications included 2 new permit applications for issuance, 2 for reissuance, and four to modify biosolids permits; each of those modifications was issued. During this reporting period, no poultry or animal feeding operations applied for or obtained coverage under the VPA General Permits for Poultry Waste Management or Animal Feeding Operation Waste Management in the Coastal Zone Management area.

VPDES/VPA/VWP - April 1, 2010 – September 30, 2010*										
	Permits Issued / Avg Proc. Days		Permits Reissued / Avg Proc. Days		Permits Modified / Avg Proc. Days		Denied / Avg Proc. Days		Permits Reissue Pending / Avg Proc. Days	
	VPDES	2	137	18	172	5	101	0	NA	28**
VPA	7	148	0	NA	4	11	0	NA	1	68
VWP IPs	17	161	3	176	7	66	0	N/A	0	N/A
VWP GPs	96	32	0	N/A	18	13	0	N/A	0	N/A

⁽¹⁾ **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 September 30, 2010

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, 2010, through September 30, 2010, DEQ issued 189 Warning Letters and four (4) Letters of Agreement for violations of VPDES, VPA, VWPP, and Ground Water program requirements.

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation followed by a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Administrative Orders or court orders may be sought. Between April and September 2010, DEQ issued 75 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 14 Consent Orders that assessed a total of \$251,189 in civil charges. Two VPDES consent orders included Supplemental Environmental Projects (SEPs). In the first case, the order specified that the responsible party donate \$38,902.50 to the local soil and water conservation district for projects along the Aquia Creek/Austin Run waterway in Stafford County. In the second case, the order required the responsible party to make a contribution of \$22,778 toward stream stabilization and restoration of the severely impacted stream bank of Cow Branch in Prince William County.

Table 1

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Warning Letters	189	n/a
Informal	Letters of Agreement	4	n/a
Formal	Notices of Violation	75	n/a
Formal	Consent Order	14	\$251,189
Total Penalties			\$251,189

d) DEQ – Air Permitting Program

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

Period: **April 1, 2010 – September 30, 2010**

PERMIT TYPE	NUMBER OF PERMITS ISSUED	AVERAGE PROCESSING TIME (Days)
PSD & NA	0	NA
Major	1	44
Minor	46	34
Administrative Amendment	9	25
Exemptions	93	18
State Operating	13	93
Federal Operating (Title V)	0	NA
Acid Rain (Title IV)	0	NA
Total Number Permits Issued	<u>162</u>	

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

Note: The information provided for this report includes data from the Fredericksburg Satellite Office, 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 SO₂ and NO_x 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, 2010**

PERMIT TYPE	NUMBER OF PERMITS PENDING
PSD & NA	1
Major	0
Minor	24
Administrative Amendment	1
Exemptions	29
State Operating	13
Federal Operating (Title V)	3
Acid Rain (Title IV)	1
Total Permits Pending	<u>72</u>

Note: The information provided for this report includes data from the Fredericksburg Satellite Office, 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, 2010– September 30, 2010**

PERMIT TYPE	NUMBER OF PERMITS WITHDRAWN	NUMBER OF APPLICATIONS DENIED
PSD	1	0
Major	0	0
Minor	14	0
Administrative Amendment	0	0
Exemptions	3	0
State Operating	0	0
Federal Operating (Title V)	1	0
Acid Rain (Title IV)	0	0
Total Permits Rescinded	<u>19</u>	<u>0</u>

Note: The information provided for this report includes data from the Fredericksburg Satellite Office, 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, 2010, and ending September 30, 2010, DEQ issued 53 Requests for Corrective Action, and 24 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 and September 2010, DEQ initiated nine (9) new formal enforcement actions via issuance of Notices of Violation. In addition, the agency issued 10 Consent Orders; these orders assessed a total of \$206,207.20 in civil charges. One order contained a

SEP that identified payment of \$45,465 to be made to the Elizabeth River Project for restoration work on a nature park located in Portsmouth, Virginia.

In May 2010, the U.S. Department of Justice issued a demand for stipulated penalties to address the terms of a 2007 federal consent decree that concerned NO_x emissions; the responsible party was required to pay \$54,000 to the Commonwealth of Virginia.

Table 2

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Requests for Corrective Action	53	n/a
Informal	Warning Letters	24	n/a
Formal	Notices of Violation	9	n/a
Formal	Consent Orders	10	\$206,207.20
Formal	Federal Consent Decree- stipulated penalties	1	\$54,000.00
Total			\$260,207.20

2) VIRGINIA MARINE RESOURCES COMMISSION (VMRC)

a) VMRC – Habitat Management Division

During the period April 1, 2010 through September 30, 2010 the Habitat Management Division received 1118 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. Eight sworn complaints were issued during the period.

The Habitat Management Staff completed actions on 1080 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 2010. Similarly, those applications received near the end of the current reporting period are still under review. Habitat Management Staff also issued 101 general permits for Virginia Department of Transportation projects.

In addition to staff actions, the Full Commission considered 97 projects. During the reporting period the Commission considered 36 protested projects or projects requiring a staff briefing, including one appeal of a local wetlands board decision. The Commission also approved 55 projects over \$50,000.00 in value for which staff had completed the public interest review and for which there was no objection.

b) VMRC – Fisheries Management Division

At its April 2010 meeting, the Virginia Marine Resources Commission (VMRC) prohibited the use of agents (an individual who holds the commercial registration license and gear license of another individual) for the 2010 limited spiny dogfish fishery, and restricted the transfer of permits to hardship exceptions only.

At its May 2010 meeting, VMRC requested a June public hearing to consider modifying the open recreational black sea bass season, from August 8, 2010 and September 1 through October 4, 2010 to May 22 through October 11, 2010 and November 1 through December 31, 2010. The reason for this proposed longer season in 2010 stemmed from an updated, more optimistic biological status of this species on a coast-wide basis.

Also at its May 2010 meeting, VMRC requested a June public hearing to establish the 2010 commercial bluefish quota of 1,213,280 pounds. This quota setting is an annual process and follows the coast-wide quota setting of the Mid-Atlantic Fishery Management Council (MAFMC or Council) and Atlantic States Marine Fisheries Commission (ASMFC). The Council establishes fishery specifications for harvests from federal waters, whereas the ASMFC sets specifications (including quotas) for state waters. Virginia landings are from both federal and state waters.

At its June 2010 meeting, VMRC established the open recreational black sea bass season as May 22 through October 11 and November 1 through December 31.

Also at the June 2010 meeting, VMRC established the 2010 bluefish quota as 1,213,280 pounds.

Lastly, at the June 2010 meeting, VMRC requested a July public hearing to establish the 2010 fall Chesapeake-area recreational striped bass management measures.

At the July 2010 meeting, VMRC postponed the decision to change the 2010 fall Chesapeake area recreational striped bass management measures, until the ASMFC determines, in November, whether the stock can support increased coastal commercial quotas. Should the ASMFC decide the biological condition of the striped bass stock can support an increase of quotas for Atlantic coastal states' commercial striped bass fisheries, the VMRC will hold a public hearing to decide whether to establish an increase in the Virginia coastal commercial striped bass quota, and, at the same public hearing, determine whether Chesapeake area recreational fishery measures can be relaxed somewhat.

At the August 2010 meeting, Dr. Bob Orth of the Virginia Institute of Marine Science provided an annual review of the status of submerged aquatic vegetation (SAV). While the regulation of fishing gears has minimized SAV scarring, overall bay SAV coverage is about 48% the Bay-wide goal of 185,000 acres. VMRC authorized the renewal of the 507.90 acre set-aside area in Hog Island Bay for seagrass restoration.

Also at the August 2010 meeting, VMRC requested a September public hearing to consider the establishment of a Fisherman Identification Program (FIP), as instructed by the General Assembly of Virginia. Such a program will allow the creation of a complete listing of anglers fishing recreationally for marine and anadromous fish species, for surveying purposes to estimate catch and effort.

At its September 2010 meeting, VMRC established the Fisherman Identification Program, in consistency with the National Saltwater Angler Registry Program. The mandatory program, which will begin in January 2011, is free to all registrants and allows the exemption from the National Saltwater Angler Registry Program and its fee. Persons with a Virginia or Potomac River Fisheries Commission saltwater recreational fishing license are exempt from the FIP requirements, but will be registered with the federal licensing program by virtue of purchasing a Virginia or Potomac River license. Charter boat or head boat licensees of the same

local areas are registered directly with the federally mandated licensing program by the VMRC. In order to provide for the costs of the FIP, VMRC approved a one-time increase of boat license fees by \$10, and an increase of recreational saltwater license fees will increase by \$5.

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. We also have an officer assigned to the FBI Task Force in an effort to apprehend organized crime in Virginia.

VIRGINIA MARINE POLICE ARRESTS/CONVICTIONS SUMMARY BY CATEGORY

REPORT FORMAT: FEDERAL FISCAL YEAR AREA: ALL AREAS
START PERIOD: 10/01/2005
END PERIOD: 09/30/2010



Category	2005/2006		2006/2007		2007/2008		2008/2009		2009/2010	
	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests	Convictions	Arrests
Buyers	2	2	4	5	10	11	1	1	2	3
Casting Garbage/Trash	1	2	1	1	0	0	0	0	0	0
Clams	4	5	4	4	0	1	1	1	0	1
Commercial Fishing License	13	14	16	21	16	25	6	9	3	3
Conchs	4	6	0	0	9	9	7	7	1	1
Crabs	81	89	69	81	138	172	93	111	46	54
Federal Violation	0	0	94	97	0	6	0	18	1	4
Fish	284	304	298	364	271	319	160	205	72	91
Freshwater Fishing without a license	28	28	12	13	1	1	10	10	13	13
Habitat/Wetlands	0	0	2	2	0	0	0	0	0	0
License Tags	4	9	7	8	3	3	1	2	1	1
Mandatory Reporting	1	1	4	8	0	0	0	0	0	0
Misc	1	1	2	2	1	1	0	0	0	0
Non-residents	0	0	0	0	0	1	0	0	0	0
NSSP	0	0	0	0	3	3	0	0	0	0
Other Agencies	670	729	592	624	435	481	279	322	183	205
Oysters	80	82	56	68	54	72	31	39	56	68
Piers	0	0	0	0	0	0	0	0	0	0
Police Powers	61	69	90	107	61	68	42	52	29	36
Removal of Obstructions	5	6	6	7	4	4	1	1	0	0
Resisting officer	0	1	1	4	2	3	0	0	0	0
Shellfish	0	0	0	0	0	0	1	2	7	7
SW Recreational Licenses	419	435	481	496	309	331	175	196	103	113
TOTALS:	1658	1783	1739	1912	1317	1511	808	976	517	600
PERCENT OF CONVICTIONS:	92.99%		90.95%		87.16%		82.79%		86.17%	

Print Date: Monday September 27, 2010

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

From April 1, 2010 through September 30, 2010, the VDH shellfish program had 867 acres of shellfish grounds closed to harvesting. There were 7488 acres of shellfish grounds reopened.

The Department received and reviewed a total of 48 VMRC Permit Applications, and processed as follows:

Three (3) of the Permit Applications needed action in the Marina program.

Forty-two (42) applications were approved based on meeting the requirements of providing adequate facilities.

Three (3) 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 April 1, 2010 through September 30, 2010.

Regulatory Programs

Stormwater Management Program

The consolidation of the Virginia's stormwater management programs into DCR streamlines program implementation, increases program efficiencies and compliance, builds on successful online initiatives, and improves water quality. 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, on site inspections, complaint response, enforcement support, and technical/regulatory training via the classroom and Internet.

DCR staff has been working with eleven large/medium (Phase I) Municipal Separate Storm Sewer Systems (MS4s) and EPA to develop and reissue the individual permit for the storm sewer systems. The eleven localities are the cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach and the counties of Arlington, Chesterfield, Fairfax, Henrico, and Prince William. In addition, 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 processing registration statements for land-disturbing activities that are covered by the General Permit for Discharges of Stormwater from Construction Activities. For the reporting period, approximately 1,153 land disturbing activities were issued General Permit coverage. During this time period, DCR staff also completed approximately 662 site inspections for compliance with the General Permit.

Urban Program staff continued to educate government officials, private contractors, and consultants in the essential elements of Erosion and Sediment Control (ESC) via classroom training and the online "Responsible Land Disturber (RLD) Certificate of Competence" Program. Approximately 427 people completed classroom training and approximately 850 people were certified or recertified for the RLD Program.

In addition, approximately 205 individuals were certified or recertified through the examination process as Inspectors, Plan Reviewers, Program Administrators and Combined Administrators.

Nutrient Management

DCR Nutrient Management Staff have been active in developing and reviewing nutrient management plans and other nutrient reduction activities to achieve the Commonwealth's nutrient reduction commitments of Chesapeake Bay tributary strategies. In the coastal zone of Virginia, DCR staff developed nutrient management plans covering 189,418 acres during the reporting period. The plan acreage developed by coastal watershed is summarized in the following table:

Basin	Crop	Hay	Pasture	Specialty	Turf/Landscape	Total
Albemarle Sound	11,679	0	0	128	0	11,807
Atlantic Ocean	5,302	0	0	0	0	5,302
Chesapeake Bay Coastal	28,613	235	96	211	0	29,155
Chowan	9,301	362	62	0	0	9,725
James	6,041	4	25	0	18	6,088
Potomac	23,788	1,315	228	67	11	25,409
Rappahannock	52,285	1,322	104	1,328	3	55,042
York	42,490	2,473	736	1,186	4	46,889
Total	179,499	5,712	1,251	2,920	36	189,418

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 continued to serve as the Coastal NPS Program Manager and implement the Coastal NPS Program at the Virginia Department of Conservation and Recreation. The focus of the Coastal NPS Program is the continued expansion of the role and services of the Virginia Network for Education of Municipal Officials (VNEMO) in the Coastal Zone.

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

VNEMO, in coordination with Chesapeake NEMO, has continued a strong role with the implementation of the project in coordinating specific roles and responsibilities within the program delivery and context of the Shoreline Project, partnering with the NVRC, the VNEMO client. VNEMO provided the NOAA Coastal Services Center to provide survey development and data analysis for the residential survey portion of the project. The NVRC collected the relevant data utilizing a web-based approach and the NOAA CSC developed a data cataloging form and is assisting in the analysis of the data. The survey was to obtain an understanding of

the waterfront residents' knowledge of shoreline issues mostly related to climate change but also sought additional information regarding other issues of concern.

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

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

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

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

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

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

b) DCR – Division of Natural Heritage

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

Inventory:

Completion of final report on the re-inventory of the Natural Heritage Resources at Fort A.P. Hill – 04-10

DCR-DNH inventory staff submitted the final report on the re-inventory of natural heritage resources at Fort A.P. Hill in Caroline County. A natural heritage inventory was originally conducted on the Fort in 1992-

1993. In four field seasons (2005-2008) DCR-DNH ecologists, botanists and zoologists re-evaluated the status of the previously documented rare species and significant natural communities and surveyed for new occurrences of rare species and communities. The report documents the current status and any changes in numbers or habitat conditions for the natural heritage resources, and provides management recommendations to assist Fort A.P. Hill natural resource staff in decisions about land uses relating to their military mission as well as protection of areas with conservation value. The report was accompanied by GIS data on locations of natural heritage resources and detailed status information. Seventy-one (71) occurrences of natural heritage resources were observed in the 2005-2008 re-inventory, this total consisting of 22 natural community occurrences, 35 plant occurrences, and 14 animal occurrences. This compares to a total of 80 occurrences of natural heritage resources in 1992-1993, the current lower total being a result of a variety of factors, including changes in monitored elements, inability to revisit areas due to liability issues, and loss of habitat due to beaver damming. The control of beaver at Fort A.P. Hill is critical if further losses of significant seepage communities and the federal/state listed swamp-pink are to be prevented.

Major revisions occurred in the assessment of community types due to the revision of the statewide classification system, and many previously monitored animal species were downgraded to the Watchlist or not monitored. Fort A.P. Hill remains the coastal plain stronghold in Virginia for the federal and state listed plant species swamp-pink (*Helonias bullata*) with four new occurrences found since 1992-1993, one during this re-inventory. Three more occurrences of the federal and state listed plant small whorled pogonia (*Isotria medeoloides*) have also been found since 1992-1993 with one during this re-inventory. Attempts to relocate the state listed Bachman's Sparrow (*Aimophila aestivalis*) were unsuccessful and this occurrence is now considered historical. This re-inventory further strengthens the conservation significance of many of the lands managed by Fort A.P. Hill.

Federal and state-listed plant found in Fountainhead Regional Park, Fairfax County – 06-10

During a survey for small whorled pogonia (*Isotria medeoloides*, G2/S2/LT/LE) within Fountainhead Regional Park, a single plant of this federal and state listed orchid species was found by Michael Terry, a volunteer who was assisting NH Field Botanist Nancy Van Alstine. Fountainhead Regional Park is located in southern Fairfax County north of the Occoquan Reservoir. This location for small whorled pogonia represents a new colony within an existing occurrence found on slopes near the Reservoir. Small whorled pogonia is restricted to the eastern U.S. and Ontario, Canada, and is found mainly in hardwood forests with sparse herbaceous cover. The newly-found plant is threatened by the severe deer browse of the herbaceous layer observed within the forest in the section of the Park surveyed. The survey was funded by the Northern Virginia Regional Park Authority (NVRPA) in advance of proposed modifications to the mountain bike trail system within the Park. Recommendations are being provided to NVRPA to promote the protection of the small whorled pogonia and guide the trail revision process.

Globally rare shrub found at Antioch Pines Natural Area Preserve – 08-10

Natural Heritage Ecologist Gary Fleming discovered a small population of the globally rare (G3) shrub *Litsea aestivalis* (pondspice) in a seasonally flooded depression at Antioch Pines Natural Area Preserve in Isle of Wight County. This is only the third population of the species known to be extant in Virginia; there are also two historical records from the early 1800's. Pondspice is endemic to the Atlantic Coastal Plain from Maryland to Florida, usually occurring in low numbers when found and considered either uncommon or rare in all states where it occurs. It is threatened by alterations in hydrology, by suppression of natural fire regimes, and by red bay or laurel wilt disease, an emerging fungal disease for which pondspice is a documented host.

BRIT Press will publish Flora of Virginia – 09-10

The Flora of Virginia Project and the publishing arm of the Botanical Research Institute of Texas, in Fort Worth, signed an agreement in July making the BRIT Press the publisher of the *Flora of Virginia*. Publication is set for late 2012.

"The BRIT Press is delighted to be working with the Flora of Virginia Project in publishing this remarkable flora," said Barney Lipscomb, Dorothea Leonhardt Chair of Texas Botany with BRIT and head of the BRIT Press. "The *Flora of Virginia* is a 21st-century flora that will present critical information about the plant life of Virginia and surrounding states."

The *Flora* will be the most modern single-volume flora for our region and will reflect the latest advances in genetics and thought in plant biosystematics. It will be the first statewide plant manual for Virginia since *Flora Virginia* in 1762.

"We are very happy to have a publisher—but we're especially happy that it's the BRIT Press," said Chris Ludwig, director of the Flora Project (floraofvirginia.org) and a co-author of the *Flora of Virginia*. "This is such a good match, and that has been clear since our first conversations over a year ago."

Historical plant occurrence rediscovered – 09-10

The DCR Natural Heritage Field Botanist rediscovered an occurrence of the state rare species hairy St. John's-wort (*Hypericum setosum*) (G4G5/S1S2) in Newport News Park, City of Newport News. More than half of the 17 Virginia occurrences of this perennial herb are ranked as historical, having a last observation date no more recent than 1980. This particular occurrence, based on a plant specimen deposited at the herbarium of the College of William and Mary, was last observed in 1972 within a "powerline cut". Despite the challenges of imprecise location information and tall herbaceous vegetation obscuring the shorter species, a plant was eventually found. An intensive survey of the area around the initial observation then produced a total of 14 flowering / fruiting plants. The global distribution of this St. John's-wort is restricted to the southern and southeastern U.S. as far north as Virginia, but it is only considered rare in Virginia. The Virginia occurrences are located predominantly in the coastal plain, mostly south of the James River, but also in the southern piedmont. The plant is found in Virginia in a variety of seasonally moist to wet, usually open, habitats including seepages within powerline rights-of-way, along ditches, and in flatwoods, in sandy, clayey or peaty soils. The open habitats are usually artificially maintained by mowing or herbicides that target the woody species. The survey was coordinated with staff at Newport News Park, and the population area has been provided to the Park for natural resource management planning purposes. This survey was part of a larger project funded by the Virginia Native Plant Society to rediscover some of the historical plant occurrences around the state.



Habitat for the rediscovered hairy St. John's-wort

Natural Areas Protection:

Mathews County breakwaters & living shoreline project – 06-10

DCR has submitted a National Coastal Wetlands Conservation grant request to the US Fish and Wildlife Service for funding to assist with the construction of an off-shore breakwater system along the Chesapeake Bay in Mathews County. The funding request was for \$963,460 in federal funds with \$330,000 in cash being contributed to the owners of the properties being benefited by the project and \$15,000 in in-kind services from Mathews County. This project will support the construction of a modified living shoreline along 3,200 feet of Chesapeake Bay shoreline, resulting in the restoration and protection of 9.2 acres of littoral habitat, sandy beach, and primary dune which supports the federally listed threatened northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) and other beach-dependent species. This project is intended to maintain this important habitat, the characteristics of the natural beach, and the natural local sediment dynamics while preventing further impacts and habitat loss due to erosion and shoreline hardening. The project will also maintain the beach that residents of the adjacent community enjoy, and residents of the community will maintain their rights to limited access and use of the beach. A conservation easement will aid in protecting this habitat from further shoreline hardening, further development and other human impacts.

Natural Areas Association Workshop planning - 09-10

In 2009 the DCR Natural Heritage Program committed to serving as the host for the 2012 Annual Conference of the Natural Areas Association. About 300 natural area professionals from North America are expected to attend. The conference will be held over five days in October 2012. The Natural Areas Association has distributed an RFP to six potential conference hotels in Norfolk and Virginia Beach. Responses to the RFP will be received through September 24, 2010.

Natural Area Preserves Stewardship:

Prescribed burn at Antioch Pines Natural Area Preserve – 04-10

On April 2, two units totaling 115 acres were burned at the 1017-acre Antioch Pines Natural Area Preserve in Isle of Wight County with the objective of maintaining Pine-Scrub Oak Sandhill natural communities with open canopies and a diverse groundcover supporting various rare plant species. A DCR-Natural Heritage crew was assisted by USFWS fire management staff and an AmeriCorps volunteer fire crew.



Antioch Pines Pine-Scrub Oak Sandhill maintenance burn

Eighth graders use Dameron Marsh Natural Area Preserve for outdoor classroom – 04-10

On April 8, 2010, the 8th Grade class from Chesapeake Academy spent the day at Dameron Marsh Natural Area Preserve honing their field ecology skills. Led by DCR Natural Areas Steward Rebecca Wilson, the students observed coastal processes and were introduced to the concepts of ecosystem structure and function, shoreline erosion, and natural succession. The preserve's diverse community types – salt marshes, tidal mudflats, beach strands, old fields, and maritime forest – were observed to provide habitat for a large

number and high diversity of animal and plant species. This field trip helps to highlight the value of state natural area preserves as unique sites for educating students about natural history, field ecology and biology, and natural resource conservation.



Chesapeake Academy students visit Dameron Marsh NAP

Garden Club visits Zuni Pine Barrens Preserves - 04-10

On April 17, the Franklin Garden Club sponsored a field day at the Zuni Pine Barrens, comprised of Old Dominion University's 318-acre Blackwater Ecological Preserve and the 1,017-acre state-owned Antioch Pines Natural Area Preserve. This event was part of the club's 2010 Garden Tour. Two field trips allowed 87 visitors to see the Pine / Scrub-Oak Sandhill and pine savanna natural communities found at this site. Participants learned about the role of fire and the adaptations of plants and animals that thrive in these fire-maintained habitats. Visitors were also able to observe a variety of wildflowers blooming in the understory of recently burned pine savannas. Field trips were led by Darren Loomis, DCR's Southeast Region Steward, and John Patterson, Assistant Professor of Biology at Paul D. Camp Community College in Franklin. Other participants included staff from The Nature Conservancy, The Virginia Department of Forestry, and members of the Butterfly Society of Virginia.



Members of the Franklin Garden Club learn about the fire-maintained natural communities at Blackwater Ecological Preserve in Isle of Wight County.

Crow's Nest Natural Area Preserve Spring Field Day – 05-10

In just four hours, all 120 reservations were filled for the May 1st Spring Field Day at Crow's Nest Natural Area Preserve hosted by DCR and Stafford County. This event attracted residents of Stafford County and nearby Fredericksburg, as well as nature enthusiasts from Richmond to Maryland who wanted to get a glimpse of one of the most remarkable sites in the State Natural Area Preserve system. Five separate guided hikes were offered during the day with emphasis on the more than 60 species of migratory bird species that utilize Crow's Nest. Some of the highlights of the day included bald eagles, scarlet tanagers and numerous species of warblers, some of which had just arrived at Crow's Nest after flying from southern wintering grounds

in South America. Occasional field days arranged by Richmond-based DCR staff will be offered at Crow's Nest until such time as positions and funding are available to open the preserve to the public full-time. Otherwise, the preserve will remain closed to the public.



DCR Natural Heritage Zoologist Chris Hobson explains the life history of a Bess Beetle discovered under a log by his daughter at Crow's Nest on May 1, 2010.

YCC crew builds new trail at Savage Neck Dunes Natural Area Preserve – 07-10

During the week of June 21, 2010, a 13-member Youth Conservation Corp (YCC) crew braved the hot weather and ably assisted DCR – Natural Heritage Eastern Shore Region stewardship staff with building a new public access trail at Savage Neck Dunes Natural Area Preserve near Eastville, VA. The 0.7-mile trail passes through maritime forest and dune woodlands, with views of interdunal freshwater ponds and depressional wetlands. These wetlands provide habitat for frogs, turtles and birds. The trail segment – designated the “Wetland Loop” – will provide excellent opportunities to view neo-tropical warblers during the fall migration. The hard-working crew of young men aged 14 to 17, plus three supervisors, was on loan from Kiptopeke State Park for the week to assist with management of state natural area preserves on the Eastern Shore. Most YCC crew members were from the greater Richmond area. Without their assistance, this trail improvement project at the Savage Neck Dunes preserve would not have been possible.



YCC crew members assist with trail-building at Savage Neck Dunes NAP

North Landing River Natural Area Preserve culvert upgrade – 07-10

Delegate Knight called DCR with a concern that a culvert under DCR's North Landing River Natural Area Preserve access road may be causing flooding of a neighbor's field. The culvert may be too small to handle the amount of flow since VA Beach has upgraded culverts under Blackwater Road, although VA Beach replaced DCR's culvert when they did the Blackwater Road work. Delegate Knight was very pleased with DCR's response, that Natural Area Steward Darren Loomis will do an onsite visit with him, and if the culvert needs to be expanded DCR can work with VA Beach to have that done.

Hughlett Point Natural Area Preserve observation deck rebuild completed - 07-10

A popular observation deck at Hughlett Point NAP was destroyed by fire of unknown origin, possibly lightning strike in the nearby dry marsh grass, on September 1, 2008. After lengthy efforts to explain to volunteers why the state process does not allow for them to assist DCR with the deck reconstruction, secure funding, and obtain necessary approvals the new observation deck is complete!



Original Deck



Burned Deck



New Deck

Hughlett Point Natural Area Preserve field trip for home school students – 07-10

On July 28, 2010, the Chesapeake Bay Region Land Steward led an educational field trip at Hughlett Point Natural Area Preserve for a group of home-school students from the Fredericksburg area. The group learned about the Natural Heritage Elements and ecosystems of this bayside preserve that features both upland forest and sandy beaches. They were treated to an up-close look at the federal threatened northeastern beach tiger beetle, learned about this creature's life cycle and that it was important not to disturb its habitat by digging or making castles in the sand. This preserve is one of the stops on the DGIF Birding and Wildlife Trail and during the fieldtrip a staff member from the Wildlife Diversity Division was onsite for a site check. This Watchable Wildlife Biologist was a welcome addition to the group, providing information on the Birding and Wildlife Trail and sharing information on natural history with the students.



Hughlett Point Natural Area Preserve Field Trip

Outreach in full swing on the Eastern Shore – 09-10.

Two outreach events have occurred on the Eastern Shore and several more are planned for the weeks ahead. On September 26, 8 students and 2 teachers from Eastern Mennonite High School in Harrisonburg visited Savage Neck Dunes NAP to learn about coastal systems. The group was given a tour of the preserve by Eastern Shore Region Steward, Dot Field. Coastal natural communities, processes and ecology were discussed and illustrated. The group was also treated to a seining experience led by Eastern Shore Stewardship Technician, Richard Ayers.

Invasive Species:

DCR teams up with partners and private landowners for Phragmites control - 07-10

This fall, DCR Natural Heritage will lead Phragmites control projects on the Northern Neck as well as on the Eastern Shore. A total of 400 acres of the 15-foot tall, highly invasive grass from Europe will be treated with a helicopter applied, EPA-approved herbicide. Natural Heritage is working with nearly 100 landowners, State Parks, US Fish & Wildlife Service, The Nature Conservancy, and Northumberland Association for Progressive Stewardship. DCR's aerial treatments are being leveraged on the Eastern Shore with US Fish & Wildlife Service leading ground based control efforts. This year's Phragmites control projects are part of DCR's on-going efforts to protect heritage resources and vulnerable wetland habitats across coastal Virginia.

Phragmites Workshop with Virginia Audubon Chapters – 07-10

On July 22, 2010, Jason Bulluck, of DCR-Natural Heritage and the Virginia Important Bird Area Program presented a hands-on workshop to 15 local Audubon Chapter members from throughout Piedmont and Coastal Virginia. This workshop taught participants how to help with the early identification of *Phragmites*, and how to communicate findings with DCR-Natural Heritage, to with their larger invasive species survey efforts. Workshop participants were taught field identification of *Phragmites australis*, an invasive species which seriously threatens the quality and quantity of bird habitat in Virginia. Participants also learned how to map their observations of *Phragmites* using LandScope, an interactive conservation mapping website developed via partnership between NatureServe, National Geographic and the DCR-Division of Natural Heritage. LandScope enables users to make maps using high-resolution satellite imagery, edits maps with mark-ups and information, and then quickly share those maps via email. Via a simple process of “note it, map it, save it, share it”, birders throughout eastern Virginia will directly contribute to DCR-Natural Heritage's efforts to maintain manageable populations of this invasive plant. Funding for this workshop was awarded to Virginia IBA Program and DCR-Natural Heritage via a 2010 National Audubon Society collaborative grant to engage chapters regarding conservation planning on Virginia IBAs.

Phragmites Workshop - 08-10

DCR-Natural Heritage staff assisted with a Phragmites workshop for private landowners sponsored by the City of Norfolk on August 10, 2010. Eastern Shore Region Steward Dot Field presented an overview of the life history of Phragmites and the physiological mechanisms that allow this invasive plant to out-compete native marsh vegetation. Southeast Region Steward Darren Loomis addressed chemical and mechanical control methods. The workshop was held at the Renaissance Academy in Virginia Beach. Attendees included private homeowners, commercial property representatives, environmental consultants, local conservation organizations and Master Gardeners. Phragmites is of increasing concern in urban and suburban areas as it impacts property value and wildlife habitat, and causes safety concerns.

Natural Heritage and Master Gardeners host Phragmites control presentation – 08-10

On Sept. 1, 2010, the Mathews County Master Gardeners held a workshop on Phragmites control with DCR Natural Heritage Stewardship Ecologist Paul Clarke as lead instructor. Paul presented information on Phragmites as part of the Master Gardener's on-going speaker series in Mathews. There was considerable local interest in the meeting, as 58 Mathews residents attended including the County Administrator and a local newspaper reporter. The workshop covered identification and ecology of Phragmites and the problems it causes in Mathews County and all of coastal Virginia. A large part of the meeting covered methods for controlling this highly invasive, non-native tall wetland grass.

Japanese stiltgrass control at Crow's Nest Natural Area Preserve – 08-10

Crow's Nest Natural Area Preserve in Stafford County is known for its rich and unique ecological communities as well as its use by over 60 neotropical migratory bird species, nesting bald eagles, and a variety of rare plants and animals. However, the rich biodiversity of Crow's Nest is currently threatened by invasive species, especially Japanese stiltgrass. This highly invasive plant, introduced to the U.S. from Asia, has become

established along nearly 25 miles of ATV trails and dirt roads, many created and used by previous hunt clubs prior to acquisition by the state and Stafford County. On August 26-27, 2010 DCR Natural Heritage staff, with financial assistance from the Trust for Crow's Nest, worked with a contracted pesticide applicator to treat over 17 acres of stiltgrass along nearly 20 miles of old ATV trails. Controlling stiltgrass is a long-term commitment as this annual weed produces an abundance of seeds that remain viable for multiple years.

Northern Neck & Eastern Shore Phragmites control – 09-10

DCR Natural Heritage completed its largest collaboration ever to control Phragmites in high priority areas on the Northern Neck and the Eastern Shore. More than 75 private landowners as well as the US Fish & Wildlife Service, the Northumberland Association for Progressive Stewardship, The Nature Conservancy, State Parks and Game and Inland Fisheries worked with DCR Natural Heritage to control 400 acres of the highly invasive Phragmites grass. Phragmites, originally from Europe continues to expand throughout much of coastal Virginia, choking out native marsh plants and degrading wildlife habitat (and frustrating private landowners). While DCR Natural Heritage took the lead on this large scale aerial control project and assisted with community outreach, private citizens and professional partners continue to leverage DCR's work with ground based control efforts and expanding outreach and educational efforts.



Preparing the helicopter for Phragmites control work

Phragmites mapping completed for 2010 – 09-10

Aerial operations were completed on Monday, September 13, for this year's survey and mapping of Phragmites. Preliminary data analysis presents a grim picture for Back Bay and North Landing River. Over 5,000 acres were mapped in Back Bay, over 700 acres on the North Landing River, and 54 acres on the Northwest River. DCR Natural Heritage staff has mapped 11,000 acres since the survey began on Virginia's Eastern Shore in 2004. The data collected during these surveys are being used by DCR, U.S. Fish and Wildlife Service, The Nature Conservancy, and private landowners for planning Phragmites control projects. As a footnote: Lisa Moss with the Mid-Atlantic Panel on Aquatic Invasive Species utilized some year end funding to purchase a 55-gallon, 350 psi skid sprayer for DCR - a \$1,850 gift, after shipping. Part of Lisa's justification for this purchase is to further support DCR's MAP grant to control Phragmites at Crow's Nest and on the Dragon Run/upper Piankatank. This unit is a welcomed addition to the collective arsenal of anti-Phrag weapons.



False Cape SP (lower) and Back Bay National Wildlife Refuge (upper)

Invasive Plants Conference – 09-10

On September 16th, DCR Stewardship Biologist presented at "Good Green, Bad Green: Invasive Plant - Plant Control for Habitat Restoration." The presentation focused on how to identify 5 present and 5 potential invasive plant species and how each species impacts native biodiversity. With over 100 participants, the workshop included speakers on control methods and hands-on sessions covering herbicide application. The workshop was held at the Northern Virginia 4h Center and the Smithsonian Conservation Ecology Center in Front Royal. Sponsors included the Smithsonian Institute. The Virginia Cooperative Extension provided coordination. DCR was part of the planning team for the workshop.

Information Management:

The Leader to Leader Program - 04-10

The DCR, Natural Heritage Program's Information Manager, Jason Bulluck, has been awarded a spot in a year-long, international leadership training course. The "Leader to Leader" program, a collaborative effort of NatureServe and American Express, will cultivate the skills of emerging leaders in the field of environmental conservation. Selected through a competitive application process, the 20 participants reflect the diversity of geography, skills, and expertise of the NatureServe network, a group of 82 independent conservation-science institutions in the United States, Canada, and Latin America. The participants are each highly trained in their disciplines, but Leader to Leader will instruct them in methods and practices that can increase their current sphere of influence while building a foundation for future leadership roles. The goals of Leader to Leader are threefold:

- To create a self-renewing pool of next-generation leaders in environmental conservation
- To strengthen the connectivity and effectiveness of the NatureServe network
- To form a community of practice among the trainees, who will return to their home institutions to share the program's lessons and mentor their colleagues.

Sustainable Site Design Conference - 04-10

The Coastal Zone Locality Liaison attended the Virginia Chapter of the American Society of Landscape Architects annual conference in Richmond on Friday, April 16, 2010. The theme for the conference was Sustainable Site Design with sessions on:

- Form-Based Codes and Sustainable Community Design
- Mapping Green Infrastructure
- Green Urbanism
- The Sustainable Sites Initiative
- Virginia's Stormwater Regulations & LID

Biodiversity presentation at NatureServe Conference - 04-10

On April 30, Natural Heritage Conservation Biologist Joe Weber delivered an invited presentation on coarse and fine filter approaches to biodiversity conservation during the Multi-Jurisdictional Data (MJD) session at NatureServe's annual Southeast Natural Heritage Conference in Austin, Texas. NatureServe's MJD, a screening tool comprised of element occurrence data at various resolutions submitted from all 50 States and all Canadian Provinces, is useful for assessing project impacts on rare species and natural communities. NatureServe is considering expansion of MJD to include priority areas such as those identified by the Virginia Priority Conservation Sites analysis, a fine filter that prioritizes species and natural communities by rareness and how well they are protected by conserved land, and landscape-level ecological cores and corridors such as those identified by the Virginia Natural Landscape Assessment, a coarse filter that can be used to conserve large assemblages of species and that potentially will provide migration routes as organisms move in response to climate change. Species distribution models developed over the past year in Virginia were discussed collectively as another type of fine filter. The talk was received well and was followed by discussion with NatureServe leadership about how these products could be extended nationwide.

Conserving Our Commonwealth Conference - 05-10

The Coastal Zone Locality Liaison had a display that included a revolving PowerPoint at the conference in Williamsburg. Additionally a new flyer was created describing the various conservation tools available through Natural Heritage for the public to use, helping to identify sensitive lands for conservation.

Accomack County Blue/Green Infrastructure Study – 05-10

The Green Infrastructure Center, Inc. has just completed the Accomack County Blue/Green Infrastructure Study, using data and information from the Virginia DCR- Natural Heritage Plan. The Virginia Natural Landscape Assessment and the Conservation Sites coverage contributed to a Priority Conservation Areas (PCA) analysis, conducted by DCR-Natural Heritage, DGIF and VCU. Output from this Priority Conservation Area analysis provided the foundation on which the Green Infrastructure, Inc. study was conducted. DCR-Natural Heritage also provided the Conservation Lands database for use in the Accomack county project. With this new study, Accomack has a comprehensive, current inventory of natural and cultural resource assets that can be used in planning future conservation and smart development. The results of the study, including various summary resource maps, can be viewed by the public at <http://gicinc.org/acomack.htm>.

Wetlands Catalog Update - 08-10

Division of Natural Heritage (DNH), under a grant from the Federal Highways Administration, Transportation Research Board, has been researching methods to update the VA NHP wetlands catalog. They have recently completed this project arriving at (1) a proposed methodology for identifying and prioritizing mitigation opportunities, and (2) a GIS demonstration of the methodology in 11-subwatersheds of the Lower Pamunkey. Their first step was to identify where the wetlands are—or were, in the case of prior converted wetlands. This was conducted using GIS and input datasets including the NWI, floodplains data, NHD streams, land cover and soils data to identify potential wetlands in the Commonwealth. Secondly, DNH used several datasets to prioritize these mitigation opportunities including Natural Heritage priority conservation sites, impaired waters under Section 303(d) of the CWA, landscape-level habitat core areas and corridors, “healthy streams reaches” identified by Virginia Commonwealth University, as well as the likelihood of the area being wetland as per the first step in the project. This process results in a value for all potential mitigation areas that indicates the number and types of resources that would be protected, where likely prior converted wetlands are highlighted, and where all mitigation opportunities are tagged with their associated subwatershed(s) and tax parcel IDs. A unique aspect of this methodology is the inclusion of information about impaired streams and prior converted wetlands, as well as indicators of biodiversity.

Natural Heritage Data Management Totals for FY2009:

Activity 04/01/10 – 09/30/10

New Mapped Locations (EO) - 35
Updated Mapped Locations (EOs) - 145
New Conservation Site - 5
Updated Conservation Sites - 15
QC Mapped Locations (EOs)
QC Conservation Sites

Total Number in Database 09/30/10:

Animal Mapped Locations (EOs) - 1151
Plant Mapped Locations (EOs) - 1213
Community Mapped Locations - 355
Conservation Sites - 788
Managed Areas: **2433**
Mapped Tracts (total): **3254**

Miscellaneous Education and Training:

Fort A. P. Hill Earth Day Celebration on - 04-10

The Coastal Zone Locality Liaison had a display, next to DCR Parks, at the Fort A. P. Hill Earth Day Celebration. Along with a display of Caroline County's Conservation Sites with pictures and information about some of the rare, threatened or endangered species, DNH displayed northern purple pitcher plants and a specimen display of dragonflies. There was also an activity for the children creating pitcher plants from card stock. About 150 children from middle school through high school, teachers and parents as well as Ft. A. P. Hill staff participated in the event.

NEMO Public Issues Education Training – 05-10

The Coastal Zone Locality Liaison participated in the second session of Discoursed-based Education presented by Virginia Cooperative Extension/NEMO entitled: "Assisting Localities with Natural Resource Issues: An Introduction to Public Issues Education Session #2: Situation Assessment and Program Design. The session was held at Sweetbriar College and included participants from several of the DCR divisions.

Stream clean-up – 06-10

Four heritage staff members participated in a DCR sponsored clean up of Walker's Creek located at the south end of the Mayo Bridge on June 11, 2010. The clean-up effort was both by land and water and 6 bags of trash were collected and 2 bags of recycle. This activity was part of the James River Regional Cleanup. DCR is considering adopting this stream as part of their Adopt-A-Stream program in partnership with the City of Richmond.

Junior Naturalist Summer Camp – 08-10

The project review coordinator participated in the Collegiate day camp as an instructor. The activities focused on birds, bats and wetlands with discussion topics including white nose syndrome, rare birds and community types. Thirty-seven children (K-7 grades) participated in the week-long camp featuring a field trip to the James River to explore aquatic and terrestrial habitats.

What's Happening to Our Native Plants and Animals Conference – 09-10

On September 21, DCR Natural Heritage Stewardship Biologist and Natural Areas Zoologist presented talks at the one-day conference, "What's Happening to Our Native Plants and Animals." Virginia Institute of Marine Science sponsored the conference at their campus in Gloucester Point. The Natural Areas Zoologist

presented an overview of White-nose Syndrome, which is severely impacting cave-dwelling bats. Loss of bat populations may trigger increases in a number of insect populations, including mosquitoes. The Stewardship Biologist presented a talk on early detection of potential invasive species and use of online reporting and mapping tools. Featured tools included iMapInvasives.org, a sophisticated multi-state initiative with help from NatureServe currently in development. Staff from VDACS Office of Plant and Pest Services presented talks on emerald ash borer, invasive species surveys, and threats to domestic honeybees. VIMS staff gave a talk on a variety of invasive species, their economic and ecological impacts, and the role climate change is playing in invasive species spread and establishment. The conference was attended by 110 participants, many of whom are Master Naturalists. State and federal agency staff also attended.

Presentation on Eastern Shore native plants to Bay Bloomer Garden Club – 09-10

On September 29, Eastern Shore Region Steward, Dot Field gave a presentation on the “Plant ES Natives Campaign” to the Bay Bloomers, a garden club based in Cape Charles. The presentation discussed the goals and objectives of the campaign and concluded with a pictorial overview of Eastern Shore native plants suitable for use in home landscapes and gardens. Thirty club members and friends attended.

Presentation to Hampton Roads Native Plant Society - 09-10

Eastern Shore Region Steward, Dot Field gave a presentation to the Hampton Roads Native Plant Society on September 23. The presentation, entitled “Plants of the Coastal Edge”, focused on plants found in the coastal natural communities of the Eastern Shore and the adjoining barrier islands. Emphasis was placed on adaptations to salt spray and intrusion, sandy soils and frequently disturbed habitats. Twenty people attended.

Land Conservation:

Isle of Wight Land Conservation project – 05-10

DCR Natural Heritage staff met with Isle of Wight County officials along with representatives from the Department of Forestry and The Nature Conservancy to discuss details of the acquisition of a 2500 acre tract by the County on the Blackwater River, with funding support from the VA Land Conservation Foundation (\$566K), Forest Legacy Funds (\$850K) and North American Wetlands Conservation Act (\$75K). Project goals include protection of the bottomland old-growth forest, water quality protection, restoration of longleaf pine ecosystem on the uplands, outdoor recreation opportunities, and revenue generation for the County.

Land Conservation in the Bay Watershed - 06-10

On June 7, DCR-Division of Natural Heritage staff, DCR-Office of Land Conservation staff and DCR-Deputy Director Jeb Wilkinson were invited to join representatives from Maryland, Pennsylvania, the Conservation Fund, the American Farmland Trust, National Park Service, and the Friends of the John Smith Chesapeake Trail, to discuss the upcoming revision to the Chesapeake Bay Commission report on land conservation in the Bay watershed. Virginia DCR staff briefed the group on the successes that have enabled Virginia's contribution to the Chesapeake Bay 2010 Land Conservation goal, as well as the challenges ahead. Successes included the nationally-recognized conservation lands tracking work at DCR-Natural Heritage, the development and implementation of the Virginia Conservation Lands Needs Assessment for conservation planning and the interactive mapping websites that have made these data available to the public. Likewise, among the greatest challenges in Virginia, was keeping these tools updated in the coming years so that land conservation can strategically target the best lands, using the most current and relevant data and information.

92 acres in Northampton County to be preserved – 06-10

The Davis Family Trust has accepted DCR's offer for the purchase of 92 acres of property on the Chesapeake Bay in Northampton County. This project is funded by a grant from American Electric Power.

Potential Acquisition of Crow's Nest Harbor Subdivision – 07-10

DCR Natural Heritage staff have been contacted by Stafford County concerning DCR's potential interest in working with the county to acquire up to 800 acres of the platted Crow's Nest Harbor subdivision adjacent to Crow's Nest Natural Area Preserve. Staff is talking with the county about potential funding sources. This would make an excellent final addition to the Natural Area Preserve, and the County is very interested in seeing it happen, but the project is complicated in that it is a platted subdivision with three major cooperating partners holding 80% of the lots, and all of the lots are unbuildable under current county water and sewer conditions

Virginia Partners in Land Management annual meeting – 09-10

On September 27-28, the DCR Director and Division Directors from Natural Heritage and Planning and Recreation Resources attended the annual meeting of the Virginia Partners in Land Management in Sweetbriar. Comprised of representatives from the US Forest Service, US Fish and Wildlife Service, National Park Service, Natural Resources Conservation Service, Va. Dept. of Forestry, Va. Dept. of Game and Inland Fisheries, Va. Tech College of Natural Resources, and DCR, the group provided updates on key land management issues in their respective areas. The main focus for discussion centered on the aging workforce in natural resource professions, and the need for the group to actively work towards recruiting youth and representatives of a more diverse population as future leaders.

c) DCR – Division of Planning and Recreation Resources

DCR Public Access Projects

DCR continues updating the agency website to include additional information on water trails and public access.

The Scenic River program raises the awareness of the state's scenic rivers and helps protect their recreational and historic attributes. 2010 marked the 40th anniversary celebration of Virginia's Scenic River program. During this year there has been a total of four additions to the scenic river program. Scenic river designation for 56 miles of the Blackwater River from Proctors Bridge to the North Carolina line was passed by the General Assembly and became effective July 1, 2010. The Blackwater River was one of 4 rivers designated as a state scenic river in 2010. Also in 2010, DCR conducted an evaluation of the Nottoway River in Southampton County, from Route 653 (Carey's Bridge) to its confluence with the Blackwater River and found it to qualify for designation. The Southampton Board of Supervisors passed a resolution supporting the Blackwater Scenic River designation. It is anticipated that this river will be designated by the 2011 General Assembly.

Public access to waterways was the number one recreational priority identified by Virginians in the 2006 Virginia Outdoors Survey. As a part of promoting this outdoor recreation use, Department of Conservation and Recreation staff has attended Public Access Working Group meetings for the Chesapeake Treasured Landscapes initiative. These meetings bring together representatives from Maryland, New York, Pennsylvania, Virginia, and Washington DC to discuss an implementation plan for increasing public access to waterways in the Chesapeake Bay watershed. The plan's objective is to develop a regional public access strategy and to increase public access to the Bay and its tributaries by 300 additional sites Bay wide by the year 2025.

DCR Planning District Projects

There were 1446.73 acres of easements recorded in the coastal zone April 2009 – Sept 2010.

d) DCR- Division of Chesapeake Bay Local Assistance

Summary:

During the reporting period, April 1, 2010 through September 30, 2010, the DCR Chesapeake Bay Local Assistance Division of DCR completed the initial round of evaluations for local government compliance with the land use and water quality provisions contained in the regulations pertaining to the Chesapeake Bay Preservation Act. The Division has also 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. The following is a summary of 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 the review and revision of local land use codes to include specific standards that implement water quality performance criteria.

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

In its review of local Bay Act programs, the Chesapeake Bay Local Assistance Board (CBLAB) adopts two kinds of determinations. When a locality is deemed consistent, it means the local ordinances are in place to designate CBPAs and to require that the performance criteria be met. When the Board deems a local program compliant, it means that the locality is properly implementing the required code or comprehensive plan provisions.

Consistency Reviews:

For the period covering April 1, 2010 through September 30, 2010 all 84 local Bay Act programs remain consistent with Phase I of the current Regulations. As indicated in previous reports, all 84 local comprehensive plans are also consistent with the Regulations.

Compliance Evaluations:

For the reporting period, 4 localities were deemed by CBLAB to be fully compliant with Phase I of the Bay Act, bringing the total number of compliant localities to 83. As of September, 2010, only 1 locality is not fully compliant but is addressing conditions to achieve full compliance. As a reflection of the progress made by localities on compliance with the Bay Act regulations, all 84 (100%) of the Tidewater localities have programs that meet the septic pump-out provisions of the Regulations. For the period covering 2009-10, 28,963 septic systems were pumped resulting in nitrogen load reductions of roughly 13,166 pounds. Also, all 84 (100%) of the Bay Act localities are now ensuring that water quality best management practices are in place to reduce

pollutants generated from land development and are further requiring that those BMPs are being adequately maintained. Since 2008, Bay Act localities reported requiring the installation of 2166 new water quality BMPs that are treating 26,013 acres of land.

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 2010, 36 advisory reviews have been completed and an additional 17 are underway. Completion of the remainder will continue through the first or second quarter of 2011.

Site Plan Reviews:

For the reporting period 154 federal and/or state Environmental Impact Reports, Environmental Assessments, and Environmental Impact Statements were reviewed and commented upon. Staff routinely responds to technical inquiries from local government staff and from consulting firms in conjunction with these reviews. Several inquiries are typically fielded in any given week, which generally involve questions regarding water quality BMPs, buffers or interpretation of the technical aspects of the regulations and guidelines. In addition to the review of state and federal projects, staff reviewed 11 site plans at the request of local governments. The Chesapeake Bay Preservation Act contains a requirement that the Department provide site plan review assistance when requested by a locality.

Technical Assistance and Outreach:

DCBLA continues to actively provide technical assistance to local staff as well as education and outreach to local staff, elected and appointed officials, consultants and advocacy groups. During the reporting period, Department staff conducted 23 technical assistance site visits, 2 education & outreach events and 3 training workshops in order to promote a greater understanding and implementation of the Chesapeake Bay Preservation Act. Further, DCBLA staff liaisons regularly attend meetings of and maintain productive working relationships with the 8 Planning District Commissions within Tidewater Virginia. The staff liaisons also work closely with those PDCs to enhance local assistance efforts.

Next round of Compliance Evaluations:

As previously reported Chesapeake Bay staff worked with CBLAB and its policy committee to revise the review elements of the next round of compliance evaluations. At its June 2010 meeting, the Chesapeake Bay Local Assistance Board adopted 31 review elements to be incorporated into the compliance review program. The approved review elements relate to specific provisions contained in the Chesapeake Bay Preservation Area Designation and Management Regulations. As designed by staff and approved by the Board, this compliance evaluation program will be the first time all Bay Act localities will undergo a comprehensive review of the provisions of the Bay Act Regulations. New 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. This second round of compliance evaluations was initiated during the reporting period.

Key Projects:

Working with staff from the DCR Public Communications Office, CBLAD has recently developed a Water Quality Code Provision Search Tool, which is contained on the Division's Web site. The ordinance search tool provides a listing of all ordinance provisions reviewed to date through the Advisory Review process described above. The ordinances correspond to questions contained in the two checklists being used during the Advisory Reviews. Questions 1 through 70 correspond to the questions on the Checklist for Advisory Review of Local Ordinances. Questions SPP1 through SPP6 correspond to the Site Plan and Plat Consistency Review Checklist questions. This database will be updated periodically as DCR completes more reviews of local ordinances. This database "went live" in June of 2010.

5) Department of Game and Inland Fisheries (DGIF)

Recreational Fishing:

1. Submerged Aquatic Vegetation Study – Back Bay

In 2010, the Fisheries Division of the Virginia Department of Game and Inland Fisheries (DGIF), in cooperation with the Back Bay National Wildlife Refuge (BBNWR), deployed approximately 800 linear feet of floating turbidity curtain in Back Bay as part of an ongoing research effort to determine variables in the growth of submerged aquatic vegetation in Back Bay. These curtains were placed in shallow areas adjacent to the BBNWR in areas with considerable exposure to wave action. Due to the relatively shallow depths of the Back Bay system, moderate winds can generate waves capable to resuspending organic matter and sediment, thereby blocking sunlight from penetrating the water column and preventing SAV growth. The work in 2010 was the first year of a multi-year project that will use these curtains as a method of reducing wave action and sediment transport.

Fisheries population sampling was continued in Back Bay in 2010. Community fisheries surveys were conducted throughout the Back Bay system. Collections were made via electrofishing as well as benthic trawl surveys.

2. Stream Monitoring, Adult Anadromous Fishes

Weekly boat electrofishing for adult anadromous fish began in February 2010 on the James and Rappahannock rivers in the fall zones. Less frequent sampling was also conducted on other streams such as the Mattaponi River. American shad were scarce in tidal Rappahannock samples. On the James below Boshers Dam, American shad catch rates were not as high as in 2009 (highest on record) but were above average compared to recent years.

3. Boshers Dam Fishway

The 2009 video review is near completion and 91 American shad have been counted. This is just slightly higher than 2008 (62). For 2009 only American shad were counted but gizzard shad were clearly the numerically dominant species again. Since 1999, at least 23 species of fish have used the fishway including a few striped bass. Sea lamprey, a native anadromous fish, is commonly seen using the fishway. The fishway was operated again during the 2010 migration season and the video that was collected will soon be reviewed.

4. Stream Monitoring, Juvenile Alosines

Juvenile alosine sampling using a bow-mounted push net was conducted from June into July of 2010 on the James (Boshers pool) and Rappahannock (tidal) rivers. Boat electrofishing began in July and will continue into early November. Pushnetting upstream in the Boshers pool produced fewer fish than normal so electrofishing began one month early resulting in the collection of ample numbers of shad for otc analysis. There was initial concern that there would not be enough shad collected for otc analysis. It appears that the juvenile shad simply had not yet moved downstream into the Boshers pool from upstream stocking locations

and, perhaps, wild spawning areas. Rappahannock collections have also been successful this year. Otoliths will be extracted from the American shad juveniles and examined under a black light microscope to determine their origin. Oxytetracycline (otc) treatment of fry in the hatchery results in a visible ring in the otoliths under black light.

The preliminary results of the 2009 juvenile American shad monitoring are as follows. Out of the 129 juvenile American shad otoliths examined from the Boshers pool 99.2% were of hatchery origin (5% wild in 2007 is the highest wild % on record). For the tidal Rappahannock, 87 otoliths were examined. Wild fish made up 93.7% and hatchery fish made up 6.9% of the sample. The average wild percentage in the tidal Rapp over the previous three years was 60%.

5. Fish Passage Projects

For the removal of Harvell Dam, the first dam encountered by migratory fish on the Appomattox River, we are currently completing the final design and preparing for the permit process. We have secured implementation funding from NOAA's Open Rivers Initiative and the USFWS Fish Passage Program. The major current challenge is to secure final permission from the owner.

Fletcher Mill Dam on the Thornton River (trib to Hazel in upper Rappahannock drainage) was removed this past winter (December/January) by TU. Riverton Dam on the North Fork Shenandoah is slated for removal this fall (DGIF, Front Royal and USFWS partnership). The current plan is to begin the removal project in October 2010.

The design for a replacement fishway at Walkers Dam on the Chickahominy River was completed. Newport News is replacing the dam over the next year and the new fishway will be constructed as part of the phased replacement of the dam.

Charles Lake Dam on Kimages Creek, a tidal James tributary, is slated for removal this fall. The dam breached in a storm a few years ago. The restoration project by VCU, TNC and AR/NOAA involves removing enough of the earthen dam to restore the natural channel to provide fish passage and wetlands restoration.

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.

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.

Land Acquisition:

VDGIF recently purchased 765 acres in Caroline County. This new parcel has been named Mattaponi Wildlife Management Area. Over the next year, VDGIF hopes to also acquire the adjoining land for a grand total of 2,600 acres of additional land preservation in the coastal zone during 2010 – 2011.

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.

VDGIF is working with partners, including a regional land trust, to implement the Priority Conservation Areas 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.

NonGame Species Monitoring and Research:

1. Delmarva fox squirrels

One of the recovery objectives for the federally endangered Delmarva fox squirrel (*Sciurus niger cineris*; DFS) is to restore populations throughout its historic range, which includes Virginia's Eastern Shore. At present, Chincoteague National Wildlife Refuge harbors the only known self-sustaining DFS population in the state of Virginia. The translocation of DFSs on lands that currently do not support squirrels have proven to be a successful means of expanding and increasing DFS populations within the species' historic range. Many of the forests that may serve as suitable translocation sites Virginia's Eastern Shore are privately owned. Several years ago, VDGIF was awarded federal funding under the Private Landowner Incentive Program 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 2007, VDGIF entered into a contractual agreement with a locally owned environmental consulting firm (hereafter referred to as contractor) to assist with the identification of at least two private property owners with suitable squirrel habitat who are willing to have DFS translocated onto their property and agree to engage in land management and restoration activities designed to benefit DFS. Below is a summary of recent actions taken towards the establishment of a DFS safe harbor program on Virginia's Eastern Shore.

During the first year of the project an intensive GIS based landscape analysis was used to identify potential areas on the Eastern Shore that are privately owned, likely contain suitable DFS habitat, and have predicted land uses conducive to supporting DFS populations. This analysis resulted in the discovery of two potential sites near the Maryland/Virginia state line that encompass an area of approximately 4,200 acres of largely forested habitat, hereafter collectively referred to as Conservation Area 1. Both sites are actively managed for silviculture and are within five miles of two viable DFS populations located in Maryland. If the introduction of DFS into Conservation Area 1 is successful and results in an expanding population, it is possible that genetic interchange may occur between the Maryland populations and the introduced Virginia population.

Following the discovery of Conservation Area 1, the contractor conducted an on-the-ground habitat suitability analysis at the two sites after gaining permission from both landowners to survey their lands. Results from the habitat surveys indicate that neither property is entirely suitable for DFS; however, both sites contain parcels with suitable DFS habitat that are large enough to sustain a viable population over the long term. Furthermore, there is also potential connectivity among suitable tracts within each property and between the two properties. Collectively, these areas represent several potential DFS translocation sites that can serve as the "core" area for the DFS reintroduction in northern Accomack County and pave the way for the implementation of long-term DFS management strategies.

The majority of work completed during this reporting period focus on persuading the two major landowners in Conservation Area 1 to allow DFS translocations to occur on their properties in response to their growing reluctance to enter into a safe harbor agreement because of fears regarding possible restrictions imposed by the Endangered Species Act. VDGIF staff and the contractor met with the attorney of the second landowner in the spring of 2010 to address his client's concerns and at the end of the meeting the attorney agreed the safe harbor agreement posed no encumbrances on the landowner and promised to advise his client to reconsider our proposal. The landowner's final decision on whether or not to enter into the safe harbor program is still pending as is the decision by the first landowner, Sustainable Conservation, Inc., which a subsidiary of the Conservation Fund.

Despite the set backs described above, the contractor completed a comprehensive five-year DFS management plan for Conservation Area 1 during this reporting period. It provides in detail, forest management recommendations that would ensure the success and viability of an introduced DFS population in Conservation Area 1 and at the same time does not place any encumbrances on the landowners. Lastly, the first draft of the Safe Harbor Agreement application to be submitted to the US Fish and Wildlife Service is still awaiting review by Virginia's state Attorney General.

2. 2010 American Oystercatcher Breeding Summary

In 2009, VDGIF staff began monitoring oystercatcher productivity on islands located in Accomack County along the eastern shore of the Chesapeake Bay. The decision to shift the majority of VDGIF's oystercatcher monitoring efforts from the barrier islands to the eastern shore of the Chesapeake Bay was based on the fact that this area of the Bay supports approximately 15% of the Commonwealth's oystercatcher breeding population and harbors nearly 90% of the breeding pairs in the Chesapeake Bay. Thus, we considered this an important breeding area that warranted further examination. No prior attempts have been made to measure oystercatcher breeding success in the Chesapeake Bay, therefore by filling this data gap, we will be able to compare reproductive success among the three most important oystercatcher breeding areas in Virginia: the barrier island chain; the seaside lagoon system; and the eastern shore of the Chesapeake Bay. This work was further motivated by the fact that many of the Bay islands are experiencing severe erosion, which added a level of urgency to begin collecting avian productivity data before the sites become unsuitable for nesting birds.

We monitored the reproductive success of 90 oystercatcher pairs on nine Chesapeake Bay islands in 2010 (Table 1). We did not cover Lower Bernard Island or Pamlico Creek Islet this year because collectively they supported only three pairs in 2009 and did not warrant the extra time and resources needed to continue monitoring these sites. We included a new site (No Name Island) this year because it is located in close proximity to Webb Island and may at one time have been part of the Webb Island chain. All other sites were monitored both years.

The combined productivity estimate for the bay islands was 0.78 fledged young per pair, which represents an increase over the previous year's estimate of 0.57 fledged young per pair (Table 1). At two of the nine sites we reported productivity estimates above 1 fledged young per pair, while estimates for the remaining seven sites fell below 1 fledged chick per pair. A population viability analysis performed by Davis (1999) using demographic parameters from the closely related European Oystercatcher (*Haematopus ostralegus*) predicted that productivity values as low as 0.14 fledged young per pair per year are sufficient to maintain a stable oystercatcher population given their longevity. Only No Name Island fell below this threshold and we consider this rather inconsequential given that this site supported only one pair (Table 1). This year's combined productivity estimate for the bay islands was well within the range reported for the barrier island chain and seaside lagoon system whereas in the previous year, productivity on the bay islands exceeded estimates reported for the island chain and lagoon system (Table 2). These data indicate that collectively, the bay islands currently support source populations, but further monitoring will be necessary to determine how the distribution and reproductive success of breeding pairs on these islands will change as the amount of suitable nesting habitat continues to decrease because of rising sea levels and increased frequency of storms.

As in 2009, we have very little information regarding this year's hatching success. Moreover, we were unable to determine cause for the vast majority of failed nesting attempts due to irregular intervals between site visits, which ranged from 2 – 10 days. In 2010, we were able to confirm the hatching of at least one egg for 55 of the 120 nesting attempts. Of the 55 successful nests, 46 (84%) yielded at least one fledged young. Conversely in 2009, 57 (55%) of the 103 documented nesting attempts were known to have hatched at least one egg and of those, only 35 (61%) yielded at least one fledgling. During both years, we suspected that avian depredation and tidal flooding were the two major factors effecting oystercatcher hatching and fledging success. In both years, all sites monitored harbored breeding Herring Gulls (*Larus argentatus*) and Great Black-backed Gulls (*L. marinus*). These gulls are known nest predators (Schulte *et al.* 2007) and have been observed attempting to take oystercatcher chicks (A. Wilke, TNC, pers. comm.) and adults (P. Denmon, USFWS, pers. comm.). While we did directly observe the taking of oystercatcher eggs, young or adults, we surmise they may have had some impact on breeding success given the fact that the vast majority of oystercatcher breeding territories contained nesting gulls. Moreover, we found three dead chicks from two different broods with puncture wounds indicative of avian depredation. We documented the periodic presence of two immature and one adult Bald Eagle (*Haliaeetus leucocephalus*) at Webb and Halfmoon islands this year and encountered several gull carcasses that showed evidence of eagle depredation. This suggests that gull populations are being held in check to some degree by larger avian predators. We predict large gulls will continue to nest on the bay islands for as long as the habitat remains

suitable, but so far our data show that oystercatchers are able to experience relatively high breeding success in the presence of these aggressive avian predators. We observed no evidence of mammalian predators at any of the sites covered this year or last year.

In 2010, we did not observe the prolonged and abnormally high tides documented the previous year (Sweet *et al.* 2009) which likely contributed to this year's increase in breeding success. As in the previous year, we observed very little human activity on the bay islands. Sites most frequented by the public were Watts, Clump and Halfmoon islands with most visits occurring on the weekends. Despite the fact that Tangier is a developed island, we saw people in the oystercatcher nesting area only on one occasion. This is largely due to the fact that the beaches where the majority of oystercatchers nest are not very conducive to recreational activities because they are narrow and interspersed with marsh. We plan to continue monitoring the bay islands for at least one more year to account for annual variation in productivity rates and environmental conditions and document shifts in local distribution.

Table 1. American Oystercatcher productivity estimates on nine Chesapeake Bay islands in Accomack County, Virginia, 2010. Results from 2009 monitoring efforts are displayed in parentheses.

Site	No. pairs Monitored	No. known nesting attempts	No. yng Fledged	Productivity estimate ¹
Clump Island	17 (11)	26 (13)	14 (16)	0.82 (1.45)
Goose Island	11 (9)	13 (9)	12 (14)	1.09 (1.56)
Tangier Island	13 (11)	13 (14)	11 (7)	0.85 (0.64)
Watts Island	11 (13)	15 (17)	4 (2)	0.36 (0.15)
Halfmoon Island	9 (8)	13 (9)	4 (5)	0.44 (0.63)
Webb Island	11 (13)	16 (14)	7 (2)	0.64 (0.15)
No Name Island	1 (ND ²)	2 (ND ²)	0 (ND ²)	0.00 (ND ²)
Parker's Island	12 (11)	16 (15)	10 (1)	0.83 (0.09)
Scarsborough Is.	5 (7)	6 (8)	8 (2)	1.60 (0.29)
TOTALS	90 (86)	120 (103)	70 (49)	0.78 (0.57)

¹ No. young fledged ÷ no. pairs monitored. Calculations based on pairs with known nests.

² ND = no data.

Table 2. American Oystercatcher productivity along Virginia's barrier island chain and within the seaside lagoon system, 2006 – 2010. Productivity estimates were based on the total number of pairs monitored within each geographic area and reflect number of young fledged per pair. Only those pairs with known nests were included in the calculations.

Area	2006	2007	2008	2009	2010
Barrier islands	0.61	0.43	0.43	0.31	0.89
Seaside lagoon system	0.59	0.24	0.41	0.42	0.70
Chesapeake Bay islands	--	--	--	0.57	0.78

In 2010, VDGIF continued to monitor the reproductive success of oystercatcher pairs breeding in the seaside lagoon system adjacent to the village of Wachapreague (hereafter referred to as the Wachapreague marshes). The Nature Conservancy's Virginia Coast Reserve (VCR) began monitoring the Wachapreague marshes in 2004 and transferred the responsibility over to VDGIF the following year. This year, we monitored a total of 32 pairs which collectively produced 23 young and resulted in an overall productivity estimate of 0.72 fledged young per pair. This is the second highest productivity estimate reported for the Wachapreague marshes since 2004 (Figure 1). Our data continue to suggest that tidal flooding is the most significant limiting factor for birds breeding in this system and generally results in numerous renesting attempts as nests get washed out during extreme tide cycles. For example, among the 32 pairs monitored this year, we documented a total of 66 nesting attempts. However, pairs that manage to elude flooding events during the incubation period and produce hatchlings stand a good chance of fledging young. Of the 21 pairs that hatched at least one egg in 2010, 18 (86%) fledged at least one young. High fledging success may be due in part to a lack of mammalian predators and an abundant food supply within or in close proximity to oystercatcher breeding territories. The variability

in breeding success illustrated in Figure 1 reflects how the timing of flooding events in relation to oystercatcher nesting phenology plays an important role in overall productivity within the seaside lagoon system.

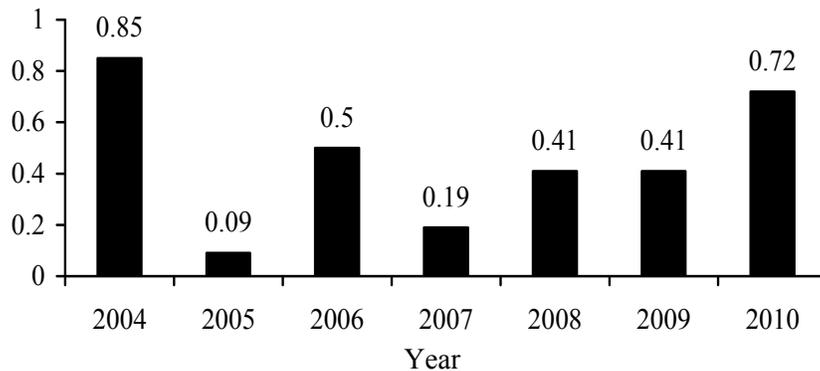


Figure 1. American Oystercatcher productivity rates in the Wachapreague marshes within the seaside lagoon system of Virginia's Eastern Shore, 2004 – 2010. Estimates reflect number of chicks fledged per pair. Only those pairs with known nests were included in the calculations. 2004 data were provided by the Nature Conservancy's Virginia Coast Reserve.

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3. American Oystercatcher Banding

In 2003, The Nature Conservancy's Virginia Coast Reserve (VCR) initiated an American Oystercatcher banding program, which targeted primarily hatch year birds hand captured on breeding territories. In the first year, VCR staff applied unique combinations of multiple, UV resistant single layer darvic plastic wrap around color bands on the right and left metatarsus and tibiotarsus along with a size 5 USFWS metal band on the right metatarsus. In 2004, the wrap around color bands were replaced with size 6 black color bands made of a triple-layer, UV-resistant darvic plastic. Each band is engraved twice with white, unique field-readable two-digit alpha-numeric codes and duplicated. Each bird received two identical color bands, one on each tibiotarsus, and a size 5 USFWS metal band on the right metatarsus. In 2005, VDGIF began assisting with oystercatcher banding efforts in Virginia, and below is a brief summary work performed in 2010.

All of VDGIF's banding efforts in 2010 were focused on sites monitored for oystercatcher productivity (i.e., Chesapeake Bay islands and the Wachapreague marshes). We banded a total of 39 unfledged young eight of the nine bay islands, of which only one did not fledge (Table 1). In addition, we banded 21 unfledged young in the Wachapreague marshes, all of which fledged.

Table 1. Summary of American Oystercatcher banding in Virginia during the 2010 breeding season within three geographic regions. Numbers in parentheses represent total number of banded birds in each geographic area.

Site	Total no. chicks banded
BARRIER ISLANDS	
Assateague Island	2
Assawoman Island	13
Cedar Island	2
Cedar Sandbar ¹	6
Cobb Island	1
Fisherman Island NWR ²	4
Little Cobb Island ³	1
Metompkin Island	10
Ship Shoal Island ⁴	5
Smith Island	4
Wreck Island	2 (50)
SEASIDE MARSHES	
Chimney Pole	1
Wachapreague	21 (22)
CHESAPEAKE BAY ISLANDS	
Clump Island	6
Goose Island	7
Halfmoon Island ⁵	3
Scarborough Island	6
Tangier Island	4
Watts Island	2
Webb Island	7
Parker's Island	4 (39)
TOTAL BANDED	111
TOTAL FLEDGED	102

¹ KY. and T4 did not fledge from Cedar Sandbar

² N1, N2 and N3 did not fledge from Fisherman Island

³ 87. did not fledge from Little Cobb Island

⁴ 86. And 92. did not fledge from Ship Shoal Island

⁵ P2 did not fledge

Since 2003, 643 young and 21 adults have been banded in coastal Virginia (Table 2). In recent years, this has been a collaborative effort on the part of VCR, Eastern Shore of Virginia NWR, Chincoteague NWR and VDGIF. The majority of banded birds have originated from breeding territories on the barrier islands; however, we are increasing efforts to expand breeding season banding efforts in the seaside lagoon system and Chesapeake Bay islands. Prior to 2009, a total of 23 oystercatchers were banded on breeding territories in the Chesapeake Bay, the vast majority of which were marked an independent researcher. Currently the number stands at 91 individuals or 14% of Virginia's banded population (Table 2). Moreover, the number of oystercatchers banded in the seaside marshes currently exceeds 100. These efforts have and will continue to provide a greater opportunity to determine post-breeding dispersal patterns and survival rates of birds originating from different breeding areas within Virginia through in-state fall/winter re-sighting efforts as well as resighting surveys conducted by individuals throughout the oystercatchers' winter range.

Table 2. Summary of American Oystercatchers banded in coastal Virginia, 2003 – 2010. Totals for the number of young banded only include individuals known to have fledged. Birds banded in 2003 received wrap-around non-engraved color band combinations. Birds banded in 2004-2010 received engraved color bands as dictated by the American Oystercatcher Working Group coordinated color banding scheme. Young includes birds banded as "locals", "fledged" young on territory and hatch years banded in the fall and early winter. Adults include all adults banded on territory or AHYs on winter roosts.

Region	Total banded (% of total)	Total young (% of total yng)	Total adults (% of total adults)
Barrier islands	462 (69)	450 (70)	12 (57)
Seaside marshes	111 (17)	106 (16)	5 (24)
Chesapeake Bay islands	91 (14)	87 (14)	4 (19) ¹
TOTALS	664	643	21

¹All four adults were banded by an independent researcher.

4. Colonial Waterbirds

In 2010, 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, an effort which began in 2006. The annual survey window for Virginia is June 5 – 20. Least Terns are one of the more difficult seabird species from which to obtain accurate breeding population estimates because they are highly ephemeral (abandon one site in favor of another in rapid fashion 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. As such, several methods are 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. None of these methods are known to yield accurate population estimates given the nature of the species. 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. Virginia's survey results from 2006 – 2010 are presented in Figure 1 and thus far the data show an increasing statewide trend in the number of breeding pairs.

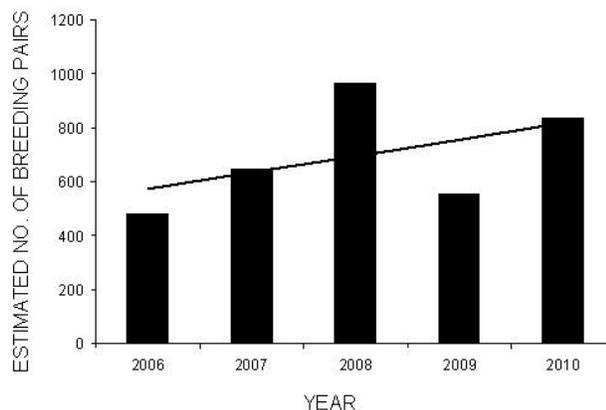


Figure 1. Estimated number of Least Tern breeding pairs in Virginia, 2006 – 2010.

In all years, over 50% of the breeding pairs occurred on the barrier islands located seaward of the Delmarva Peninsula and in 2009 and 2010 the percentage increased to over 70% (Table 2). This represents the most pristine and undisturbed habitat utilized by Least Terns. 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. All of these sites are impacted heavily by human recreational activities and to a lesser extent, mammalian predators, during the breeding season. Greater effort is being made to minimize human disturbance through education and outreach and regulatory actions on the part of local municipalities. Craney Island Dredge Material Disposal Site in Portsmouth, VA, which is owned and managed by the US Army Corps of Engineers (USACOE), has supported between 1% and 11% of the statewide Least Tern breeding population (Table 2). This site receives considerable disturbance from construction activities and operation of heavy equipment. Moreover, it supports a large population of mammalian predators, primarily Red Fox (*Vulpes vulpes*) and raccoons (*Procyon lotor*). An avian management plan is currently being drafted by a private consulting firm to provide guidance to the USACOE on how to minimize disturbance to nesting birds. In 2007, Least Terns were discovered nesting on rooftops (i.e., Lynnhaven and Patrick Henry malls located in Virginia Beach and Newport News, respectively) for the first time in coastal Virginia. Roof top colonies have been reported throughout the southeast for several decades and have been anticipated for many years in Virginia. In 2009 and 2010, Least Terns did not occupy the rooftop at Patrick Henry Mall, which is a positive shift given that such colonies are subject to severe heat stress and rapid flooding events following heavy downpours.

Table 1. Percentage of the annual estimated number of Least Tern breeding pairs that nested among four different habitat types in Virginia, 2006 – 2010. Numbers in parentheses represent the number of colonies in each habitat type.

Habitat type	% of estimated statewide number of breeding pairs				
	2006	2007	2008	2009	2010
Barrier beaches ¹	69 (19)	58 (19)	56 (32)	72 (26)	73 (19)
Inshore beaches ²	30 (2)	37 (4)	25 (5)	10 (3)	13 (4)
Dredge material site ⁴	1 (1)	1 (1)	6 (1)	11 (1)	9 (1)
Rooftop sites ²	0	4 (2)	13 (2)	7 (1)	5 (1)
TOTALS	100 (22)	100 (26)	100 (40)	100 (31)	100 (25)

¹Barrier islands located seaward of the Delmarva Peninsula

²Western shore of the Chesapeake Bay

³Craney Island Dredge Material Management Area, Portsmouth, VA.

⁴Lynnhaven Mall, Virginia Beach, VA and Patrick Henry Mall, Newport News, VA in 2007 and 2008 only

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 loggerhead sea turtle (*Caretta caretta*) nesting database. From 1970 – 2010, a total of 126 Loggerhead nests and one Green Sea Turtle (*Chelonia mydas*) have been documented in Virginia, the majority of which have occurred on the southern mainland beaches near the NC/VA border. In 2010, nine confirmed loggerhead nests were reported in Virginia; four on Wallop's Island, one on Assateague Island and four on the southern mainland beaches at False Cape State Park and Back Bay NWR (BBNWR). In addition, one Loggerhead nest was discovered on Maryland's portion of Assateague Island. Final results on this year's hatching success are still pending, but so far only one nest has hatched successfully on Wallop's Island whereas all four nests on the southern mainland beaches have completed hatching. BBNWR staff report that three of the four nests had a hatch rate of $\geq 90\%$ while the remaining nest had a hatch rate of 57%. The nest on Assateague Island has shown no hatching activity thus far. Lastly, BBNWR staff documented one non-nesting emergence on the southern mainland beaches and Wallop's Island biological staff reported two non-nesting emergences.

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; two on Goose Island located in the Chesapeake Bay and four on the barrier islands. The 2010

statewide stranding total thus far is 133: 105 loggerheads; 20 Kemp's ridleys; four green turtles, two leatherbacks and 2 unidentified turtles.

In 2009, VDGIF staff completed and submitted its application for a Section 6 Cooperative Agreement with National Marine Fisheries Service (NMFS), which allows the Department to apply for federal funding for projects involving the conservation and management of threatened and endangered sea turtles and marine mammals in Virginia. The Cooperative Agreement was signed at the end of the year following the submittal of a multi-state sea turtle proposal that was co-authored by VDGIF and VAQS with the state of Maryland serving as a partner. The proposal was selected for funding by NMFS and the total amount awarded was just over 1.4 million dollars. 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 and the start date is January 2011.

6. *Endangered or Threatened Birds*

2010 Piping Plover and Wilson's Plover breeding summary:

The 2010 end-of-season statewide Piping Plover (*Charadrius melodus*) breeding population was comprised of 192 breeding pairs, which represents a 0.5% decrease from the 2009 end-of-season total of 193 pairs. All Piping Plover breeding activity in 2010 was confined to the barrier islands located on the seaward margin of Virginia's Eastern Shore. As in previous years, the majority of pairs occurred on four northern islands: Assateague (n = 41), Assawoman (n = 24), Metompkin (n = 39) and Cedar islands (n = 44).

Staff from The Nature Conservancy's Virginia Coast Reserve (VCR), Chincoteague NWR, Eastern Shore of Virginia NWR and VDGIF monitored 99% (n = 191 pairs) of the statewide Piping Plover population (n = 191 pairs) in 2010. This year's statewide productivity estimate was 1.35 fledged young per pair. This year's site specific productivity data are presented below in Table 1. These data are preliminary and should be treated as such as proofed results and summaries for each the islands are still pending.

Table 1. Piping Plover productivity estimates on Virginia's barrier islands. The number of pairs monitored for productivity (n = 192), which represents 94% of Virginia's end-of-season Piping Plover breeding population (n = 193 pairs). Numbers in parentheses represent 2009 data.

<i>SITE</i>	# OF PAIRS MONITORED	# OF CHICKS FLEDGED	2009 PROD. EST. (2008 EST.)
NORTHERN BARRIER ISLANDS			
Assateague Island¹	41 (33)	71 (26)	1.73 (0.79)
Wallops ²	4 (4)	4 (10)	1.00 (2.50)
Assawoman Island ¹	24 (26)	35 (31)	1.46 (1.19)
Metompkin Island	39 (46)	54 (51)	1.38 (1.11)
Cedar Island ^{1,3}	44 (39)	51 (60)	1.16 (1.54)
N. ISLAND TOTALS	152 (148)	215 (178)	1.41 (1.20)
SOUTHERN BARRIER ISLANDS			
Wreck Island ³	3 (3)	0 (Unk ⁴)	0.00 (0.00-0.33)
Cobb Island ³	2 (1)	0 (0)	0.00 (0.00)
Ship Shoal Island ³	13 (9)	12 (12)	0.92 (1.33)
Myrtle Island ³	5 (5)	10 (7)	2.00 (1.40)
Smith Island ³	13 (14)	19 (11)	1.46 (0.79)
Fisherman Island ⁵	3 (2)	1 (2)	0.33 (1.00)
S. ISLAND TOTALS	39 (34)	42 (32/33)	1.07 (0.94/ 0.97)
STATEWIDE EST.	191 (182)	257 (210/211)	1.35 (1.15/ 1.16)

¹ Data provided by Chincoteague National Wildlife Refuge.

² Data provided by Wallop's Island biological staff.

³ Data provided by The Nature Conservancy's Virginia Coast Reserve.

⁴ One chick was seen at 16 days old at last site visit.

⁵ Data provided by Eastern Shore of Virginia National Wildlife Refuge

2010 Wilson's Plover Breeding Summary

The 2010 end-of-season Wilson's Plover (*Charadrius wilsonia*) breeding pair total was 29, which represents a 28% decrease from last year's end-of-season total of 40 pairs. Last year's pair total was the highest reported since 2000 when an equal number were observed. Between 2000 and 2009 the breeding population ranged from 26 – 37 pairs with most years reporting fewer than 30 pairs. This year's 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 on the southern islands (Parramore Island – Fisherman Island) during intermittent years and from 1975 – 1990 as many as 30 adults were observed on the southern barrier islands during the breeding season (VDGIF unpubl. data).

2010 Wilson's Plover productivity studies were confined to Metompkin Island and were conducted by VDGIF staff. A total of four pairs were monitored, which represented 14% of the statewide population. We documented six fledged young, which resulted in a productivity estimate of 1.50 fledged young per pair. We began conducting Wilson's Plover studies in 2004 and in prior years covered a greater proportion of the breeding population. Results from these efforts yielded productivity estimates that were consistently higher than were reported for Piping Plovers with exception

of 2009 when productivity fell to 1.09 fledged young per pair. Despite the apparent high level of breeding success relative to Piping Plovers, Virginia's Wilson's Plover population has not increased significantly since breeding surveys began in 1975. This suggests there is limiting factor that is keeping the population at a low, but relatively consistent level.

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 3rd year of production and 4th year of operation at the VA Fisheries and Aquatic Wildlife Center (VFAWC). Propagation started in March and ended in September resulting in the production of nearly 490,000 juvenile mussels from six species (Table 1), which is an increase of nearly 400,000 juveniles compared to the 2009 propagation numbers. While none of the species propagated in 2010 are listed as threatened or endangered, all are either listed as a species of greatest conservation need in Virginia's Wildlife Action Plan or as a species of concern by DGIF and/or the USFWS. Unfortunately, due to water quality issues in the ponds used for propagation that resulted from water quantity issues and the higher than normal air temperatures, approximately 80% of the juveniles were lost due to mortality. Upwards of 100,000 juveniles are being held in floating baskets in Harrison Lake and other systems at VFAWC and these will be checked in upcoming months to determine success. Preliminary assessment of the propagation systems indicates that these juvenile mussels are surviving and growing. Any mussels produced from 2010 will likely be released in 2011 depending on their length.

In addition to propagating freshwater mussels, VFAWC also continued to rear mussels produced in 2008 and 2009. These mussels were slated for release in the fall of 2010 but had to be released earlier due to the water quality issues. Over 3,900 1+ and 2+ mussels from three species were released in two rivers, with the majority released in the lower Nottoway River (Table 2). Upwards of 4,000 mussels produced in 2009 were lost due to the water quality issues but VFAWC is still holding about 1,000 mussels from this batch that will be released either in the fall of 2010 or spring 2011. All the mussels released into the Nottoway River were tagged and released at a site which DGIF frequently samples so we can monitor success.

Table 1. Juvenile freshwater mussels produced at VFAWC in 2010

Species	Source Location	Juveniles Produced
<i>Anodonta implicata</i>	Nottoway River	513
<i>Lampsilis cariosa</i>	Nottoway River	205,732
<i>Lampsilis radiata radiata</i>	Nottoway River	68,160
<i>Leptodea ochracea</i>	Nottoway River	144,562
<i>Ligumia nasuta</i>	Nottoway River	61,939
<i>Villosa constricta</i>	Johns Creek	8,724
	NF Roanoke River	254
		489,884

Table 2. Freshwater mussels propagated at VFAWC that were released in 2010

Species	Date	Release Site	Age	Number
<i>Lampsilis radiata radiata</i>	7/21/10	Nottoway River near Riverdale	1+ yrs	1,976
			2+ yrs	48
	7/26/10		1+ yrs	1,745
<i>Ligumia nasuta</i>	7/21/10	Nottoway River near Riverdale	2+ yrs	47
			1+ yrs	1
	7/26/10			
<i>Villosa constricta</i>	5/15/10	Cowpasture R @ Fort Lewis Lodge	1+ yr	86
				3,903

B. FEDERAL CONSISTENCY

During the second half of FY 2010 (April 1, 2010 through September 30, 2010) the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 119 development projects and management plans for consistency with the VCP. This represents 79% of the total amount of projects (150) reviewed during this period. Major state projects accounted for 14 projects, 57 were federal actions, and 48 were federally funded projects (predominantly (44) local government projects). The 57 federal projects included 36 federal agency activities, 13 HUD mortgage insurance projects (submitted as a residual category pursuant to the federal consistency regulation 15 CFR 930.31(c)) and 8 federal licenses, approvals. OEIR staff attended the second meeting of the Minerals Management Service (MMS) Virginia Task Force on April 27, 2010 in Williamsburg. The inter-governmental task force includes local, state, tribal, and federal stakeholders working to facilitate the commercial leasing process for Outer Continental Shelf (OCS) renewable energy development off the Virginia shore. The meeting discussion focused on identifying potential lease blocks on the Virginia OCS for the development of renewable energy alternatives; specifically the production of electricity from wind turbines. All federal consistency determinations and federal consistency certifications were completed with the established legal deadlines.

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

Table 1 depicting federal projects in Tidewater, Virginia reviewed from April 1, 2010 through September 30, 2010.

TYPE OF FEDERAL PROJECTS REVIEWED*	NUMBER OF PROJECTS COMPLETED	REVIEW PERIOD
*Direct Federal Actions	49	30-60 Days
** Federal Activities (approvals & permits)	8	90 Days
***Federally Funded Projects	48	30 Days
Outer Continental Shelf	0	45-60 Days
TOTAL	105	30-90 DAYS

*Includes 13 HUD Mortgage Insurances reviewed as FCD residual category of Subpart C of the Regulations.

**These projects do not include 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 4/1/2010 to 9/30/09

I. Federal Agency Projects

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

Demolition of Buildings at Saint Juliens Creek Annex – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted by the Department of the Navy. The FCD is for the demolition of six buildings at Saint Juliens Creek Annex in the City of Chesapeake. During demolition, the Navy states that it would ensure that best management practices are followed. The sites will be converted to a grassy field by backfilling, grading and grass seeding. Based on the review of the FCD and the comments submitted by agencies administering the enforceable policies, DEQ concurs with the Navy that the proposal is consistent with the Virginia Coastal Zone Management Program, provided all applicable approvals are obtained.

NASA Shoreline Restoration and Infrastructure Protection – DEQ-OEIR completed the Commonwealth’s coordinated review of a Draft Programmatic Environmental Impact Statement (PEIS) and federal consistency determination (FCD) for the National Aeronautics and Space Administration’s (NASA) Shoreline Restoration and Infrastructure Protection Program (SRIPP) at Wallops Flight Facility. The purpose of the SRIPP is to reduce the potential for damage to, or loss of, existing NASA, U.S. Department of the Navy, and Mid-Atlantic Regional Spaceport assets on Wallops Island from wave impacts associated with storm events. The preferred alternative involves extending Wallops Island’s existing rock seawall a maximum of 4,600 feet and placing sand dredged offshore in Federal waters onto the Wallops Island shoreline. The re-nourishment cycle is anticipated to occur every 5 years, with a total of 9 re-nourishment cycles over the 50-year life of the SRIPP. Reviewing agencies indicated that each of the proposed action alternatives will significantly impact the

environment and that relocating vulnerable infrastructure to the mainland would be the best long-term solution to protect the infrastructure on Wallops Island. Essentially, all potential sources of sand identified in the draft PEIS could contain munitions and explosives of concern. However, reviewing agencies agree that the preferred alternative would have the least impacts of all the action alternatives provided that sand is not taken from the Wallops Island borrow site for beach replenishment and the proposed seawall extension is limited to the minimum length absolutely necessary for the protection of the facilities. Reviewers also identified information gaps and deficiencies in the draft PEIS, which should be remedied in the final PEIS.

Training Range at Fort Lee – DEQ-OEIR completed a coordinated review of a federal consistency determination submitted by the Department of the Army for the construction of a training range at Fort Lee in Prince George County. The existing 14 firing lanes would be redeveloped, but the target area would be extended 550 meters. Existing support facilities would either be replaced or expanded. New facilities would be constructed in previously cleared areas. The extended target area covers approximately 50 acres of land, including 5 acres of wetlands. The Department of Conservation and Recreation states that while lands analogous to Resource Protection Areas (RPAs) would be affected, the necessary removal of trees in the RPA to provide a clear line of sight would be consistent with the Chesapeake Bay regulations. DEQ concurs with the Army that the proposed project is consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ's response includes a recommendation to coordinate with the Virginia Marine Resources Commission regarding the potential submittal of a Joint Permit Application.

Back Bay National Wildlife Refuge – DEQ-OEIR completed a coordinated review of a draft environmental assessment (EA) and comprehensive conservation plan (CCP) submitted by the U.S. Fish and Wildlife Service (FWS). The document discusses management plans for the 9,120-acre Back Bay National Wildlife Refuge in the City of Virginia Beach and includes an Alternative A (no action), Alternative B (FWS -preferred) and Alternative C. Alternative A proposes to continue the current management plan for the next 15 years; Alternative B focuses on enhancing the conservation of wildlife through habitat management and providing additional visitor opportunities; and Alternative C features techniques to encourage forest growth. Proposed facilities include three canoe/kayak launch sites and a headquarters/visitor contact station, and proposed construction projects include parking lots, road and trails. The Commonwealth has no objection to the implementation of the preferred alternative (Alternative B) provided that all applicable state and federal laws and regulations are followed. In general, reviewers indicated that Alternative B offers a well-balanced approach for the management of wildlife, habitat and public use of the refuge. DEQ's response includes recommendations to continue coordination with the Department of Historic Resources and the City of Virginia Beach as well as to be consistent with requirements protecting wetlands and reducing erosion, sedimentation and stormwater runoff.

Alternative Energy (Wind and Solar) Projects at Wallops Island – DEQ-OEIR completed a coordinated review of a draft environmental assessment (EA) and federal consistency determination (FCD) submitted by the National Aeronautics and Space Administration (NASA) for an alternative energy project at Wallops Flight Facility in Accomack County. The purpose of the proposed project is to implement a technologically proven renewable energy source to meet federal requirements. The EA considers the proposed action, two alternatives and the no action alternative. The proposed action, NASA's preferred alternative, includes constructing two 2.0-megawatt utility-scale wind turbines on Wallops Island and up to five 2.4-kilowatt residential-scale wind turbines on the main base and mainland. Under alternative 1, NASA would construct one utility-scale wind turbine and up to five residential-scale turbines. This alternative also includes the installation of solar panels at the main base. Alternative 2 proposes the installation of five residential-scale turbines and solar panels. Under the no action alternative, the alternative energy project would not be implemented. Based on the information provided in the EA and FCD, and the comments of reviewing agencies, DEQ concurs that the proposed activity is consistent with the Virginia Coastal Zone Management Program, provided that NASA complies with all requirements of applicable permits and other authorizations that may be required. In general, the

Commonwealth of Virginia supports NASA's effort to expand its alternative energy sources at the Wallops Flight Facility. The development of alternative energy is consistent with the goals of the 2007 Virginia Energy Plan. One of its recommendations (page 11) states that the federal government should expand its efforts to support energy efficiency and conservation, including increasing its investment in alternate energy development. Accordingly, reviewers support NASA's efforts to develop alternative energy. However, reviewers indicate that Alternative 2 would have less impact than the preferred alternative, as proposed. Reviewers' concerns include the impact that the utility-scale turbines may have on federally- and state-listed species, bats, and migratory and resident birds. Reviewers also indicate that the proposed project sites may contain military munitions, and that the numerous projects planned (beyond the scope of this alternative energy project) for Wallops Island may result in significant, cumulative environmental impacts.

BRAC Fort Lee Real Property Master Plan – DEQ-OEIR completed a coordinated review of a draft environmental assessment (EA) and federal consistency determination (FCD) submitted by the U.S. Army Garrison for the Fort Lee Real Property Master Plan (RPMP) in Prince George County. The proposed action is to adopt and implement the plan as well as the proposed projects identified as a future need. Fort Lee, separated into three areas, is in the middle of a six-year construction effort to accommodate the growth resulting from the 2005 Base Realignment and Closure (BRAC) recommendations. The RPMP consists of two elements: a Long Range Component and a Future Development Plan map. Projects included on the Future Development Site Plan are 44 Long Range Component projects. These projects are either planned or under way. However, the Medical Administration Building (Priority 44, Project Number 72358) does not have an identified location. The RPMP includes provisions for environmental conditions to be addressed with every future project, including those that redevelop existing sites. Project-specific environmental documents will be prepared as necessary and appropriate for future projects. Based on the information provided in the EA and FCD, and the comments of reviewing agencies, DEQ concurs that the proposed activity is consistent with the Virginia Coastal Zone Management Program, provided that the Army complies with all requirements of applicable permits and other authorizations that may be required. The Army must ensure that the proposed action is consistent with the enforceable policies and that this project is constructed and operated in accordance with all applicable federal, state and local laws and regulations.

Navy Land Transfer for Roadway Improvements Project – DEQ-OEIR completed the coordinated review of a federal consistency determination (FCD) submitted by the U.S. Navy (Navy), in cooperation with the Federal Highway Administration (FHWA) and Virginia Department of Transportation (VDOT), for roadway improvements to the intersection of Route 165 and Fentress Airfield Road at Naval Auxiliary Landing Field in the City of Chesapeake. The Navy will grant approximately 0.847 acres of permanent and temporary easements of federal land to the Commonwealth. The easements would allow VDOT, in cooperation with FHWA, to widen Mount Pleasant Road to allow for the addition of a dedicated left turn lane onto Fentress Airfield Road. The widening would include limited vegetation clearing to improve sightlines leading to the intersection. 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 finds that the proposal is consistent with the VCP provided all applicable permits and approvals are obtained for anticipated wetland impacts, erosion and sediment control, stormwater management, air emissions, and solid and hazardous waste generation and disposal. Furthermore, DEQ recommended that the Navy coordinate with the Department of Game and Inland Fisheries to ensure compliance with protected species legislation due to the legal status of the Canebrake rattlesnake which inhabits the area.

Navy- Bulkhead Repairs – DEQ-OEIR completed the coordinated review of a federal consistency determination submitted by the U.S. Department of the Navy for repairs to 1,400 linear feet of a bulkhead at Naval Station Norfolk. The project consists of replacing the existing bulkhead and riprap, installing slope fill and making stormwater and street improvements. Based on reviewers' comments, DEQ concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response included the recommendation to work with the DEQ to receive its Virginia Water

Protection permit, maintain all erosion and sediment controls and best management practices during the construction, and coordinate with the Department of Historic Resources to ensure compliance with the National Historic Preservation Act.

Child Development Center – DEQ-OEIR completed the coordinated review of a Final Draft Environmental Assessment (EA) and federal consistency determination (FCD) submitted by the Department of Defense (DOD) for the expansion of an existing child development center at the Defense Supply Center Richmond in Chesterfield County. The expansion to the 9,070-square-foot Bettye Ackerman-Cobb Child Development Center (CDC) will provide the CDC with an additional 5,000 square feet of space and include four rooms for infants, toddlers, and pre-kindergarten-aged children, along with various storage areas. A fenced outside playground area will also be constructed. Based on DEQ’s coordinated review of the EA and FCD and the comments submitted by resource agencies, DEQ found that the proposal is unlikely to have significant effects on ambient air quality, water quality, wetlands, important farmland, forest resources, or species of plants or insects listed as rare, threatened, or endangered. Furthermore, DEQ concurs that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided all applicable permits and approvals are obtained with respect to impacts to water resources, Chesapeake Bay Preservation Areas, erosion and sediment control and stormwater management.

USCG Modifies Temporary Boat Shelter for Consistency with State Regulations – DEQ-OEIR completed the coordinated review of a Federal Consistency Determination (FCD) submitted by the U.S. Coast Guard (USCG) for the construction of a temporary boat shelter at USCG Station Milford Haven in Mathews County. During the coordinated review the Department of Conservation and Recreation (DCR) determined that there was insufficient information in the document to determine whether the project was consistent with the coastal lands management enforceable policy of the Virginia Coastal Zone Management Program (VCP). DCR found that the project site may be located within land analogous to a Resource Protection Area (RPA) in which development is restricted to water-dependent activities. The additional information provided by USCG confirmed the presence of RPA-analogous land. Accordingly, the USCG modified the proposal by relocating the shelter outside of the RPA. The Commonwealth’s conditional concurrence is based on the USCG obtaining necessary authorizations prior to any ground disturbance. Under the Federal Consistency Regulations if the USCG fails to meet the conditions of the concurrence, the conditional concurrence becomes an objection.

Nationwide Ballast Water Standard – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted by the U.S. Coast Guard (USCG) concerning the establishment of a nationwide ballast water discharge standard from vessels. Vessel owners would comply with this regulation to prevent or reduce the introduction and spread of non-indigenous species in waters of the United States. Ballast water management and treatment methods to meet the standard would be a separate action and the subject of a separate environmental analysis. The FCD finds the proposed rule to be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). Reviewers, including the Virginia Port Authority (VPA), support the USCG efforts to establish a national standard to reduce and prevent the spread of invasive species from ships discharging ballast water into waters of the United States. However, VPA recommends the following to the USCG:

- Ensure that the standards proposed mirror the standards developed by the International Maritime Organization’s treaty on ballast waters, so that all international ocean-going vessels have one set of standards with which to comply when they enter a port.
- Reconsider postponing implementation and enforcement of the phase II standards until there is available treatment or management technology that allows vessel owners to meet those standards.
- Ensure that ballast water exchange remain a viable management alternative for mariners until treatment technology is available and cost effective.
- Consider potential impacts to the Marine Highway Program before issuing a final rule.

- Coordinate regulatory efforts with the EPA Vessel General Permit Program and with the many states, including Virginia, which already have adopted a ballast water program.

The proposed rule appears to be consistent with the Commonwealth's guidelines governing voluntary ballast water management practices to be followed by the operators of commercial vessels in Virginia's waters. Virginia's regulation also sets forth the requirements and procedures for the distribution and filing of Ballast Water Control Report forms with the Virginia Marine Resources Commission. Based on the review of the FCD and the comments submitted by agencies administering the enforceable policies of the VCP, DEQ concurs that the proposal is consistent with the VCP.

FCD Objection to Constuction and Demolition of Facilities at the Norfolk Naval Shipyard – DEQ-OEIR, on behalf of the Commonwealth, objected to the Navy's federal consistency determination (FCD) based on insufficient information for its proposal to construct a new Controlled Industrial Facility, demolish two buildings, and demolish two dry docks at the Norfolk Naval Shipyard in Portsmouth. During the course of DEQ's coordinated review of the FCD, the Virginia Marine Resources Commission (VMRC) determined that the FCD did not provide sufficient information related to the subaqueous lands management enforceable policy of the Virginia Coastal Zone Management Program to complete its evaluation of the project. Information needs include the historical analysis of the shoreline along and adjacent to the proposed project site and the completion of a Joint Permit Application. DEQ encouraged the Navy, in accordance with the federal consistency regulations, to work with the VMRC regarding the information requested. Once the VMRC informs DEQ that consistency with subaqueous lands management enforceable policy is achieved, DEQ will lift the objection. As required by the federal consistency regulations the Navy must notify DEQ if it decides to proceed, despite the Commonwealth's objection, prior to commencing the project.

Installation of New Outfall Pipe at Fort Story – DEQ-OEIR completed the coordinated review of a federal consistency determination (FCD) submitted by the Department of the Navy (Navy) for the installation of a new outfall pipe at the Joint Expeditionary Base Little Creek Fort Story (JEBLCFS) West in the City of Virginia Beach. The 272-foot 24-inch reinforced concrete pipe will be constructed in association with the construction of a new operations building at JEBLCFS West. The project site is located on the northwest corner of the installation, with the pipe terminating into a drainage channel adjacent to a boat ramp on Little Creek. A ten-foot rip rap apron will be constructed at the end of the pipe at the drainage channel. The pipe and rip rap apron will terminate and rest on the existing rip rap lining the channel. DEQ concurs with the FCD that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Installation and operation of the outfall pipe must be consistent with the applicable regulatory program requirements for wetlands management, erosion and sediment control, stormwater management, impacts to areas analogous to Chesapeake Bay Preservation Areas, and air pollution control. The Navy must also coordinate with appropriate agencies with regard to solid and hazardous waste management, listed protected species and historic resources.

Bulkhead Repairs – DEQ-OEIR completed the coordinated review of a federal consistency determination submitted by the U.S. Department of the Navy for the demolition of the existing deteriorated concrete deck and timber open wharf at Berth 15. The existing berth area will be replaced with a new open wharf structure. Additionally, a new sheet-pile bulkhead will be installed channelward of the existing deteriorating bulkhead. This activity will occur at the Norfolk Naval Shipyard along the Elizabeth River in Portsmouth. Based on reviewers' comments, DEQ concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response included the recommendation to maintain all erosion and sediment controls and best management practices during the construction and recommendations from the Department of Game and Inland Fisheries to protect aquatic resources when working along the Elizabeth River.

Listing of Loggerhead Sea Turtles as Endangered or Threatened – DEQ-OEIR completed the coordinated review of a negative federal consistency determination submitted by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) for the listing of nine distinct population segments

(DPSs) of loggerhead sea turtles as endangered or threatened. There are two proposed threatened DPSs including the South Atlantic Ocean and the Southwest Indian Ocean, and seven proposed endangered DPSs which are the North Pacific Ocean, South Pacific Ocean, Southeast Indo-Pacific Ocean, North Indian Ocean, Northwest Atlantic Ocean, Northeast Atlantic Ocean and Mediterranean Sea. The proposed listing will not result in any regulatory changes or any additional prohibitions. Pursuant to the Endangered Species Act and implementing regulations, the taking of loggerhead sea turtles is currently prohibited, and would continue to be under the proposed actions. The Virginia Marine Resources Commission found the proposed listing consistent with the fisheries management enforceable policy of the Virginia Coastal Zone Management Program under its jurisdiction. The Department of Game and Inland Fisheries supports the proposed listings and also believes that the proposed action is consistent with the fisheries management enforceable policy.

Demolition of the Mason Creek Bridge –DEQ-OEIR completed the coordinated review of a federal consistency determination (FCD) submitted by the Department of the Navy (Navy) for the demolition of the Mason Creek Bridge (Structure LP-69) at Naval Station Norfolk in the City of Norfolk. The bridge is located on the east side of the base at Willoughby Bay. An existing bulkhead and concrete cap will remain at the west end of the project site. The Navy submitted a Joint Permit Application (JPA) for wetlands and subaqueous lands impacts. After review of the JPA, the DEQ Tidewater Regional Office and the Virginia Marine Resources Commission determined that no authorization is necessary under the Virginia Water Protection Permit program for wetland impacts or for subaqueous land impacts as a result of the removal of the bridge. On behalf of the Commonwealth, DEQ concurs with the Navy’s consistency determination provided the Navy obtains applicable permits and authorizations under the enforceable policies of the Virginia Coastal Zone Management Program for erosion and sediment control, stormwater management, air pollution control and impacts to lands analogous to Resource Protection Areas.

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).

Consistency Objection: Apartments at Hampton Roads Crossing – In accordance with the federal consistency regulations implementing the Coastal Zone Management Act, DEQ-OEIR, on behalf of the Commonwealth, objected to the federal consistency determination (FCD) for the Apartments at Hampton Roads Crossing project in the City of Suffolk. DEQ’s objection is based on insufficient information in the document to determine its consistency with the Virginia Coastal Zone Management Program with respect to the point source pollution control enforceable policy administered by DEQ. The U.S. Department of Housing and Urban Development (HUD) proposes to provide mortgage insurance to Prudential Huntoon Paige, for the construction of the proposed apartments located at 8110 Lee Hall Avenue. The proposed project will include the construction of a 216-unit market-rate general occupancy apartment complex situated on a 10.36-acre site. The units will be divided between twelve, three-story, multi-family apartment structures. The complex will include driveways, surface parking, curb and gutter, and sidewalks. Based on the information provided in the FCD, it appeared that a perennial stream on the site was recently filled. DEQ requested clarification and additional information. However, to date, the requested information has not been provided. In the absence of the requested information, DEQ is unable to concur with the FCD. DEQ encouraged the applicant to work with the Tidewater Regional Office and provide the information that is necessary to complete TRO’s review. DEQ will lift its objections when TRO concurs that the project is consistent with the point source pollution control enforceable policy.

Lifting of Objection Subsequent to the state’s objection, the project consultant provided DEQ-TRO with sufficient information confirming that a valid jurisdictional delineation of the subject property had been conducted, that the surface water feature was not jurisdictional and that a permit was not required for the work. DEQ-TRO concluded that the proposed project does not involve impacts to surface waters, including wetlands,

regulated by the DEQ. Accordingly, on May 10, 2010, DEQ-OEIR lifted the Commonwealth's objection to the FCD.

Courthouse Lane II Apartments – DEQ-OEIR completed the coordinated review of a federal consistency determination (FCD) submitted by the U.S. Department of Agriculture (USDA) Rural Development (RD) for the Courthouse Lane II Apartment rehabilitation project in Caroline County. The Courthouse Lane II Limited Partnership intends to purchase and rehabilitate the Courthouse Lane II Apartments at 153 Chase Street. The multi-family development consists of six, one-story apartment structures with a total of 24 residential dwelling units, a one-story laundry facility, asphalt parking areas and landscaping. The development is located on 2.74 acres of land. Rehabilitation activities will include the repair and replacement of roofing, siding, windows, doors, insulation, appliances, hot water heaters, HVAC, carpet, tile, parking areas and landscaping. Based on DEQ's review of the FCD and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ finds that the proposal is consistent with the VCP provided Courthouse Lane II Limited Partnership obtains all applicable permits and approvals for erosion and sediment control, stormwater management, air emissions, Chesapeake Bay Preservation Area impacts, and solid and hazardous waste generation and disposal.

Rockefeller Apartments – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD). HUD intends to provide mortgage insurance for the renovation of a building that will become a 90-unit multifamily apartment complex called the Rockefeller in the City of Norfolk. Land-disturbing activities will include removal of an asphalt-paved parking lot and an underground storage tank. The parking lot will be repaved. HUD has determined that the construction will be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program (VCP), and DEQ concurs provided all applicable permits and approvals are obtained. DEQ recommends that HUD coordinate with the Department of Historic Resources to ensure compliance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations at 36 CFR 800 and with the DEQ regional office on potential storage tank requirements.

The Wilden Development – DEQ-OEIR completed the review of a federal consistency document submitted by Center City South Senior Apartments, L.P. for the construction of The Wilden, a low income senior apartment complex to be located at 350 South Washington Street in the City of Falls Church. Through the Virginia Housing Development Authority, the Virginia Department of Housing and Community Development is providing U.S. Department of Housing and Urban Development HOME Tax Credit Assistance Program (TCAP) stimulus funding to Center City South Senior Apartments, L.P., a private nonprofit housing partnership. The 0.64-acre site currently consists of an asphalt parking lot serving an existing multi-story building. The proposed 6-story, mixed-use building will contain 66 residential units, 63 one-bedroom and 3 two-bedroom units, administrative offices, a community room, a rear plaza for outdoor activities and approximately 1,500 square feet of commercial space. Seven units will be fully accessible for residents with disabilities. DEQ finds the proposed construction of the senior apartment complex consistent with the enforceable policies of the Virginia Coastal Zone Management Program provided Center City South Senior Apartments, L.P. obtains all applicable permits or approvals prior to construction. The enforceable policies that are likely to apply include nonpoint source pollution control, air pollution control and coastal lands management.

Spring Arbor at River Road Assisted Living Facility – DEQ-EIR completed the coordinated review of a federal consistency determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD) for the construction of the Spring Arbor at River Road Assisted Living Facility in Spotsylvania County. HUD proposes to provide mortgage insurance under the HUD Section 232 program to the Lancaster Pollard Mortgage Company for the construction. The 6.95-acre property currently consists of one two-story residential structure and undeveloped land. A pond is currently located on the subject property and an intermittent

tributary of the Rappahannock River is located on the western portion of the site. The property is proposed to be developed with one one-story, 79-unit assisted living facility and a maintenance building. Exterior property improvements are to include landscaped and asphalt parking areas. Based on DEQ's review of the FCD and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ finds that the proposal is consistent with the VCP provided the developer obtains all applicable permits and approvals for proposed wetland impacts, erosion and sediment control, stormwater management, Chesapeake Bay Preservation Area requirements, air emissions, and solid and hazardous waste generation and disposal.

Reynolds North Plant Apartments – DEQ-OEIR completed the Commonwealth's review of a federal consistency determination for the Reynolds North Plant apartments in the City of Richmond. The U.S. Department of Housing and Urban Development is processing an application for mortgage insurance to finance the interior renovation of five commercial structures located in downtown Richmond. The renovations will convert the existing commercial buildings into 170 multi-family apartments. No exterior work including any land disturbance will be undertaken. DEQ concurred that the proposal is consistent with the enforceable policies of Virginia Coastal Zone Management Program (VCP). DEQ recommended that the applicant work with the Department of Historic Resources to ensure compliance with Section 106 of the National Historic Preservation Act and provided recommendations on the abatement of asbestos-containing materials and lead-based paint.

Britton Trace Apartment – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD). HUD plans to provide mortgage insurance for apartment buildings, a clubhouse and a maintenance building in the City of Hampton. The project site consists of approximately 8 acres of undeveloped land and 2.7 acres of wetlands. HUD has determined that the construction will be consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). Provided the project is conducted in accordance with requirements of the U.S. Army Corps of Engineers' Nationwide 12 and Nationwide 18 permits, the DEQ regional office has no objection to the project. The Department of Conservation and Recreation (DCR) states that the proposed stormwater pipeline and outfall for the development are permitted in the Chesapeake Bay Resource Protection Area provided that conditions of the locally adopted Chesapeake Bay Preservation Act regulations are followed. Other reviewers do not anticipate any adverse impacts to natural resources that cannot be mitigated.

Consistency Objection- Shoulder Hill Complex – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted by the U.S. Department of Housing and Urban Development (HUD). HUD intends to provide mortgage insurance for the proposed Shoulders Hill Complex, which will include a mixed-use development of 16 multi-family residential structures and five retail/office buildings, in the City of Suffolk. The FCD submitted on behalf of HUD describes the proposed project site, which is approximately 29 acres and is being utilized as a nursery. In accordance with 15 CFR 930.43(b), the Commonwealth of Virginia objects to the consistency determination based on insufficient information to determine its consistency with the wetlands management enforceable policy administered by DEQ (Virginia Code §62.1-44.15:5) of the Virginia Coastal Zone Management Program (VCP). During the course of DEQ's coordinated review, the DEQ Tidewater Regional Office (TRO) indicated the FCD does not contain sufficient information to determine impacts to wetlands and requested additional information. HUD and its consultant were unable to provide the information needed by TRO during this review. DEQ encouraged HUD, in accordance with 15 CFR 930.43(d), to work with the TRO to provide the additional information that is necessary for TRO to evaluate the project's consistency with the wetlands management enforceable policy of the VCP. Once TRO informs OEIR that consistency with this enforceable policy is achieved, DEQ will lift its objection.

FCD for Cornerstone Apartments – DEQ-OEIR completed a coordinated review of a federal consistency determination (FCD) submitted on behalf of the U.S. Department of Housing and Urban Development (HUD). HUD intends to provide mortgage insurance for the construction of an apartment complex, called Cornerstone Apartments, in the City of Virginia Beach. The FCD states that the proposed property for this project consists of approximately 10 acres of undeveloped land. Photographs of the property show that roads and curbs have been installed and the land cleared of vegetation. The complex will include 15 buildings, a clubhouse and parking areas. HUD has determined that the development of the apartment complex would be consistent to the maximum extent practicable with 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. DEQ's response includes recommendations to coordinate with the locality on planned transportation improvements, ensure consistency with Chesapeake Bay Preservation Act ordinances and restrict air emissions as appropriate.

III. Federal Activities (Permits, Licenses and Approval)

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

Airfield Lighting Rehabilitation at Newport News-Williamsburg International – DEQ-OEIR completed the coordinated review of a federal consistency certification (FCC) submitted by the Newport News-Williamsburg Airport Commission (Airport Commission) for the rehabilitation of the airfield lighting system project in the City of Newport News and York County. The components of the existing lighting system to be rehabilitated and/or replaced include: Runway 7/25 high intensity runway light (HIRL) system; portions of the Taxiway A medium intensity taxiway light (MITL) system; Runway 2/20 visual approach slope indicator (VASI) system; lighted airfield signs; and airfield lighting vault. The existing airfield lighting vault will be replaced at a new location adjacent to the South Corporate Apron. The vault is an approximately 2,500 square-foot building. Based on DEQ's review of the FCC and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ finds that the proposal is consistent with the VCP provided Airport Commission obtains all applicable permits and approvals for erosion and sediment control, stormwater management, air emissions, Chesapeake Bay Preservation Area impacts, and solid and hazardous waste generation and disposal.

Telecommunications tower at Middle Peninsula Airport – DEQ-OEIR completed a coordinated review of a federal consistency certification for a proposed telecommunications tower at Middle Peninsula Airport in King and Queen County. The 100-foot tall tower will be placed within a fenced 25-foot-by-25-foot area, which will be leased by a private company. The proposed site has been clear-cut and is overgrown with vegetation. Concrete for the tower foundations and areas for the equipment shed, propane generator and tank will be poured onsite. DEQ concurs that the proposed project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Reviewers did not identify any adverse impacts to natural resources that cannot be mitigated. DEQ's concurrence response includes recommendations to coordinate with the Virginia Department of Game and Inland Fisheries regarding potential instream work and with the Center for Conservation Biology regarding new documented nests of the state-listed bald eagle.

Telecommunications Tower at Chesterfield County Airport – DEQ-OEIR completed a coordinated review of a federal consistency certification (FCC) for the proposed installation of a telecommunications tower at Chesterfield County Airport. The 60-foot tall tower will be placed within a fenced 25-foot-by-25-foot area, which will be leased by a private company. The proposed site, which has been cleared of vegetation and recently seeded with grass, is surrounded by pavement and buildings. The FCC finds the proposed project to be consistent with the enforceable policies of the Virginia Coastal Zone Management Program (VCP). Based on the review of the FCC and reviewers' comments, DEQ concurs that the proposal is consistent with the VCP. DEQ's concurrence response includes a recommendation to coordinate with DEQ regional office if there are proposed changes to the stormwater system to determine if a modification to the existing Virginia Pollutant Discharge Elimination System permit is necessary.

Crystal City-Potomac Yard Interim Transit Improvements – DEQ-OEIR completed the coordinated review of a federal consistency certification (FCC) submitted by the Washington Metropolitan Area Transit Authority (WMATA) for interim transit system improvements in the Crystal City-Potomac Yard area of Arlington County. Proposed improvements include the placement and configuration of transit stops within the project corridor. The proposed station stops include a platform, typically 75 feet long and 12 feet wide with a 15-foot ramp on one end. WMATA previously submitted a FCC for this proposal on October 2, 2006. DEQ responded on November 27, 2006 with the Commonwealth’s concurrence with the FCC. The current amended project reflects a realignment of the transit corridor and the elimination and relocation of certain station stops. DEQ, on behalf of the Commonwealth, concurs with the FCC that the amended proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Construction and operation of the transit improvements must comply with the applicable regulatory requirements for erosion and sediment control, stormwater management, Chesapeake Bay Preservation Areas, air pollution control and solid and hazardous waste management.

Rehabilitation at Newport News-Williamsburg International Airport – DEQ-OEIR completed the coordinated review of a federal consistency certification (FCC) submitted by the Newport News-Williamsburg International Airport Commission (Airport Commission) for rehabilitation of taxiway pavement at the airport in the City of Newport News and York County. The rehabilitation will be conducted in accordance with licensing requirements administered by the U.S. Department of Transportation (USDOT) Federal Aviation Administration (FAA). Pavement rehabilitation operations include: concrete repairs; concrete and/or asphalt overlays; joint sealing; and full or partial depth reconstruction. DEQ concurs with the FCC that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Construction must comply with the applicable regulatory requirements for erosion and sediment control, stormwater management, Chesapeake Bay Preservation Area impacts, air pollution control, and solid and hazardous waste management.

IV. Federal Funds

Multi-Service Center – DEQ-OEIR completed the coordinated review of a federal consistency certification (FCC) for the construction of a multi-service center by the City of Virginia Beach’s Department of Housing and Neighborhood Preservation. The funding for the proposed project is from the U.S. Department of Housing and Urban Development (HUD), Community Development Block Grant. The Lighthouse Multi-Service Center will be located on a 1.2-acre parcel at 215 North Birdneck Road in Virginia Beach. The Center will support homeless individuals and families by providing a gathering place for meetings and other services. The facility will not house residents nor serve meals. Based on DEQ’s coordinated review of the FCC and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program (VCP), DEQ finds that the proposed project is consistent with the VCP provided all applicable permits and approvals are obtained for erosion and sediment control and stormwater management and impacts to Chesapeake Bay Preservation Areas. In addition, the report recommended that the City contact DEQ’s Tidewater Regional Office to determine if a permit is needed for wastewater discharge.

Southern Timber Tract Land Acquisition – DEQ-OEIR completed the review of a federal consistency certification (FCC) submitted by the Department of Game and Inland Fisheries (DGIF) for the acquisition of the Southern Timber Tract in Caroline County. The approximately 766-acre parcel of land is located on State Route 605 (Paige Road). The tract is a contiguous parcel of flat to gently rolling land with one area containing a series of steep slopes, atypical of the surrounding topography. Approximately two miles of the eastern property boundary is bordered by the Mattaponi River. After acquisition of the property, DGF intends to establish boundaries and gain control over unauthorized use of the property; develop infrastructure to manage public use, such as gates, parking areas, informational kiosks and a river access point; initiate inventories of the natural resources on site and complete a site master plan; and assess current and past land management for compliance with best management practices and take corrective action where needed. DEQ finds that the

proposed action would have no effect on any of the enforceable policies of the VCP since the federal funding would be used by DGIF only for property acquisition. The DEQ response advises that, if after acquisition of the tract, should DGIF propose to undertake the construction of a "major State project", *Virginia Code* § 10.1-1188 *et seq.* requires the preparation and submission to DEQ of an Environmental Impact Report (EIR).

V. OCS Reviews

Preliminary Revised 2007-2012 Outer Continental Shelf Oil and Gas Leasing Program – DEQ-OEIR conducted a coordinated review of the Preliminary Revised Program (PRP), inviting comments from the Commonwealth's natural resource agencies. On April 29, 2010, DEQ submitted technical comments on the PRP addressing air, water, waste, wildlife, natural heritage resources, and historic resources, and related regulatory program requirements.

Background Information: On June 29, 2007 the former Secretary of the Interior (Secretary) approved the Proposed Final OCS Oil and Gas Leasing Program for 2007–2012 (PFP) that became effective on July 1, 2007. DEQ coordinated the review of the Draft Environmental Impact Statement that served as the basis for the PFP and submitted the Commonwealth's response on November 20, 2006. On April 17, 2009 the U.S. Court of Appeals for the District of Columbia Circuit vacated and remanded the Department of Interior's (DOI's) OCS 2007–2012 leasing program. The Court found that DOI's determination of when and where to offer areas for leasing of oil and gas resources was based on a flawed analysis that failed to assess fully the relative environmental sensitivity and marine productivity of the OCS because it only evaluated the effects of spills on the shoreline. The Court specified that on remand the Secretary must first conduct a more complete comparative analysis of the environmental sensitivity of different areas of the OCS, as required under section 18(a)(2)(g) of the Outer Continental Shelf Lands Act (OCSLA). On April 2, 2010 DOI's Minerals Management Service (MMS) requested public comments on the Preliminary Revised 5-Year OCS Oil and Gas Leasing Program for 2007-2012. The (PRP) is the result of the Secretary's analysis and rebalancing of the program. The PRP includes 16 oil and gas lease sales in 6 areas, including Mid-Atlantic Sale 220 scheduled for 2011, located fifty miles off the Virginia coast. Following the end of the comment period on May 3, 2010, the Secretary will consider any comments received in making his final decision on a final revised leasing program for 2007–2012.

Geological and Geophysical Exploration on the Outer Continental Shelf – On May 17, 2010, DEQ-OEIR submitted technical scoping comments on behalf of the Commonwealth to the U.S. Department of the Interior (DOI) Minerals Management Service (MMS) for the preparation of a Programmatic Environmental Impact Statement (PEIS) for geological and geophysical exploration on the mid- and South Atlantic outer continental shelf (OCS). The technical comments were submitted in response to the reopening of the comment period for the PEIS. MMS previously requested scoping comments in 2009, but did not move forward on the PEIS. MMS reopened the comment period pursuant to the regulations implementing the procedural provisions of the National Environmental Policy Act of 1969, as amended. The PEIS will evaluate potential environmental effects of multiple geological and geophysical activities on the Atlantic OCS. These activities are associated with Atlantic OCS siting for renewable energy projects, oil and gas exploration, and marine minerals extraction.

Outer Continental Shelf Oil and Gas Leasing Program 2012-2017 – DEQ-OEIR, on behalf of the Commonwealth, coordinated the development of technical scoping comments for submission to the Department of the Interior (DOI) Minerals Management Service (MMS) for the preparation of an Environmental Impact Statement (EIS) for the Five-year Outer Continental Shelf (OCS) Oil and Gas Leasing Program 2012-2017. The draft proposal will succeed the current program that is set to expire on June 30, 2012, and will be the basis for conducting the studies and analyses the Secretary of Interior will consider in making future decisions on what areas of the OCS to include in the program. The draft EIS will evaluate all or portions of eight OCS planning areas for oil and gas leasing, including the mid-Atlantic which includes the OCS off the Virginia coast. Environmental issues and concerns that MMS will consider in the 2012-2017 EIS include, but not limited to, the following: potential impacts from accidental oil spills; potential impacts to tourism and recreation activities;

and ecological impacts from potential degradation of marine and coastal habitats. Additionally, alternatives will be developed and analyzed during the EIS process that may include increasing or decreasing the number or frequency of sales, coastal buffers, limiting areas available for leasing, and excluding parts of or entire planning areas. Comments were also solicited on the relationship between the Oil and Gas Program and the Alternative Energy Program. The Commonwealth will be invited to comment on the draft EIS once completed.

Minerals Management Service Virginia Task Force – DEQ staff attended the second meeting of the Minerals Management Service (MMS) Virginia Task Force on April 27, 2010 in Williamsburg. The inter-governmental task force includes local, state, tribal, and federal stakeholders working to facilitate the commercial leasing process for Outer Continental Shelf (OCS) renewable energy development off the Virginia shore. The meeting discussion focused on identifying potential lease blocks on the Virginia OCS for the development of renewable energy alternatives; specifically the production of electricity from wind turbines. From preliminary information on potential lease blocks provided at the first Task Force meeting in December 2009, the group was presented with a refined group of approximately 36 potential lease blocks. These blocks appear to be relatively free from use constraints due to military activities at the Virginia Capes Range Complex, NASA Wallops Flight Facility launching activities, dredge material disposal and shipping traffic. The Task Force identified additional lease blocks for further evaluation. Once there is agreement on the blocks to be included in the lease sale, MMS will issue Request for Interest (RFI) which is a formal notice inviting interested parties to provide submissions of interest in obtaining one or more commercial leases from MMS authorizing the construction and operation of a renewable energy project on the OCS. The RFI will assist MMS in determining if competitive interest exists in the described area. The published RFI is accompanied by a public comment period, typically no less than 60 days. Task Force members will have the opportunity to review and comment on the draft RFI prior to its publication in the Federal Register.

C. PROGRAM CHANGES

On June 23, 2010 NOAA notified the Virginia CZM Program that its request to add enforceable policies was approved as a routine program change. The new policies involved changes to management programs for Fisheries and Habitat of Tidal Waters, Coastal Primary Sand Dunes and Beaches, Wetlands, Wetlands Mitigation, NPDES Program - Clean Water Act Incorporation, and State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution - Clean Air Act Incorporation. Changes to the Administration of Game, Inland Fisheries, and Boating were also originally submitted for approval, but were withdrawn based on concerns raised by the Virginia Department of Transportation. A qualification was added by NOAA that some changes submitted would be incorporated as non-enforceable components of the Virginia Program. The Virginia CZM Program distributed a Public Notice regarding the updates to the Program's enforceable policies stating that they had been approved and would become effective on July 19, 2010.

The Virginia CZM Program has contacted staff from the Environmental Law Institute (ELI) to discuss contractual assistance to address several program change issues. Section 309 grant funds will be used to 1) develop a more in-depth analysis of the program's original enforceable policies regarding wildlife and endangered species; 2) evaluate the ramifications of recodification of Title 29.1, Chapters 1, 3, 4 and 5 regarding Administration of Game, Inland Fisheries, and Boating; and 3) analyze the changes that might occur in permit review procedures when the new laws are incorporated. ELI will also be assisting the Virginia CZM Program in identifying a clear list of its enforceable policies for federal consistency.

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 measure 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.

In addition during this semiannual reporting period, the Coastal Policy Team reviewed the Executive Order which continues the Virginia CZM Program through June 30, 2010 and made recommendations to the new Governor to update the EO by including language about new issues (sea level rise and marine spatial planning).

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 just 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 for FY 2010, these sewage treatment plant upgrades funded with matching dollars are one of the only 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: In the event that funding for special initiatives for the water quality and non-point source program become available, the Virginia CZM Program will work closely with the Coastal Non-point Manager to identify opportunities for targeted assistance to local governments for the “Roads, Highways, and Bridges” nonpoint program management measures.” To date, Virginia CZM has received only non-discretionary funds during years 2006, 2008 and 2009 to support Coastal Non-point Management and to develop and establish a 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. Congress has appropriated no Coastal Nonpoint funds for FY 2010.

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 current focal area, Sustainable Community Planning, was chosen after extensive input from partner agencies at the 2007 Coastal Partners Workshop and through discussions of the Coastal Policy Team. As a result, Virginia CZM resources, including staff time and grants, are being 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. Both of these topics, but especially climate change adaptation, address the NOAA suggestion for a community resiliency initiative. Coastal GEMS is an important component of this initiative, and a number of local government training sessions have been conducted by Virginia CZM staff (see Suggestion 6).

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: Starting in July 2008, the Environmental Impact Review Program Manager began discussions with Stephanie Altman and Jim McElfish of the Environmental Law Institute regarding the strengths and weaknesses of the enforceable policies of the Virginia CZM Program. For example, the fisheries enforceable policy administered by VRMC is only used if a subaqueous permit is required. Adding the State T & E species legislation was recommended. This issue will be further examined at the upcoming December 2010 Coastal Partners Workshop in Richmond. At Coastal Policy Team meetings DGIF and DCR Natural Heritage both supported the concept however, VDOT has reservations about incorporating those state laws. The EIR Program Manager also asked ELI to evaluate other policies addressing coastal uses such as recreational fishing and boating, public access, use of public beaches to determine if they could be added as new enforceable policies. DCR’s public access expert thought that there wasn't the necessary legislative support to do this and ELI did not believe they could be used. Discussions will continue and CZM staff will continue to discuss the concept with NOAA/OCRM staff to ensure that the suggestion is being fully pursued.

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. 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 which allows 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 will be incorporated into an overall PCA layer – giving localities and state agencies a single layer depicting all blue and green infrastructure within Virginia’s coastal zone. An 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.

Virginia CZM’s “focal area” during the fiscal years 2008 -2010 is “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 “focal area” grants to the coastal PDCs will 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 PDCs are coordinating with Virginia NEMO and a grant to Virginia NEMO at the Department of Conservation and Recreation is helping to provide direct technical assistance to those localities requesting it. The focal area projects should result 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.

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 has asked 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 has taken advantage of several opportunities to improve coordination with our NOAA “sister” programs, CBNERRS and Sea Grant. Virginia CZM staff participated in Virginia Sea Grant strategic planning sessions and evaluations and Virginia CZM and CBNERRS staff occasionally hold “collaboration meetings.” The Director of Virginia Sea Grant and Manager of CBNERRS are members of the Coastal Policy Team and Virginia CZM staff serve on the CBNERRS Coastal Training Steering Committee. These are all important venues for identifying common goals, priorities and programs. The Coastal Training Program at CBNERRS recently provided a climate change training session for local government staff and officials, supporting Virginia CZM’s focal area effort. Virginia CZM is involving both Sea Grant and CBNERRS staff in the 2010 Virginia Coastal Partners Workshop.