

October 30, 2008

**Virginia Coastal Zone Management Program
Semiannual Section B Report on Core Agency Implementation Activities
For the Period from April 1, 2008 – September 30, 2008**

	Page
A. STATE AGENCY MONITORING - The core agencies within the Virginia Coastal Resources Management Program are:	
1) Department of Environmental Quality (DEQ)	
a) Virginia Coastal Zone Management Program Office	2
b) Water Permitting Programs (VPDES, VPA, VWP)	2
c) Water Program Enforcement and Compliance	2
d) Air Permitting Program	3
e) Air Program Enforcement and Compliance	5
2) Virginia Marine Resources Commission (VMRC)	
a) Habitat Management Division	5
b) Fisheries Management Division	6
c) Law Enforcement Division	6
3) Virginia Department of Health (VDH) – Division of Shoreline Sanitation	7
4) Department of Conservation and Recreation (DCR)	
a) Division of Soil and Water Conservation	8
b) Division of Natural Heritage	11
c) Division of Planning and Recreation Resources	20
d) Division of Chesapeake Bay Local Assistance	21
5) Department of Game and Inland Fisheries (DGIF)	23
B. FEDERAL CONSISTENCY	34
C. PROGRAM CHANGES	46

A. STATE AGENCY MONITORING

1) DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

a) DEQ – Virginia Coastal 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. A Grants Coordinator, Shannon Girouard, was hired and began work on September 10, 2008. One of our Coastal Planners, Kelly Price, left on September 5, 2008. This position will remain vacant until the Commonwealth ends its hiring freeze.

b) DEQ – Water Permitting Programs

The Virginia Pollution Discharge Elimination System (VPDES) permit is required for all point sources of water discharge. The Virginia Pollution Abatement permit (VPA) is required for facilities that handle wastewater, animal waste or biosolids, and do not have a discharge from the site. For example, an agricultural facility that temporarily stores wastewater to be applied on land as part of an irrigation/fertilization program. The Biosolids Use Regulation was transferred to DEQ and incorporated into the VPA Regulation effective January 1, 2008. As of September 30, 2008, 19 applications have been submitted to apply biosolids to land under the VPA Regulation. The Virginia Water Protection (VWP) permit 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. VWP permits may be Individual Permits (IPs) or General Permits (GPs). The following table describes the activity for each of these permits:

VPDES/VPA/VWP - April 1, 2008 – September 30, 2008										
	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	0	NA	30	126	5	99	0	NA	9*	NA
VPA	0	NA	1	86	0	NA	0	NA	1	97
VWP IPs	31	302	1014**	337	13	137	0	N/A	0	N/A
VWP GPs	165	70	N/A	N/A	41	38	0	N/A	N/A	N/A

*This represents existing VPDES permits expired but pending through September 30, 2008.

**This permit reissuance combined the reissuance of the original permit for mitigation purposes and the authorization of new impacts, which otherwise would have been authorized under a separate permit. The combining of authorization was requested by the permittee.

c) DEQ – Water Program Enforcement and Compliance

DEQ continues to apply both informal and formal enforcement measures in the WATER enforcement program. See the table 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, 2008 and September 30, 2008, DEQ issued 211 Warning Letters and 8 Letters of Agreement for violations of VPDES, VPA and VWPP 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 1 and September 30, 2008, DEQ issued 64 Notices of Violation for violations of VPDES, VPA and VWPP program

requirements. During the same period, the agency concluded enforcement cases with the issuance of 14 Consent Orders, assessing a total of \$250,827 in civil charges.

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Warning Letters	211	n/a
Informal	Letters of Agreement	8	n/a
Formal	Notices of Violation	64	n/a
Formal	Consent Order	14	\$250,827
Total		297	\$250,827

d) DEQ – Air Permitting Program

PERMITS ISSUED April 1, 2008 – September 30, 2008

PERMIT TYPE	NUMBER OF PERMITS ISSUED	AVERAGE PROCESSING TIME (Days)
PSD & NA	2	140
Major	0	NA
Minor	69	40
Administrative Amendment	7	38
Exemptions	73	14
State Operating	14	55
Federal Operating (Title V)	3	146
Acid Rain (Title IV)	2	50
Total Number Permits Issued	<u>170</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: 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.

PERMITS PENDING
as of **September 30, 2008**

PERMIT TYPE	NUMBER OF PERMITS PENDING
PSD & NA	0
Major	0
Minor	33
Administrative Amendment	3
Exemptions	11
State Operating	15
Federal Operating (Title V)	7
Acid Rain (Title IV)	1
Total Permits Pending	<u>70</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.

PERMITS WITHDRAWN AND APPLICATIONS DENIED
Period: **April 1, 2008– September 30, 2008**

PERMIT TYPE	NUMBER OF PERMITS WITHDRAWN	NUMBER OF APPLICATIONS DENIED
PSD	0	0
Major	0	0
Minor	14	0
Administrative Amendment	0	0
Exemptions	2	0
State Operating	1	0
Federal Operating (Title V)	0	0
Acid Rain (Title IV)	0	0
Total Permits Rescinded	<u>17</u>	<u>0</u>

Note: 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. See the table below.

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 from April 1, 2008 through September 30, 2008, DEQ issued 87 Requests for Corrective Action, one Informal Correction Letter, one Letter of Agreement, and 17 Warning Letters.

Formal enforcement actions are used in those cases where non-compliance is more serious or may take a significant amount of time to correct. Formal measures generally involve the issuance of a Notice of Violation and negotiation of a Consent Order, or an Executive Compliance Agreement in the case of a state agency. In some cases, Unilateral Orders or court orders may be pursued. Between April 1, 2008 and September 30, 2008, DEQ initiated 19 new formal enforcement actions via issuance of Notices of Violation. The agency issued 12 Consent Orders; these orders assessed a total of \$303,233 in civil charges. One Consent Order included a Supplemental Environmental Project (SEP) as part of the administrative settlement; the SEP specified that \$65,670 of the civil charge would be satisfied by completing an Environmental Management System. Virginia DEQ further received payments of (a) \$9,850, which represented a penalty assessed in June, 2008, by the U. S. Environmental Protection Agency for failure of a facility in West Point, Virginia to comply with certain requirements of a federal consent decree entered on November 4, 2004, and (b) \$59,833 for penalties assessed in May, 2008, for failure of a facility in the City of Alexandria to comply with reporting requirements stipulated in an April 2007 amended federal consent decree.

Measure	Action Type	Count	Total Civil Charges Assessed
Informal	Request for Corrective Action	87	n/a
Informal	Informal Correction Letter	1	n/a
Informal	Warning Letter	17	n/a
Formal	Notice of Violation	19	n/a
Formal	Consent Order	12	\$303,233
Formal	Penalty notice for failure to comply with certain requirements of 2004 federal consent decree (civil action no. 3:04-CV-647 (E.D. Va.))	1	\$9,850
Formal	Penalty notice for failure to comply with reporting requirements set forth in a 2007 federal amended consent decree (civil action no. 1:04cv113 (E.D. Va.))	1	\$59,833
Total		137	\$372,916

2) VIRGINIA MARINE RESOURCES COMMISSION (VMRC)

a) VMRC – Habitat Management Division

During the period April 1 through September 30, 2008 the Habitat Management Division received 1240 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. Sixteen sworn complaints were issued during the period.

The Habitat Management Staff completed actions on 1235 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 October 2008. Similarly, those applications received near the end of the current reporting period are still under review. Habitat Management Staff also issued 40 general permits for Virginia Department of Transportation projects.

In addition to staff actions, the Full Commission considered 108 projects. During the reporting period the Commission considered 59 protested projects or projects requiring a staff briefing, including six appeals of a local wetlands board decision. The Commission also approved 49 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 the May 27, 2008 Commission meeting, there was a public hearing on proposed amendments to Regulation 4VAC20-450-10 et seq., “Pertaining to the Taking of Bluefish”, to change the 2008 commercial quota, from its 2007 amount of 1,018,660 pounds, to 1,048,366 pounds. The Commission moved to approve the amendment to the Regulation.

At the June 24, 2008 Commission meeting, there was a request for a public hearing on proposed amendments to Regulation 4VAC20-910-10 et seq., “Pertaining to Scup (Porgy)” to adjust the summer quota from 7,892 pounds to 2,887 pounds, to be in compliance with the Scup Fishery Management Plan. The Commission moved to advertise for public hearing in July 2008.

At the July 22, 2008 Commission, meeting there was a public hearing on proposed amendments to Regulation 4VAC20-910-10 et seq., “Pertaining to Scup (Porgy)” to adjust the summer quota from 7,892 pounds to 2,887 pounds, to be in compliance with the Scup Fishery Management Plan. The Commission moved to establish the 2008 summer quota at 2,887 pounds.

At the August 26, 2008 Commission meeting, there was a request for a public hearing on proposed amendments to Regulation 4VAC20-252-10 et seq., “Pertaining to Striped Bass” to establish 2008 recreational harvest restrictions. The Commission approved the request to advertise for an October 28, 2008 public hearing.

At the August 26, 2008 Commission meeting, there was a request for a public hearing on proposed amendments to Regulation 4VAC20-620-10, et seq., “Pertaining to Summer Flounder” requested by the industry to modify the open season and possession limits for the offshore commercial summer flounder fishery. The Commission approved the request to advertise for a September 23, 2008 public hearing..

At the September 23, 2008 Commission meeting, there was a public hearing on proposed amendments to Regulation 4VAC20-620-10, et seq., “Pertaining to Summer Flounder” to modify the open season and possession limits for the offshore commercial summer flounder fishery. The Commission moved to approve the amendments to the regulation.

At the September 23, 2008 Commission meeting, there was a request for a public hearing on proposed amendments to Regulation 4VAC20-910-10 et seq., “Pertaining to Scup (Porgy)” to establish landing limits for the commercial fishery during the Winter II period. The Commission moved to advertise for an October 28, 2008 public hearing.

c) VMRC – Law Enforcement Division

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

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

etc. We also have an officer assigned to the Drug Enforcement Agency's local Task Force in an effort to interdict drug trafficking on Virginia's tidal waterways.



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

REPORT FORMAT: FEDERAL FISCAL YEAR
START PERIOD: 10/01/2003
END PERIOD: 09/30/2008

Category	2003/2004		2004/2005		2005/2006		2006/2007		2007/2008	
	Convictions	Arrests								
Buyers	25	35	3	5	2	2	0	0	0	0
Casting Garbage/Trash	0	0	0	1	1	2	1	1	0	0
Clams	4	4	2	2	4	5	4	4	0	0
Commercial Fishing License	10	11	3	4	3	4	5	6	1	1
Conchs	4	4	1	1	4	4	0	0	0	0
Crabs	133	145	147	163	81	89	67	75	88	99
Fish	170	192	218	251	284	304	318	378	147	174
Fishing without a license/revoked license	5	6	117	121	59	59	22	24	9	10
Habitat/Wetlands	0	0	0	0	0	0	0	0	0	0
Landing License	0	0	0	0	0	0	0	0	0	0
License Tags	1	3	6	9	4	9	6	7	0	0
Mandatory Reporting	0	0	0	0	1	1	3	3	0	0
Misc	0	0	0	0	1	1	0	0	0	1
Non-residents	0	0	1	1	0	0	0	0	0	0
NSSP	0	0	0	0	0	0	0	0	0	0
Other Agencies	339	358	714	769	670	729	691	747	407	453
Other Police Powers	0	0	0	0	0	0	0	0	0	0
Oysters	16	17	87	100	80	82	55	68	49	58
Piers	0	0	0	0	0	0	0	0	1	1
Police Powers	251	299	112	137	61	69	87	99	38	39
Removal of Obstructions	0	0	2	2	5	6	0	1	0	0
Resisting officer	0	0	0	0	0	1	0	0	0	0
Shellfish	3	5	3	3	0	2	0	0	0	0
SW Recreational Licenses	481	516	305	322	398	414	479	495	240	253
TOTALS:	1442	1595	1721	1891	1658	1783	1738	1908	980	1089
PERCENT OF CONVICTIONS:	90.41%		91.01%		92.99%		91.09%		89.99%	

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

The Department received and reviewed a total of 49 VMRC Permit Applications, and processed as follows:

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

Forty (40) applications were approved based on meeting the requirements of providing adequate facilities.

Six (6) applications were denied because of inadequate facilities.

From April through September 2008, the shellfish program had 804 acres of shellfish grounds closed to harvesting. There were 3348 acres of shellfish grounds reopened.

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, 2008 through September 31, 2008.

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), during the past six months, 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 accepted new registration statements from the small (Phase II) MS4s in order to authorize discharge under the new general permit effective July 9, 2008.

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 1,254 land disturbing activities were issued General Permit coverage. During this time period, DCR staff also completed approximately 480 site inspections for compliance with the General Permit.

A major focus of Stormwater Management Program staff during this reporting period has been the development of the revised regulations for the Stormwater Management Regulations. A Technical Advisory Committee (TAC) was formed to provide review and recommendations for the Parts II, II and XIII of the regulations. The Virginia Soil and Water Conservation Board, at the September 24, 2008 meeting, adopted proposed regulations

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 750 people completed classroom training and approximately 1,600 people were certified or recertified for the RLD Program. In addition, approximately 250 individuals were certified through the examination process as Inspectors, Plan Reviewers, Program Administrators and Combined Administrators.

Nutrient Management Regulations

Nutrient Management Plans Written

- 287 nutrient management plans were written covering 81,648 acres: New plans covered 37,756 acres and revised plans covered 43,892 acres.
- Estimated nutrient reductions from these new 37,756 acres in nutrient management plans can be calculated using an average multiplier of 18.81 lbs/acre for nitrogen and 8.51 lbs / acre for phosphorus. This equates to an estimated 710,190 lbs of nitrogen and 321,304 lbs of phosphorus.

Plans Reviewed

- 68 biosolids and industrial waste permit site reviews completed on 6514 acres with site-specific comments made to VA Dept. of Health for use in permits issued under Biosolids Use Regulations.
- 155 nutrient management plans were reviewed, approved, and entered into a tracking database for inclusion into VPA animal waste permits. These plans cover 39,881 acres.
- 11 NMPs for state-owned lands were approved for a total of 1105 acres. 43 site reviews conducted on state agency lands reviewing plans covering 440 acres.

Samples Taken

- 357 manure samples collected impacting 20,813 acres of land receiving manure.
- 1183 soil samples were taken for phosphorus and pH representing 10,796 acres.
- 438 soil nitrate samples were taken in order to adjust nitrogen application rates on 5,094 acres.

Nutrient Spreader Calibrations

- 12 manure spreaders were calibrated to match actual application rates to nutrient management plan specifications on 1,413 acres.

Farmer Contacts

- 689 initial field visits or follow-up visits to farmers to gather data for nutrient management plans including current soil tests, farm maps, and manure samples.
- 1643 phone contacts to farmers to answer questions and amend recommendations based on crop rotation changes, new soil or manure tests.

Presentations at Meetings and Field Days

- 5 farmer meetings having a total attendance of 205.
- 8 soil and water conservation district board meetings having a total attendance of 215
- 1 Nutrient Management Certification Exam was held during this period with 22 participants

2 Computer software training sessions were held with 33 planners.

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 also serves 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.

The CNP Program Manager participated, planned or attended various meetings including the Coastal Policy Team, Coastal PDC meetings, Virginia Stream Alliance, NPSAC, and Healthy Waters, Chesapeake Bay Program Commonwealth of Virginia Champion. The CNP Program Manager has continued participating in the development of the Healthy Waters and Healthy Lands Initiative. The CNP Program Manager was an invited participant in the NOAA Section 312 evaluation of the Minnesota Lake Superior Coastal Program. The CNP

Program Manager was invited to represent the VDCR on the Virginia Sea Grant External Advisory Committee. In addition, the Coordinator represented the Commonwealth in the development of a Social Marketing Workshop that was held in Cumberland, MD and served the entire Chesapeake Bay watershed. The presenters included, Jack Wilbur-Utah Dept of Agriculture, Eric Eckl-Water Words that Work and Theresa Trainor-USEPA. Coordinator also planned the Financing Green Initiatives Workshop to be held prior to the Chesapeake Watershed Forum in Sheperdstown, WVA.

The CNP Program Manager was requested by the VDEQ and the VDCR Richmond Regional Office to facilitate the dialogue between a local developer and the regulating community regarding a stream impact issue. Also, those offices requested technical assistance in determining the impacts from uncontrolled runoff contributing sediment to the receiving waters. The CNP Program Manager performed a site evaluation based upon geomorphic and biologic conditions and offered suggested solutions and remediation.

In addition, the CNP Program Manager worked with local partners to develop applications to the National Fish and Wildlife Foundation Grant opportunity. Most recently includes an application for low impact development implementation, demonstration, education/certification at the Science Museum of Virginia. This application, if funded, would fit with the soon to be released Stormwater Rules and serve as a central location of demonstrating and training those to implement the technologies as listed in the BMP manual.

The CNP Program Manager continued to undertake the development of the VA Networked Education for Municipal Officials (NEMO) Program through a coordinated effort between Chesapeake NEMO, Virginia Cooperative Extension and Virginia partners. The VA NEMO program relies upon the DCR Regional Offices (Regional Managers and Watershed Coordinators), DCR Division of Chesapeake Bay Local Assistance (DCBLA), Planning District Commissions, Soil and Water Conservation Districts, Watershed groups as the delivery mechanism and other Agencies providing local technical assistance. During the reporting period, the VNEMO Coordinator and the CNEMO Coordinator met with the VA Dept of Forestry to build a role for DOF in the program.

The VNEMO Program provided two presentations to the Mathews Planning Commission and Comprehensive Plan Subcommittee: Linking Land, Water and Growth and Planning the Direction of your Community.

The VNEMO Program was requested to facilitate several potential NEMO project scoping sessions to build potential sites for further work. Such sites included the City of Hampton—buffer language development, Richmond County and the members of the Richmond County NFWF Targeted watershed Grant Project—integration of the Chesapeake Bay Model Phase 5.x data with the upcoming County comprehensive plan revision, and the northern Virginia Regional Commission—integrating sea level rise into local decisions, Rappahannock-Rapidan Regional Planning Commission. The VNEMO program worked with the coastal PDCs to draft language for their focal areas projects (ANPDC, MPPDC, NVRC). The VNEMO Program Coordinator attended the HRPDC Locality Stormwater Coordinating Cmt meeting to market the VNEMO Program.

The VNEMO Coordinator represented the Commonwealth in the development of a Social Marketing Workshop that was held in Cumberland, MD and served the entire Chesapeake Bay watershed. The presenters included, Jack Wilbur-Utah Dept of Agriculture, Eric Eckl-Water Words that Work and Theresa Trainor-USEPA. The VNEMO Coordinator also planned the Financing Green Initiatives Workshop to be held prior to the Chesapeake Watershed Forum in Sheperdstown, WVA.

The VDCR entered into a contractual agreement the Alliance for the Chesapeake Bay to support the development of the Chesapeake Watershed Network web based communication tool. The funding supported the specific piece to coordinate the communication between those seeking services and those rendering services. This site, utilizes Web 2.0 communication tools to correspond effectively through the use of shared documents, forums, blogs, Wikis and email blasts. The contract was for \$5000.

The VDCR Division of Soil and Water worked with the VDCR Public Communications Office to develop a travelling display panel for the VNEMO. This display panel can and will be used at public venues.

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 Virginia CZM Program.

Inventory:

Mid-Atlantic National Park Vegetation Mapping and Classification Completed (04/11/08)

As part of a contract with the Northeast Region of the National Park Service, DNH Ecologists have been working since 2002 to map and classify the vegetation on over 23,000 acres of National Park land in the Piedmont and Coastal Plain of Virginia. Seven reports have been completed that describe and map the vegetation on Appomattox Court House National Historical Park, Booker T. Washington National Monument, Colonial National Historical Park, Fredericksburg and Spotsylvania National Military Park, George Washington Birthplace National Monument, Petersburg National Battlefield, and Richmond National Battlefield Park. Over the course of the project, over 32 examples of globally rare or exemplary Natural Communities were documented on the seven parks; 20 of these were new occurrences. Vegetation data collected from the seven national parks were combined with over 2000 existing plot samples from throughout the Mid-Atlantic Piedmont and Coastal Plain and analyzed to refine the United States National Vegetation Classification for the Mid-Atlantic region. The vegetation maps and vegetation classification can provide the foundation for resource management activities in these parks, thus influencing the conservation and management of the natural heritage resources found there.

Rare Dragonfly Surveys Highly Successful (05/09/08)

Numerous members of the Division of Natural Heritage participated in surveys during late April for two spring-active, rare dragonflies along the James River, especially the Richmond section of the river. The target species were the Spine-crowned Clubtail (*Gomphus abbreviatus*), and the Wisconsin Snaketail (*Ophiogomphus susbehcha*). The latter species, or possibly a closely related, undescribed species or subspecies, was first observed in Virginia in the Richmond section of the James River in 2006, but little was known about its distribution and abundance. During the recent surveys, the Spine-crowned Clubtail was found at 18 sites on the James ranging from Belle Isle in Richmond to James River State Park in Buckingham County. It was also documented near the mouth of the Appomattox River in Petersburg and along the Rivanna River in Fluvanna County. The Wisconsin Snaketail (or close relative) was found at 13 sites on the James ranging from North Bank Park in Richmond to several sites in Albemarle County. Both species are apparently common and widespread in the James River, but neither was detected during surveys of the Rappahannock River, and they are both reportedly very rare in the Potomac River. Adult and larval specimens of the *Ophiogomphus* from the James River population will be compared with Wisconsin Snaketail specimens to determine their taxonomic status.

Report for Systematic Pre-Assessment of Candidate Species Selection (07/18/08)

A report detailing the results of Task 2 of “A Systematic Pre-assessment from Candidate Species Selection” was completed for the US Fish and Wildlife Service's Virginia Field Office. Task 1, completed in Dec 2007, reviewed 7,500 species in Virginia and selected the 208 G1 and G2 species from that set. This list was further refined and Task 2 focused on developing and applying a scoring method to assess the rarity, threat, and population trends for 91 of the rarest species in Virginia. In addition, expert recommendations (including personnel from Virginia Department of Game and Inland Fisheries, Virginia Museum of Natural History, Virginia Tech, Old Dominion University, Roanoke College, and other Natural Heritage programs, etc) were

compiled and factored into the final list. The result was a list of 15 species deserving the highest conservation attention possible. The final phase of this project will rank the 15 species from highest to lowest priority.

Natural Areas Protection

Crow's Nest Saved (04/25/08)

The protection of Crow's Nest has been one of Virginia's highest land conservation priorities for more than ten years. On April 18, the Virginia Department of Conservation and Recreation (DCR) and Stafford County purchased 1,770 acres on the eastern end of the Crow's Nest peninsula, the first phase of a two-phase land purchase to protect Crow's Nest as Virginia's 54th state natural area preserve. Funding for this purchase came from DCR, Stafford County, the Virginia Department of Environmental Quality and the Aquatic Resources Trust fund of the U.S. Army Corps of Engineers and The Nature Conservancy. By December 2009, DCR and its conservation partners hope to acquire an additional 1,101 acres on Crow's Nest which under a purchase contract. Successful purchase of the Phase 1 and Phase 2 parcels will result in the permanent protection of nearly 2,900 acres of highly significant coastal habitat. The property will be managed to restore and maintain the natural heritage resource values it supports and will be open to the public for compatible and appropriate uses as a state natural area preserve.



By December 2009, DCR and its conservation partners hope to acquire an additional 1,101 acres on Crow's Nest which under a purchase contract. Successful purchase of the Phase 1 and Phase 2 parcels will result in the permanent protection of nearly 2,900 acres of highly significant coastal habitat. The property will be managed to restore and maintain the natural heritage resource values it supports and will be open to the public for compatible and appropriate uses as a state natural area preserve.

Photo: Eastern end of the Crow's Nest peninsula bounded by Potomac Creek in the foreground and Accokeek Creek and its marshes to the north.

The Potomac Conservancy Uses DCR Data for Land Conservation Planning (05/09/08)

The Potomac Conservancy, a land trust dedicated to protecting the health, beauty, and enjoyment of the Potomac River and its tributaries is harnessing the statewide Virginia Conservation Lands Needs Assessment (VCLNA). For example, at the Potomac Conservancy, the VCLNA provides spatial summaries of data that allow for the identification of important landscapes for land protection in the Conservancy's targeted subwatersheds. Prior to the VCLNA the Potomac Conservancy conducted their own analyses using land cover data (2001 National Land cover data) and hydrology data to broadly identify the lands associated with forested streams and tributaries in which they might focus their efforts. "The VCLNA data does that for me and more," says Seth Coffman, Conservation Program Associate for the Potomac Conservancy "now using the VCLNA data I can identify those areas in the subwatershed of high value regarding aquatic and terrestrial ecological integrity and water quality benefits provided by forests. Then looking at the locations of these lands relative to streams, other protected lands, national forest, and state parks I can further tease out of the data, information pertaining to habitat connectivity and continuous forest cover." The Potomac Conservancy is taking this a step further: to better focus their outreach in their priority subwatersheds they analyze local parcel boundary data with the VCLNA model output summary maps. This allows an analysis of parcel size and ownership so that they may focus on landowners that might benefit from knowing the disproportionately positive benefits of their land(s). The Potomac Conservancy uses the findings of such local analyses to "inform [landowners] and in some cases just remind them that they own a special piece of land that holds environmental qualities important for a variety of reasons." Indeed, many landowners and the public can benefit from knowing those certain lands

that help to protect our Green and Blue Infrastructure Assets. It is no secret that local communities rely on these assets to maintain their collective high quality of life.

The Potomac Conservancy is setting an illustrative example of how local land trusts can reap the maximum benefits of their efforts. By simply integrating free, state level Green Infrastructure data into their local analyses, their results allow decisions that are both comprehensive and relatively easy.

Great Dismal Swamp Fire (06/16/08)

Natural Heritage staff responded to a wildfire at the Great Dismal Swamp National Wildlife Refuge that was started in a 200 acre clear cut area by a piece of logging equipment. In an effort to contain the fire, staff worked with Refuge and The Nature Conservancy staff in an extended attack effort in 100+ degree heat to deploy a hose lay around a 15 acre fire that had started the day before. This proved impossible and by days end the wildfire had spread to 150+ acres and into the surrounding woods despite efforts of ground crews and helicopter and air tanker support. By the end of the operational period, the initial hand crew, hotshot crew, and air support were proven ineffective in controlling the spread of the wildfire and a Type 2 incident management team was called in to take over the wildfire. As of 8:00 am on Thursday, June 12, 2008, the fire had grown to 900 acres even though there were four 20-person hand crews on site with four engines and one helicopter. Sixty-five thousand dollars (\$65,000) was spent on the fire and was less than 10 percent contained. Estimated containment date was predicted to be July 1. Natural Heritage staff efforts to be on scene to try and catch the fire before it got big while resources were being brought in were very much appreciated by FWS staff.

Natural Areas Stewardship

New Point Comfort Natural Area Preserve Maintenance (04/04/08)

New Point Comfort Natural Area Preserve, located on the Chesapeake Bay in low-lying Mathews County, has a natural pond on the northern boundary of the preserve. This pond has been managed, early on by farmers with an irrigation ditch, and then later by a drainpipe installed by the military in the 1940's. However, with on-going pipe maintenance and periodic flooding into the neighboring community, residents are seeking a more effective solution to managing storm water. The pond is associated with beach dunes that support federal and state protected Northeastern Beach Tiger Beetles. To identify and implement a feasible solution, DCR's Natural Heritage staff continues to work with the community's residents, the Mathews County administrator, U.S. Fish and Wildlife Service, and The Nature Conservancy, who own and manage the preserve. Currently, options being studied include reducing the amount of runoff into the pond from the community via repair of older drainage ditches, re-opening non-maintained irrigation ditches, improving/replacing the existing drain pipe, and/or installing a mechanical pump. Viable options are scheduled to be decided upon by the end of April with implementation to occur as soon as possible.

Old Dominion University Field trip to Blackwater Ecological Preserve and Antioch Pines Natural Area Preserve (04/11/08)

Twenty alumni from Old Dominion University visited Blackwater Ecological Preserve and Antioch Pines Natural Area Preserve for their annual ODU Biology alumni fieldtrip. Leaders of the field trip were Dr. Lytton Musselman, Chairman of the biology department at Old Dominion University, Staff from DCR's Natural Heritage Program, Jay Bolin an ODU graduate student and Dr. Kenneth Cameron a world renowned orchid expert from the University of Wisconsin. The field trip was a follow up to the previous day's opening of the Arthur and Phyllis Kaplan Orchid Conservatory at Old Dominion University. The focus of the day's field trip was a search for orchids. Although only one species of orchid was found flowering, examples of three other species were seen that day. Highlights of the trip include the Southern twayblade orchid, the state rare Flowering pixie-moss, and the state rare Sweet shrub.

Guardrail installed at North Landing River Natural Area Preserve (04/11/08)

Natural Heritage staff installed 125' of guardrail at North Landing River Natural Area Preserve to limit access into the preserve. Over the past few years, the preserve had become a dumping ground for tires, old building materials, and household trash. Several cars and trailers had been abandoned along the entrance road blocking access into the preserve. Over the past three months, Natural Heritage staff worked with the neighbors and the City of Virginia Beach to remove all the trash and debris. Over 600 pounds of glass and aluminum was recycled. Four cars and two trailers were towed away. With the site now clean and the guardrail installed, the interior of the preserve is now accessible. See pictures below.



Natural Heritage Donation (04/18/08)

The Eastern Shore Master Naturalist Chapter received a \$500.00 donation from the Town and Country Garden Group. The group is the Conservation Department of the Woman's Club of Accomack. Group members sewed reusable cloth shopping bags for use on the Eastern Shore. A local produce and herb outlet supplied the materials and paid the group to produce the bags. The group, in turn, donated the money earned to the Master Naturalist Chapter. The donation will be used to purchase field guides and other supplies for the chapter. The Eastern Shore Region Steward serves as the chapter advisor.

Volunteer Stewardship Group Formed (04/18/08)

A volunteer stewardship committee has been formed for Savage Neck Dunes NAP. The 11-member committee is comprised of Eastern Shore Master Naturalists, who have taken on the task as a group project. The committee will be responsible for visitor outreach, public use monitoring, updating species lists, assisting with field trips, and trail maintenance, along with other stewardship activities as needed. The formation of the stewardship committee will provide the Eastern Shore Steward with much-needed assistance in managing this Tier I preserve.

Unauthorized grazing at Magothy Bay Natural Area Preserve (05/09/08)

On May 5, 2008 Eastern Shore Stewardship Technician Richard Ayers patrolled the boundary lines at Magothy Bay Natural Area Preserve, at which time he observed horses grazing in a small field on DCR property. An electric fence had been erected using "T" posts and fence tape that sectioned off about four acres of the preserve. Inside the fence were five horses, a 50-gallon stock tank with water, and a grey Chevy pick up with no tags parked halfway under the fence. Four white DCR boundary signs were clearly visible from where the truck was parked, with one within the fenced area. A neighbor was contacted who stated the horses likely belonged to the brother of the farmer who currently leases and farms part of the preserve. Eastern Region Natural Areas Steward, Dot Field contacted the farmer and asked if he knew about the horses. He indicated that he had given his brother "permission" to graze the horses on the preserve field. Dot informed him that livestock grazing on state natural areas is not permitted and that the horses needed to be moved. A follow-up check two days later found the horses gone and the electric fence tape and approximately 20% on the fence posts removed. The pickup truck, stock tank and most of the fence posts remain. *Moral of the story: Purchase of land is half of the effort to protect resources...the other is stewardship and site presence.*



Two Natural Heritage Stewardship staff served as instructors at Virginia's Interagency Wildland Fire Academy (06/09/08)

The week-long Wildland Fire Academy was held at Longwood University in Farmville for the first time and drew a record 539 participants. These participants included career and volunteer firefighters representing 84 local fire departments from across the state as well as employees from the DCR/Divisions of State Parks and Natural Heritage, Department of Forestry, Department of Emergency Management, US Forest Service, National Park Service, US Fish and Wildlife Service, The Nature Conservancy, and others. Rebecca Wilson served as an instructor for S-131 (Advanced Firefighter) and Claiborne Woodall served as an instructor for S-390 (Introduction to Wildland Fire Behavior Calculations).

Division of Natural Heritage Fire Program Update (07/07/08)

Prescribed burns are critical for achieving DCR's natural area preserve management goals since they restore habitat for rare fire-adapted species and maintain fire-dependant ecological communities. During late fall of 2007 and winter/spring of 2008, 10 units encompassing 596 acres on state-owned or managed natural area preserves were burned under controlled conditions. Outside partners helped to make this accomplishment possible. Due to budget shortfalls, DCR-DNH was unable to contribute funding support to the interagency seasonal fire crew in 2008. Even so, DCR's key fire management partners, the U.S. Fish and Wildlife Service (USFWS) and The Nature Conservancy (TNC), stepped up and generously made the interagency crew resources available to the DCR-DNH fire program. This skilled fire crew was present on all DCR-DNH burns in 2008 and also assisted with burns with the USFWS, TNC, U.S. Forest Service, National Park Service, and on private property collectively burning a total of 6,321 acres. Fire crew from DCR's State Parks Division as well as AmeriCorps volunteers also made important contributions toward 2008 Natural Heritage prescribed fire accomplishments. In addition, DCR-DNH staff assisted on numerous burns with USFWS and TNC and also assisted the Virginia Department of Forestry and USFWS by responding to wildfires in Dinwiddie and Surry Counties and at the Great Dismal Swamp National Wildlife Refuge. DCR-DNH personnel also cooperated with staff from TNC, USFWS and State Parks to conduct an interagency Annual Fire Refresher plus an Introduction to Wildland Fire Behavior and Firefighting class.

Master Naturalist Chapter Presentation (07/11/08)

On July 8, Stewardship Biologist Adam Wilson spoke to the Central Rappahannock Chapter of the Virginia Master Naturalist Program about the history of the Natural Heritage Program and natural areas management in Virginia. Of particular interest to the 20 members in attendance was Crow's Nest Natural Area Preserve, located within the chapter's geographic area. Chapter members expressed an interest in volunteering at Crow's Nest and were hopeful that DCR will be able to find funding for Phase 2 acquisition. One member, an environmental reporter for the Fredericksburg Free Lance Star, was interested in learning more about the Natural Heritage Program.

American Water Resource Association Field Trip to Savage Neck Dunes (07/11/08)

Forty-one planners and water quality professionals from across the nation and globe participated in two field trips to Savage Neck Dunes Natural Area Preserve on Sunday, June 29. The field trips were sponsored by the Virginia Institute of Marine Science National Estuarine Reserve Research System as part of the agenda for the American Waters Resource Association (www.awra.org) conference being held in Virginia Beach. The theme of the conference was Riparian Ecosystems and Buffers: Working at the Water's Edge. DCR's Dot Field (Eastern Shore Region Steward) led the trips with assistance from Richard Ayers (Eastern Shore Stewardship Technician) and members of the Savage Neck Dunes Volunteer Stewardship Committee. Field trip participants were given a close-up view of one of the few remaining intact secondary dune systems and undeveloped Chesapeake Bay shorelines in the Commonwealth. The importance of the natural buffer vegetation to water quality, shoreline stabilization, and overall system health was emphasized. Participants were especially intrigued by the numerous Northeastern Beach Tiger Beetles (indicators of a healthy shoreline) scurrying in the inter-tidal zone.



Field trip participants (2008 AWRA Conference) at Savage Neck Dunes Natural Area Preserve located in Northampton County on the bayside of Virginia's Eastern Shore.

Cape Charles Coastal Habitat Natural Area Preserve trail maintenance (08/04/08)

A DCR Youth Conservation Corps Crew from Kiptopeke State Park worked very hard and cleaned up the hiking trail and boardwalk at Cape Charles Coastal Habitat NAP. A citizen responded to the work with: "I wanted to let you know that we visited the trail. I commend the wonderful job that was done there, there was visibly a lot of work and effort put into the maintenance that was done. Thank you again for your attention to this matter so that we can enjoy the trail."



Eastern Shore Region Natural Areas Steward Receives Award (08/11/08)

Dot Field, has been selected as the Eastern Shore Soil and Water Conservation District Educator of the Year. The award usually honors a K-12 educator who implements innovative soil and water conservation activities for reaching students and other audiences. District award winners are then eligible for state honors. However, this year the District chose to forgo state recognition and nominate Dot because of her conservation education efforts on the Eastern Shore. Dot works with Eastern Shore high school students in the Envirothon Program, teaches a section on landscaping with native plants for the Eastern Shore Master Gardener Program, implements Phragmites control workshops for private landowners, presents lectures on Natural Heritage resources, leads numerous field trips to Eastern Shore Natural Area Preserves, and acts as advisor and instructor for the Eastern Shore Master Naturalist Chapter.



Dot Field (on left) receiving her District Educator of the Year Award

Eastern Shore Region Natural Area Preserves Maintenance (08/11/08)

Natural Heritage Eastern Shore Stewardship staff utilized a Youth Conservation Corps (YCC) crew based out of Kiptopeke State Park to implement a variety of projects on Eastern Shore Region Natural Area Preserves. The crew cleared overgrown vegetation from the Cape Charles Coastal Habitat NAP boardwalk, posted property boundaries at Magothy Bay NAP, and assisted the Eastern Shore Master Naturalist Chapter with a public trail project at the Onancock School. The all female crew worked diligently on all the projects and have received praise from local residents for their efforts.

Dameron Marsh's new kayak launch opens (08/15/08)

New public access improvements have been completed to better accommodate launching of kayaks, canoes, or other small "car-top" boats. Dameron Marsh Natural Area Preserve is home to some of the Chesapeake Bays most significant habitat for marsh-bird communities and pristine beaches for the federally listed threatened Northeastern beach tiger beetles. The new public access will be open during daylight hours on weekends into October with staff on site to share information about how Dameron Marsh and the Commonwealth's growing Natural Area Preserve system is working to conserve and protect the Commonwealth's biodiversity and some of its rarest wildlife species. Kayakers and canoeists can also use the launch during weekday hours all year long with a short portage of their boats from the main parking area.



Visitors to Dameron Marsh Natural Area Preserve try out the new kayak launch then explore the preserve's shores and marshes along Ingram Bay.

Hughlett Point Natural Area Preserve Public Access Facility Burns (09/05/08)

On Saturday, August 30, 2008 a fire of unknown origin burned and completely destroyed a boardwalk and observation deck at Hughlett Point Natural Area Preserve in Northumberland County. In addition, 3-4 acres of marsh and upland habitats burned, requiring suppression response from the Department of Forestry and local volunteer fire department. DCR-DNH staff requested State Police arson investigation assistance, and two special agents arrived on-scene at 11:30 pm, Sunday, 8/31/08. The one-hour investigation resulted in the conclusion that the cause of fire could not be identified but that most likely this was accident and not arson. The popular deck had, for over a decade, provided a remarkable view of the Chesapeake Bay and Northern Neck salt marshes. Replacement costs for the facility are likely to exceed \$100,000; however, no funds for rebuilding the deck and boardwalk currently exist.



Invasive Species:

Natural Heritage Conducts Phragmites Workshop for Private Landowners in Virginia Beach (06/09/08)

Staff from Natural Heritage, in cooperation with the Back Bay Restoration Foundation and the U.S. Fish and Wildlife Service, held a public workshop on Phragmites in Virginia Beach. Participants included industry and resort representatives, private landowners, Master Naturalists, and community organizers. The Phragmites workshop covered many aspects of the 15 foot tall wetland invader including its biology, history, distribution and means of control.

Phragmites Control Workshops for Landowners (09/05/08)

On July 22, 2008 and August 20, 2008, DCR-DNH Stewardship staff conducted Phragmites Control Workshops for Landowners on the Eastern Shore. These were the 14th and 15th workshops, respectively, DCR staff have coordinated over the last four years, all made possible by NOAA funding through Seaside Heritage

grants administered by DEQ's Coastal Zone Management Program. The 54 participants received information on the ecology and natural history of Phragmites, methods of control, and sources of assistance in combating this invasive wetland grass. Workshop attendees included Eastern Shore of Virginia Land Trust conservation easement holders, VDOT staff, USFWS staff, and a representative from the office of Congresswoman Thelma Drake.

Emerald Ash Borer Training Workshop (09/22/08)

On 9/22/2008, staff members from DCR–Natural Heritage, Virginia Outdoor Foundation, Department of Forestry, and Bull Run Mountain Conservancy, as well as Master Naturalists from northern Virginia attended a training session about the Emerald Ash Borer (EAB). EAB is a non-native beetle responsible for killing millions of ash trees throughout the upper Midwest just in the last few years. This invasive species is rapidly spreading and, with no effective large-scale control methods known, is expected to cause the elimination of all ash (*Fraxinus* spp.) trees from North American forests. EAB was recently discovered in Virginia, in Fairfax County, and is expected to spread to other parts of the state within the next few years. The species is also now present in Maryland and West Virginia. The training workshop was hosted by the Department of Forestry, the Department of Agriculture and Consumer Services, and Fairfax County. Participants were informed about the spread of EAB in the U.S., its current known distribution in Virginia, and its likely impacts on Virginia forests. The workshop also included visits to infested sites in Fairfax County where participants learned how to locate and identify EAB, its signs, and symptoms. Instructors included Dr. Chris Asaro – DOF Forest Health Specialist, Jim McGlone – DOF Urban Forest Conservation Specialist, Debra Martin – VDACS CAPS/Invasive Species Coordinator, Joe Rossetti – DOF Service Forester, and Troy Shaw – Fairfax County Dept. of Public Works and Environmental Services.



2008 Phragmites Control Treatments Completed (09/29/08)

During the weeks of 9/15 and 9/22/08, DCR – Natural Heritage staff members supervised a contractor who completed aerial spraying of 380 acres of the invasive wetland grass, *Phragmites australis*. Three treatment areas were targeted in 2008, which included marshes and shorelines of 1) the Eastern Shore Seaside, 2) North Landing River, and 3) the Ball’s Neck portion of the Northern Neck. Phragmites was treated using a helicopter and herbicide containing the active ingredient, imazapyr. Private lands adjacent to or near state natural area preserves was treated along with public lands as part of a strategy to reduce Phragmites abundance in these ecologically important parts of Virginia. Federal funding through the DEQ/VA Coastal Zone Management Program’s Seaside Heritage Program and the NRCS Wildlife Habitat Incentives Program made this work possible.



Information Management:

Natural Heritage Data Management Totals:

Total Number in Database (for CZM Counties) as of 09/30/08:

New Mapped Locations (EO) - **55**
Updated Mapped Locations (EOs) - **488**
New Conservation Sites - **21**
Updated Conservation Sites - **28**

Number in Database (for CZM Counties) as of 09/30/08:

Animal Mapped Locations (EOs) - **1,087**
Plant Mapped Locations (EOs) - **1,144**
Community Mapped Locations - **358**
Conservation Sites - **781**

Miscellaneous:

Chesapeake Bay Mountain Academy (06/23/08)

Karst Education Coordinator Carol Zokaites hosted the 4th Chesapeake Bay Mountain Academy June 16-19 at Douthat State Park. The Mountain Bay Academy, run through the Virginia Resource Use Education Council and funded by the National Oceanic and Atmospheric Agency, provides training for secondary teachers in earth science and biology on the mountain headwaters portions of the Chesapeake Bay watershed in Virginia, and includes optional components that can be completed for graduate credit through VCU. This year's academy was a great success, with 21 teachers from around Virginia learning how to teach their students about water quality, aquatic fauna, geology, and karst topography.

Chesapeake Bay Foundation (CBF) Staff experience Karst and the western part of the watershed (08/22/08)

Twelve staff members from CBF were given a karst field trip by the Karst Education Coordinator and the Karst Program Coordinator. Standing in fields full of sinkholes, caves and springs, really showed the CBF staff the great surface water to groundwater interactions in the western part of the Bay watershed. This also showed the need for conservation measures in Karst areas to help with Bay protection. The next day, Bill Balfour, Karst Protection Specialist, accompanied the CBF staff into a commercial cave so they could see the Karst from the inside.

c) DCR – Division of Planning and Recreation Resources

The [Captain John Smith Chesapeake National Historic Trail](#) (CAJO) was designated by legislation signed by President George Bush on December 19, 2006. The trail commemorates Smith's historic voyages of exploration on the Chesapeake Bay and its tributaries from 1607-1609. Through an amendment to the National Trails System Act, Congress designated CAJO as the first national water trail in the United States. The CAJO designation Act (P. L. 109-148) requires the Secretary of Interior to administer the trail "in coordination" with the Chesapeake Bay Gateways and Water Trails Network and the Chesapeake Bay Program, and in consultation with federal, state, tribal, regional, and local agencies and the private sector.

As part of this study, the Virginia Department of Conservation and Recreation (DCR) Division of Planning and Recreation Resources (PRR) entered into an agreement with the National Park Service in May 2008 to conduct an inventory and evaluation of state and local lands along the Chesapeake Bay and its tidal tributaries. This study documents and describes the existing conditions and potential opportunities for public access along the CAJO in Virginia. An important emphasis of the study is on planning for the provision of

power and non-power boat access along the designated water trail. The analysis and evaluation considered state and local lands along the trail routes including state parks, natural area preserves, wildlife management areas and state forests as well as other locally owned public lands. This study identifies sites along the trail with high potential for access and interpretation. Resources identified in this study could be incorporated into a comprehensive management plan for CAJO.

The CAJO trail traces nearly 3,000 miles of historic routes taken by John Smith charting the land and waterways of the Chesapeake Bay from 1608 - 1609. In Virginia, the route of the water trail traces John Smith's several voyages on the York and James rivers in 1607 as well as his two major voyages up the Chesapeake Bay during the summer of 1608. Both of these voyages started from Jamestown. Before returning to Jamestown, the routes of discovery progress north along the Eastern Shore, across the Bay to present-day Baltimore and the Patapsco River then southward along the Western Shore and up the Potomac River to Washington, D.C. before returning to Jamestown. The second voyage of discovery extended up the Bay to the mouth of the Susquehanna River and Havre de Grace, then returns southward along the Patuxent and Rappahannock rivers back to the first permanent settlement.

As the nation's first national water trail, the CAJO is oriented for watercraft and highlights water access sites. Numerous existing land sites along the voyage routes will interpret Smith's explorations, native settlements and cultures, and the environment of the early 17th century.

This study uses existing resources and maps to identify existing and potential public access opportunities along the CAJO. The following maps, data and information were the primary sources used to identify existing public access opportunities along the water trail. These resources provided the basis for conducting an inventory of existing public access sites within proximity to Smith's 1607 – 1609 voyages. The Study will be completed by October 15, 2008 and transmitted to the National Park Service. The Park service will use the information in the development of the General Management Plan for the [Captain John Smith Chesapeake National Historic Trail](#) (CAJO) which will be prepared in 2009.

d) DCR- Division of Chesapeake Bay Local Assistance

During the reporting period of April – September 2008, the Division of Chesapeake Bay Local Assistance continued to make significant progress in overseeing local government implementation of the Chesapeake Bay Preservation Act. The Division has also enhanced its education and training for both local government staff and consultants involved with administering the Act through local codes and development review processes. The following is a summary of activities for this period.

Program Description:

The Bay Act requirements fall into three categories. Phase I consists of local governments designating and mapping Chesapeake Bay reservation Areas (CBPAs) and adopting land use and development performance criteria to protect those features. CBPAs include tidal wetlands, tidal shores, nontidal wetlands connected and contiguous to tidal wetlands and perennial streams and a 100-foot fully vegetated buffer. Phase II consists of the review and revision of local comprehensive plans to incorporate water quality protection measures. Phase III involves the review and revision of local land use codes to include specific standards that implement water quality performance criteria.

In its review of local Bay Act programs, the Chesapeake Bay Local Assistance Board adopts two kinds of determinations. When a locality is deemed consistent, it means the local ordinances are in place to designate CBPA's and to require that the performance criteria are 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 April 1 – September 30, 2008, CBLAB determined 1 local amended Phase I to be consistent with the Bay Act regulations. The locality was the Town of Painter. With Painter becoming consistent, all 84 local Bay Act ordinances are now consistent with the Regulations.

It is important to point out that all of the 84 Bay Act localities had adopted Chesapeake Bay Preservation Area maps and local ordinances to protect those areas in place by 1996. CBLAB adopted revisions to the Bay Act regulations, however, in 2001. This action necessitated all 84 localities to revise their local ordinances to be consistent with the amended regulations.

Compliance Evaluations:

For the period April 1 – September 30, 2008, 7 localities were deemed by CBLAB to be fully compliant with Phase I of the Bay Act. As of September 2008, 53 localities have been deemed compliant, with an additional 27 localities deemed not fully compliant but that are addressing conditions to achieve full compliance. Also as of the reporting period 4 local compliance evaluations were in progress. Significantly, 80 of the 84 local Bay Act programs are either fully compliant or are addressing conditions to become compliant.

Site Plan Reviews:

For the reporting period 214 site plans for state and federal projects were reviewed and commented upon for consistency with the Chesapeake Bay Preservation Act requirements. In additional 32 site plans were reviewed at the request of local governments.

Technical Assistance & Outreach:

Due to funding constraints, DCBLA has refocused its educational efforts from larger workshops and conferences to smaller workshops, PDC meetings and enhanced technical assistance to local Bay Act staff. A total of 23 education and training events were provided during the reporting period on such topics as training to identify non-tidal wetlands that are to be included as Resource Protection Areas and riparian buffer management and restoration.

In addition to the above education, training and technical assistance events, DCBLA staff gave presentations on the incorporation of Better Site Design practices into local codes to the Association of Soil & Water Conservation Districts in May of 2008. In April 2008, Division staff gave presentations at Environment Virginia on a variety of tools to incorporate water quality protection into local codes and comprehensive plans.

For the reporting period, DCBLA staff conducted a total of 49 technical assistance site visits, providing assistance on such topics as perennial flow and non-tidal wetland determinations, riparian buffer restoration techniques and other Bay Act compliance issues. The requirement for such determinations reflects one of the key changes to the Bay Act regulations that were adopted by the Chesapeake Bay Local Assistance Board in 2001.

New Initiative:

During the reporting period the Division continued to make progress on the development of the next phase of Bay Act implementation which is known as Phase III. This phase will involve the review and revision of local codes to address water quality protection. To facilitate these reviews the Division has developed a code and ordinance checklist to identify possible ordinance provisions. Sample ordinance provisions that will be reviewed include provisions for the maintenance of open space, limits on the number and size of parking spaces, establishment of buffers on intermittent as well as perennial streams and measures to reduce impervious cover. The initial phase of the code & ordinance review will be voluntary. During this initial period Division staff will work with local staff to review their codes and identify measures to be added or amended that will help to protect water quality. This process is expected to begin by the summer of 2009.

5) Department of Game and Inland Fisheries (DGIF)

Recreational Fishing:

American Shad Restoration Program

This is a cooperative project involving the Virginia Department of Game & Inland Fisheries (VDGIF), the U. S. Fish and Wildlife Service (USFWS), the Virginia Marine Resources Commission, the Interstate Commission on the Potomac River Basin and the Potomac River Fisheries Commission. Broodfish catches during the spring spawning run on the Pamunkey River were again relatively low compared with years prior to 2006. This was partly due to a decline in abundance that has occurred since 2002 in many rivers on the East Coast. In addition, budget cuts reduced fishing effort by 10% in 2008. Catches on the Potomac River, which has been one of the few rivers to show increasing shad abundance over the last five years, were a little lower than expected. Egg taking crews on the Pamunkey and Potomac rivers collected a total of over 22 million fertilized American shad eggs. The eggs were shipped to VDGIF's King and Queen Fish Cultural Station and the USFWS's Harrison Lake National Fish Hatchery where they were incubated, hatched, reared to up to seven days of age, marked with a tetracycline dye, and stocked. The overall survival rate from egg to stocked fry was 56%; this is considered excellent. Unfortunately, due to the lower catches of broodstock, the only stocking quota that was met was for the mainstem of the Rappahannock River (4,140,536). The Hazel River, a tributary to the Rappahannock River, was stocked with 690,970 fry. Fry stockings in the James River system were as follows: mainstem (4,652,432); Appomattox River (819,719); Rivanna River (468,470); and Slate River (275,885). As mitigation for broodfish losses, the Pamunkey River was stocked with 716,750 fry and the Potomac River system was stocked with 884,081 fry. The total number of shad fry released in 2008 was 12,648,843. This brings the grand total of fry stocked since the inception of the program in 1992 to 160,606,549.

Several hundred otoliths were extracted from broodfish heads collected during spring, 2008. Sectioning of these otoliths for aging and hatchery mark detection is in progress. Results will be included in the next report.

Wetlands:

Mitigation Banking

VDGIF continues to participate on the Wetland Mitigation Banking Review Team 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.

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 Department works with many partners to achieve this goal. The Department has also implemented the Virginia Migratory Waterfowl Stamp Grant Program. This program provides grants to non-profit organizations for wetland enhancement, restoration and creation. Five grants have currently been approved and are in the contract and restoration process.

VDGIF 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. During the past year, restorations totaling 15 acres are in the process of construction on Department lands in Appomattox County, and 100 acres of *Phragmites* were chemically treated in Surry County. The department is also currently working on wetland restorations statewide, including Atlantic white cedar restoration on the Cavalier Wildlife Management Area in the City of Chesapeake and additional private lands projects on the Eastern Shore of Virginia.

Geographic Information Systems/Data Management:

VDGIF continued to maintain spatial datasets of wildlife locations and resources in the coastal zone. Essential habitat maps for the Tier II species of Virginia's Wildlife Action Plan are now complete. This includes all state or federal listed species. The essential habitat maps of these Tier II + species (including T&E) have been combined with essential habitat maps of the previously available Tier I species to get a more complete map of the distribution of habitats for rare species. This map represents 247 species total, 149 terrestrial and 98 aquatic. Many of these are in the coastal zone. VDGIF has begun work on a related effort to map the distribution, and eventually habitat, of the species in Tiers III and IV. The result of this effort will be all 924 species (Tiers I – IV) of greatest conservation need mapped to fine scale watersheds. VDGIF is managing a regional habitat classification and mapping project for the Northeastern US, which includes 14 states and the District of Columbia. The resulting regional terrestrial habitat classification system, regional aquatic habitat classification system, regional aquatic habitat GIS dataset, and GIS dataset of secured lands will be released soon. For more information see...http://www.rcngrants.org/habitat_classification.shtml

Use of VDGIF's Wildlife Environmental Review Map Service (WERMS) continues to grow. This service provides current data on the location of critical wildlife resources that are to be considered during planning and project reviews. VDGIF implemented a password protection feature that makes the sensitive threatened and endangered species locations more secure.

VDGIF continues to update the bald eagle nest database. Locations of eagle nests from the 2008 survey will be available soon. VDGIF is also updating non-breeding bald eagle survey observations, by digitizing thousands of eagle locations. To make this process more efficient, VDGIF has developed a mobile data collection application, where survey participants digitize the location of eagles while conducting the survey. This reduces data entry effort and makes the data available much faster. VDGIF continues to use a similar mobile data collection application during wildlife disease monitoring efforts, including sampling for chronic wasting disease in deer and avian influenza in birds.

VDGIF is also developing spatial information for recreational opportunities, including continuing to develop a comprehensive boating access database, in cooperation with the Virginia Coastal Zone Management Program.

Wildlife Mapping:

To date, the WildlifeMapping program has trained over 1,450 volunteers and has generated over 56,000 observations of wildlife and their habitats. The coastal region is the most represented region, both in terms of volunteers and observations, providing approximately 40% of the incoming data. For 2008, most all WildlifeMapping workshops are being conducted in conjunction with chapters of the Virginia Master Naturalist Program. As of this fall, the Virginia Master Naturalist program will have 25 active chapters, with two of the new chapters also in the Coastal Zone, the Arlington Regional chapter and the Peninsula chapter based in Newport News. With nine of the 25 chapters in the Coastal Zone, it is anticipated this region will continue to dominate in the quantity of WildlifeMapping data received from Master Naturalists. These Master Naturalists can also be expected to provide many hours of volunteer service to the Coastal Zone natural resource community. As an example, Master Naturalists from the Historic Rivers and Riverine chapters will serve as mentors to schools in the Coastal Zone who will be participating in a box turtle monitoring project under joint supervision of VDGIF and VCU. VDGIF is in the process of acquiring control of the WildlifeMapping database. In the process, it is hoped that additional user-friendly features will be added to the current program.

Virginia Birding and Wildlife Trail (VBWT):

The VBWT is designed to support wildlife conservation efforts in Virginia by providing Virginians and visitors with increased access and opportunities to view wildlife throughout the state. Staff is continuing to visit trail sites and arrange meetings with site managers and tourism officials across Virginia. These meetings allow for full cooperation and coordination for the VBWT. In addition, two Master Naturalist volunteers completed calling over 450 VBWT site owners/managers to update contact information and inquire about site signage needs. Web site updating will begin this fall. A contractor completed all road signage in April 2007. This road signage enhances the ease of use for trail users and has produced an increased interest in the Trail statewide.

The Conservation Management Institute at Virginia Tech completed their contract with VDGIF to design and implement a user survey of the VBWT. The data show that conservatively, the Trail brings about \$8.5 million into the state economy each year. Visitors are usually couples with a mean age of about 50 years old. They have median annual income exceeding \$75,000. Most visitors on the Trail are less than intermediate birders. The portion of the survey sent to local planning and tourism officials show that VDGIF needs to do more to educate localities about the Trail. While Tourism staffs are familiar with the Trail effort, most other local officials are not as familiar with it. A copy of the full survey results is available on the Department's Web site at www.dgif.virginia.gov/vbwt.

Site enhancements have been completed at Willis Wharf Marina, a site on the Eastern Shore Loop of the Virginia Birding & Wildlife Trail and on the Seaside Water Trail. The project was funded by Virginia CZM as part of the Seaside Heritage Program. This project developed an observation platform overlooking the tidal wetlands adjacent to the Willis Wharf Marina. Construction occurred on county-owned property at the marina. The viewing platform is a 4 foot high platform with a handicap accessible ramp. The surface is 24 feet wide by 64 feet long with railings. The decking surface was constructed with recycled plastic lumber to increase the durability of the platform and reduce maintenance. The property is owned by the County of Northampton and the platform will be open to the public. This will provide opportunities to view a variety of shorebirds and improve the ecotourism infrastructure of the area.

In consultation with a variety of partners (Northampton County, Willis Wharf Village Committee, Virginia CZM and Northampton-Accomack PDC), initial design parameters were defined. These included accessibility, and synthesizing the structure with the surrounding working waterfront. With guidance from VA CZM staff, VDGIF Watchable Wildlife staff, VDGIF Capital Programs staff created detailed plans for the platform. These plans were forwarded to all partners for review and comment. The plans were found to be satisfactory and were approved by the Northampton County Board of Supervisors. The construction contract was awarded to Eastern Shore Homecrafters. VDGIF entered into a cooperative agreement that delineates the responsibilities of the primary partners (VDGIF and Northampton County) regarding construction and maintenance of the viewing platform. These documents were approved by the Northampton County Board of Supervisors at their October meeting. Signage acknowledging the contributions of NOAA, CZM and all other partners has been installed on site. In addition, stationary binoculars are being installed for visitors to better view shorebirds from the platform. A site visit by VDGIF staff has confirmed that all construction is satisfactory and consistent with the plans provided.

Two interpretive panels have been installed on the platforms highlighting shorebirds and their ecology. The panels are constructed from Digital High Pressure Laminate, a material which provides for excellent image clarity and superior resistance to weathering and damage. The panels were designed by VDGIF Watchable wildlife staff with artwork provided by New York DEC, North Carolina DMF and VDGIF staff. Additional signage will be installed through a separate Virginia CZM grant that describes the ecological and economic values of the Seaside of Virginia's Eastern Shore as well as the unique character of the Village of Willis Wharf.

VDGIF has participated in planning with CZM staff and staff from the Eastern Shore Soil & Water Conservation District to design habitat enhancing plantings at the platform site. These native plants will enhance the site and provide a demonstration area to encourage increased use of native plants in the surrounding community as part of the Virginia CZM/Seaside Heritage Program's Native Plants Social Marketing Campaign.

On Sept 19th, 2008 a formal dedication ceremony took place at the Willis Wharf Viewing Platform. This ceremony coincided with the 16th annual Eastern Shore Birding & Wildlife Festival, increasing exposure for the event. The dedication was attended by VDGIF board members and staff, Northampton County Supervisors, a representative of Congresswoman Drake, CZM Program staff, A-NPDC, Willis Wharf Committee and members of the local community.

The structure at Willis Wharf has been featured in a joint Virginia VDGIF/Colorado Division of Wildlife Publication "A GUIDE TO WILDLIFE VIEWING AND PHOTOGRAPHY BLINDS: Creating Facilities To Connect People With Nature." This guide acts as a resource for those wishing to enhance infrastructure related to wildlife viewing.

The Willis Wharf structure has also been selected for the 2009 Watchable Wildlife Calendar. This publication features stunning nature photography coupled with images and information about particular sites.

Willis Wharf will be highlighted in June 2009. The image of the platform and a pair of Royal Terns were taken by VDGIF's Lt. Ken Conger with a site description developed by VDGIF Watchable Wildlife program staff.

New Church Visitor Center Kiosk

A new kiosk was erected at the New Church Visitor Center in Accomack County and dedicated on Jun 12, 2008. This visitor center is the 1st point of contact for visitors entering the Commonwealth along U.S. Route 13 from Maryland. The kiosk was a joint venture with the U.S. Fish & Wildlife Service and the VA Coastal Zone Program. The large panel features Chincoteague NWR on one side and the VDGIF's Virginia Birding & Wildlife Trail Eastern Shore Loop on the reverse. VDGIF provided assistance and reviewed the design of the panel. The visitor center is a distribution center for information regarding the VBWT; the kiosk will hopefully increase interest and visitorship to the VBWT.

NonGame Species Monitoring and Research:

Rafinesque's eastern big-eared bat

The Rafinesque's Big-eared bat (*Corynorhinus rafinesquii*) is classified as state endangered in the Commonwealth of Virginia (VDGIF 2005). The Virginia Department of Game and Inland Fisheries Comprehensive Wildlife Conservation Strategy ranks *C. rafinesquii* as Tier I, a species of greatest conservation need (VDGIF 2005). The Virginia Endangered Species Recovery Plan for the Eastern Big-Eared bat (Schwab et al. 1990) outlines many recovery needs and strategies for this species. The first goal of the Recovery Plan is to determine the distribution of *C. rafinesquii* in Virginia by searching man-made (abandoned structures) and natural roost sites (hollows in trees) for day-roosting adults. Within the search areas, the objective is to identify essential habitat such as maternity colonies, hibernacula, and roosts of solitary bats. Once these sites have been identified, it is possible to visit maternity colonies and to census roosts to monitor population trends.

A 1997 survey by the VDGIF reported 81 abandoned building roosting sites in the counties of Sussex, Southampton, Suffolk, Greenville, Chesapeake City, New Kent, and Hanover, including 12 nursery colonies (Garrett 2001). The maximum number of bats observed in 1998 was 471. Surveys in 2001 showed that half of previously documented nursery colony sites had been abandoned or destroyed (Garrett 2001). Since 2001, many *C. rafinesquii* roost structures have been destroyed and new sites were documented in Virginia Beach and Isle of Wight counties (Carpenter 2008), so it was necessary to undertake this survey project to determine and document the continued presence of this species and its viability in southeastern Virginia.

Surveys to search potential man-made roost sites were conducted during this reporting period by revisiting previously documented sites and road cruising for new structures. Buildings were surveyed during the day by acquiring landowner permission, entering the site and searching rooms, closets and attics for live bats or guano. To maintain a management profile for each site where bats were found, a count, the behavior of animals, the GPS location and address were recorded as well as building characteristics such as number of stories and type of roof. Previously occupied structures were assessed as 'good,' 'vulnerable,' 'destroyed,' or 'unknown' status if permission from the landowner was not granted or the structure could not be located. Following the protocol from previous survey, if new sites did not have bats, a null site record was created. Additional records of *C. rafinesquii* were also entered into the VAFWIS database.

We observed a total of 15 structures which had Rafinesque's Big-eared bats present, 9 solitary roosts and 4 maternal colonies. The maximum number of bats seen during this survey was 165. We confirmed the destruction of 14 structures previously known to be used by bats. Landowners report natural decomposition, hurricanes and storms, the development of property, and property upkeep as reasons for collapsing structures. Approximately 15 null sites were documented.

To monitor population trends at maternity colonies, four previously known maternal roost sites were revisited. These are located in Southampton and Sussex counties and the City of Virginia Beach. Count data were collected for these maternal colonies. This year, colonies consisted of groups of 30-50 bats. Survey information shows stable population trends at these four maternal roost sites. One site was documented as being used as a maternity colony 3 times in over 10 years. No new maternity colonies were discovered during this reporting period.

Because of the trend in destruction of known roosts, an emphasis was placed on surveying new areas. Charles City, Surry and Prince George counties were road-cruised, because these areas are considered likely within the range of *C. rafinesquii*, but have no records (VAFWIS 2008). Road cruising in these counties and the City of Suffolk has yielded approximately 80 structures with potential as bat roosts. Property owner contacts are underway. We plan to continue surveys in these areas in 2009.

The second goal of the Recovery Plan is to protect roost sites and other habitat from adverse modifications by enlisting the assistance of landowners in habitat protection. During this reporting period, a new solitary roost was secured with a padlock and maternal colony sites were monitored for structural integrity. To develop and maintain landowner and public support for species protection, approximately 100 information letters were sent to landowners. Landowner contacts were documented and updated by phone interviews and written correspondence. I discussed the status of structures and *C. rafinesquii* protection with landowners. To disseminate public information, three newspaper articles were published during this reporting period in the Virginia-Pilot, Progress-Index, and Hopewell News. An educational pamphlet (Carpenter 2007) was created and is currently in publishing approval process. Also, a kids coloring sheet (Defenders of Wildlife 2008) was sent to interested parties.

Surveys of historic maternity roosts and solitary bat roosts during this reporting period yielded new solitary bat roosts and an updated VDGIF site management profiles. By adding to the information on distribution, abundance, and status of *C. rafinesquii*, current information will assist in the revision of the Recovery Plan for the Rafinesque's Big-eared Bat. Survey information shows stable population trends at four maternal roost sites. Surveys indicate high maternity roost fidelity over many years and counts indicate this Tier I state-endangered bat species does not appear to be in danger of extirpation.

Literature Cited

- Carpenter, Ela Sita. 2007. Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Brochure. (Unpublished)
- Carpenter, Ela Sita. 2008 Roosting Affinities of Rafinesque's Big-eared Bat (*Corynorhinus rafinesquii*) in Southeastern Virginia. Masters Thesis. Department of Biology, Chemistry, and Environmental Science. Christopher Newport University.
- Defenders of Wildlife. 2008. Kids Planet. Color Your World. Rafinesque's big-eared bat coloring sheet. Illustration by Steve Oliver <http://www.kidsplanet.org/cyw/bat.html> accessed June 2008.
- Garrett, Mary Keith. 2001. Eastern Big-Eared Bat: Status of previously reported structures and ownership of property, Southeastern Virginia. Virginia Department of Game and Inland Fisheries. (Unpublished)
- Schwab, Donald J, Mary K Clark, Thomas M. Padgett, and Robert K. Rose. 1990. Virginia Endangered Species Recovery Plan for the Eastern Big-eared Bat. Virginia Department of Game and Inland Fisheries, Richmond.
- Virginia Department of Game and Inland Fisheries. 2005. Virginia's Comprehensive Wildlife Conservation Strategy. Section 4.4.1.14.
- Virginia Fish & Wildlife Information Service (VAFWIS). 2008. *Corynorhinus rafinesquii macrotis* <http://vafwis.org/fwis/> accessed June 2008.

Chicken turtle survey at First Landing State Park

In Virginia, the Chicken Turtle (*Dierochelys reticularia*) is only known to occur in 2 locations: First Landing State Park (previously known as Seashore State Park) in Virginia Beach and the Cat Ponds in Isle of Wight County. In the early 1970's this species was considered common. However, survey efforts during 1989-1992 found only 9 adults in First Landing State Park. Considering the average life span is 25 years, and these 9 adults were about 10 years old, this population maybe extinct. The second population was found in 2000 at the Cat Ponds in Isle of Wight County. However, the drought of 2002 may have had catastrophic effects on this population. The drought resulted in water levels at the Cat Ponds to become so low that the turtles were unable to seek refuge from predators (i.e. raccoons). Seven Chicken Turtle skeletons were found at the end of the summer. A cursory survey in 2005 did not find any Chicken Turtles at one of the Cat Ponds.

From 28 April to 8 May, we conducted a turtle survey at First Landing State Park in Virginia Beach. This is the third consecutive year WDGIF and State Park biologists have conducted a survey for the Chicken

Turtle. Unfortunately, no Chicken Turtles were captured. Next year, we plan on continuing to survey First Landing SP and expanding our efforts to the Cat Ponds.

Herpetofauna survey at Piney Grove

From 2 June, to 6 June 2008, we surveyed a small pond (< 1 hectare) at Piney Grove in Sussex County. Piney Grove is located in Sussex County and is managed by The Nature Conservancy, primarily for Red Cockaded Woodpecker. However, Piney Grove is also habitat to a diverse herpetofauna. The site is dominated by black gum and surrounded by loblolly pine. Submerged and emergent aquatic vegetation is abundant throughout late winter and spring. The deepest area of the pond may reach a maximum depth of 1.5 meters. Only during periods of flood will it exceed more than 1.5 meters.

On June 5 2008, one Two-toed Amphiuma (*Amphiuma means*) was captured and on June 6, 2008, three were captured. In one trap, two Amphiumas were captured. In Virginia, the Two-toed Amphiuma appears to be common where suitable habitat exists and considering the vast amount of suitable habitat in Virginia, their conservation status appears to be secure. This is a new county record for Sussex County and fills a distribution hiatus of this species in Virginia. Below is a complete list of reptiles and amphibians documented at Piney Grove over the past 2 years:

Frogs

American bullfrog, Pickerel frog, Southern leopard frog, Green frog, Carpenter frog, Spring peeper, Southern chorus frog, Upland chorus frog, Brimley's chorus frog, Southern cricket frog, Pine Woods treefrog, Cope's gray treefrog, Eastern narrow-mouth toad, Fowler's toad, *Little grass frog

*found adjacent to Piney Grove, but most likely does occur

Turtles

Eastern (=common) snapping turtle, Eastern painted turtle, Stinkpot, Coastal Plain cooter, Eastern box turtle

Snakes

Black racer, Eastern (=black) rat snake

Lizards

Five-lined skink, Northern fence-lizard, Little brown skink

Demarva 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 last reporting period, the contractor began an intensive landscape analysis using GIS technology in conjunction with the most current tax parcel maps 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 effort 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. Both sites are actively managed for silviculture and are within five miles of a viable DFS population located in Maryland.

During this reporting period, the contractor conducted an on-the-ground habitat suitability analysis at both sites after gaining permission from 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. A Portion of each property has been harvested over the last 10 years, much of which will likely remain unsuitable for DFS for at least another 10 years. However, the diversity of land management practices on the two tracts presents unique opportunities for stands that are currently suitable, along with adjacent parcels that can become more suitable over time or with selective management. 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.

VDGIF staff is currently working on a draft Safe Harbor Agreement application to be submitted to the US Fish and Wildlife Service some time in the next reporting period.

Piping Plover, Wilson’s Plover and American Oystercatcher Breeding Summary

The 2008 end-of-season statewide **Piping Plover** breeding pair estimate was 208, which represents a 4.5% increase over the 2007 end-of-season total of 199, and is the highest pair estimate reported in Virginia since the species was listed in 1986. All Piping Plover breeding activity was confined to the barrier islands located on the seaward margin of Virginia’s Eastern Shore. Staff from TNC, USFWS and VDGIF monitored 97% (n = 202 pairs) of the population for breeding productivity. 2008 marks the third consecutive year that productivity studies were conducted on all but one (i.e., Parramore Island) of the barrier islands where Piping Plovers occurred. Prior to 2005, Virginia’s productivity studies were focused on the northern islands (Assateague Island – Cedar Island), where the core of Virginia’s breeding population continues to reside. The inclusion of the southern barrier islands over the past three years contributed considerably to the statewide productivity estimate and has allowed us to begin quantifying differences in breeding success between the northern and southern portion of the island chain. This information will help us better understand why over half of Virginia’s breeding population continues to occupy the northern islands. Virginia’s 2008 statewide Piping Plover productivity estimate was 0.87 fledged chicks per pair. This represents a continuation of a statewide decline in fledging success for the fourth consecutive year and marks the first time productivity fell below 1 chick per pair since 1997. Productivity data were still being compiled and analyzed at the time of this writing; thus we were unable to provide any sound explanations for this year’s decline in breeding success.

The 2008 end-of-season **Wilson’s Plover** breeding pair total was 31, which represents the highest number reported since 2003. All Wilson’s Plover breeding activity was confined to the northern barrier islands (Assateague Island – Cedar Island). 2008 marks the fifth consecutive year VDGIF staff conducted Wilson’s plover productivity studies on Metompkin and Cedar Islands. This year, 19 pairs were monitored, which represents 61% of the statewide population. A combined estimate of 0.95 chicks per pair were produced at these sites, which represents a decrease over last year’s estimate of 1.63 chicks per pair. Despite the decrease, this year’s Wilson’s Plover productivity estimate exceeded statewide estimates for Piping Plovers and American Oystercatchers for the fourth year in a row.

In 2008, the second statewide **American Oystercatcher** breeding survey was conducted on Virginia’s coastal plain. A total of 645 American Oystercatcher pairs were recorded within three of the four geographic areas surveyed during this effort. This partial estimate, represents a 10% increase over the 2003 statewide estimate of 588 pairs. Results are still pending for the western shore of the Chesapeake Bay and further analysis will be completed once these results are finalized. The reproductive success of 286 oystercatcher pairs at eight barrier island sites were monitored in 2008 by staff from TNC, USFWS and VDGIF. Although oystercatcher productivity at five of the eight barrier island sites increased in 2008 compared to 2007, productivity on the islands (0.47 fledged young per pair) was only slightly higher in 2008 compared to the previous year’s estimate

of 0.42 fledged young per pair. In addition, TNC and VDGIF staff monitored the reproductive success of 71 oystercatcher pairs breeding within the marshes of the seaside lagoon system in 2008, which yielded a productivity estimate of 0.37 fledged young per pair. Previous reports have noted the potential advantages for birds breeding within this system, such as fewer mammalian predators and an abundant and nearby food supply. Data collected from the seaside marshes from 2006-2008 suggest that tidal flooding is the most significant limiting factor for birds breeding in this system. Productivity in 2006 was relatively high at these marsh sites largely because flooding events, in general, were less frequent and less severe. In 2007, productivity declined due to several flooding events in late May and late June, which resulted in only 16 fledged young from 67 pairs. In 2008, there were also flooding events in the early spring, which resulted in significant nest loss in the marshes as well as on the islands. However, the timing of oystercatcher renesting attempts, particularly at the Wachapreague site, yielded a greater number of fledged young than the previous year. These results demonstrate how the precise timing of spring flooding events in relation to oystercatcher nesting phenology plays an important role in overall productivity within the seaside lagoon system. Continued long-term monitoring of these sites will enable us to further evaluate the ecology of birds breeding within this system and examine how this population responds to sea level rise over time.

Colonial Waterbirds

Virginia's barrier island/seaside lagoon system supports the greatest diversity and abundance of colonial nesting waterbirds in the Commonwealth's coastal plain. Although a long-term database of numbers of adult colonial nesting waterbirds exists for the barrier islands, limited effort has been made to obtain statistically sound waterbird population estimates. In the spring of 2005, VDGIF and TNC combined resources and staff to develop methods for conducting waterbird nest counts and obtaining productivity estimates on the barrier islands. The 2006 breeding season marked the beginning of this study and the focal species of this effort included Common Terns (*Sterna hirundo*), Gull-billed Terns (*S. nilotica*), Least Terns (*S. antillarum*), and Black Skimmers (*Rynchops niger*) breeding on the eleven barrier islands (including one inlet shoal) between Assawoman and Fisherman Islands. In addition, we have attempted to gather similar data on seaside marsh colonies located within American Oystercatcher monitoring sites to allow us to compare breeding activity and success between the two habitat types. Breeding pair estimates and productivity data were still being compiled for the monitored colonies at the time of this writing; thus we were only able to provide a brief preliminary summary of the 2008 data.

Following the same methodology deployed in 2006 and 2007, we conducted counts of colonial nesting seabirds along a major portion of the barrier island Chain (i.e., Metompkin – Smith Islands) and in the seaside marshes east of Wachapreague, Quinby and Oyster. In 2008, the number of nesting pairs on the barrier islands decreased for all species except Least Terns (Table 1). Gull-billed Terns, Common Terns, Royal Terns, Sandwich Terns and Black Skimmers declined by 98%, 55%, 43%, 19% and 17%, respectively. Conversely, the number of Gull-billed Terns, Common Terns and Black Skimmers increased in the seaside marshes this year (Table 8). These increases made up for the loss of skimmers and Gull-billed Terns on the barrier islands, but did not offset the reduction in the islands' Common Tern breeding population. This year, a coastwide colonial waterbird breeding survey was conducted and results from this effort should reveal whether some of these species shifted to other breeding locations in the state. Productivity data from this study are currently being compiled and analyzed and detailed results and discussion will be forthcoming in next year's report along with results from the coastwide colonial waterbird survey.

Table 1. Total number of breeding pairs of Common Terns (COTE), Gull-billed Terns (GBTE), Least Terns (LETE), and Black Skimmers (BLSK), by site, on Virginia's barrier islands, 2008. Numbers in parentheses represent 2007 estimates. A portion of the colony size estimates for Royal Terns (ROYT) and Sandwich Terns (SATE) were provided courtesy of the Virginia Department of Conservation and Recreation Natural Heritage Program.

SITE	COTE	GBTE	LETE	BLSK	ROYT	SATE
Metompkin Island	16 (43)	0 (2)	174 (181)	374 (49)		
Cedar Island	51 (223)	1 (0)	84 (74)	15 (223)		
Dawson Shoals	0 (79)	0 (2)		0 (285)		
Cobb Island	0 (1)		41 (29)	0 (9)		
Little Cobb Island	115 (12)			449 (9)	6 (0)	
Wreck Island ¹	56 (182)	0 (60)	1	79 (535)	2253 (3949)	100(123)
Ship Shoal	1 (0)		22 (0)	1 (0)		
Myrtle Island	4 (1)		13 (9)			
Smith Island	2 (0)		9 (10)			
Total	245 (543)	1 (64)	344 (304)	918 (1110)	2259 (3949)	100 (123)

¹Lincoln-Peterson Index applied to at least one colony at site.

Table 2. Total number of breeding pairs of Common Terns (COTE), Gull-billed Terns (GBTE), and Black Skimmers (BLSK), by site, in portions of Virginia's seaside lagoon system, 2007. Numbers in parentheses represent 2007 estimates.

Site	COTE	GBTE	BLSK
Wachapreague	17 (44)	9 (19)	
Quinby	50 (60)	107 (21)	23 (5)
Oyster	71 (3)	141 (21)	89 (0)
TOTALS	138 (107)	257 (61)	112 (5)

Also in 2008, the third coastwide colonial waterbird breeding survey was conducted in Virginia ((funded in part by FY 2007 VA CZM/Seaside Heritage Program funds). The first two were completed in 1993 and 2003. Following the 2003 survey, participating biologists decided to increase the frequency of these surveys to every five years in order to better assess waterbird breeding population trends in the Commonwealth. VDGIF also provided partial funding this year's effort and Department staff provided considerable assistance with data collection efforts.

Target species included all colonial waterbirds nesting in the state except for Great Blue Herons, which are increasing exponentially in Virginia. An extensive aerial survey was conducted using a fixed-wing aircraft during the early stages of the breeding season. Once detected, the colony was circled long enough to allow observers to map the colony location and estimate its size. All colonies were given a unique numerical code and mapped on 7.5 min topographic quadrangles. Mainland areas that supported early nesting waders were flown from early April to mid-May. Coastal marshes and islands supporting gulls, terns, and allies were flown between mid-May and mid-June. Ground counts of urban areas, including rooftops, were conducted during April, May, and June. Ground counts of barrier island, Bay island, and marshland colonies were conducted during June and July.

The primary objective of this project is to generate population estimates for all colonial waterbird species (except Great Blue Herons) currently nesting on the Coastal Plain of Virginia. A secondary objective is to produce map coverages for all colonies of waterbirds within the Coastal Plain. Taken together, these two products will allow for an assessment of status and distribution for all colonial nesters on Virginia's coastal plain. Comparison of the 2008 survey to the 1993 and 2003 surveys will allow for an evaluation of trends. All data from this year's survey are still being compiled and analyzed and will be presented in their entirety in next year's report.

Diamondback Terrapins

Casual observations suggest that Diamondback Terrapins (*Malaclemys terrapin*) nesting on the barrier islands are vulnerable to various sources of predation; however, no attempt has been made to measure predator impacts on terrapin reproductive success. Terrapin clutch sizes typically range from seven to 12 eggs with each egg containing a relatively large yolk sac. Thus, terrapin nests may offer mammalian predators a greater source

of protein than bird nests with the added benefit of not having to contend with aggressive nest-guarding adults. By monitoring reproductive success of terrapins and ground nesting birds concurrently, we will be able to gain a better understanding of predator impacts across a variety of taxa and help determine what influences, if any, terrapins have on overall predation rates of waterbirds breeding on the barrier islands.

2006 marked the first year of a three year study conducted by VDGIF to monitor terrapin breeding activity on the barrier islands. We decided to limit our work to a single site in order to focus our efforts on refining nest finding and monitoring methodologies in various beach habitats (i.e., berm, dunes and washover sandflats). We selected the southern portion of Cedar Island (hereafter referred to as South Cedar Island) because it was easily accessible by boat, known to support nesting terrapins as well as mammalian predators, and did not serve as a research site for other studies. This year, VDGIF hired one seasonal terrapin technician and assigned the colonial waterbird technician to spend a significant portion of his time on this project. In 2006, 94% (n = 60) of the 64 nests monitored were depredated. Of these, 24 were destroyed by fox and the rest by ghost crabs, crows and gulls. In the winter and spring of 2007 and 2008, mammalian predator control efforts were initiated on south Cedar Island. Below are final nest fates from 2007 and preliminary results from the current field season, which was still on-going at the time of this writing.

2007 Results

Crawl surveys indicated that June was the peak laying month and highest daily crawl total was 93 recorded on June 12. Crawl activity dropped dramatically after July 17 and ceased by July 31. DGIF located a total of 102 terrapin nests this year, 95 of which were found intact and seven were found depredated. Fifty percent (n = 51) of the nests were located on the north sandflats that extended from the ocean berm to the backside marsh, 36% (n = 37) on the backside dunes and berm, and 14% (n = 14) on the ocean-facing berm and dunes. Twenty-five percent of the nests found in 2007 hatched at least one egg with over half (n = 14 nests) exhibiting 100% hatch success. Only 38% (n = 39) of the nests were lost to depredation, of which 60% (n = 23) were destroyed by ghost crabs, 38% (n = 15) by unidentified predators, 2% (n = 1) by fox and 0% by raccoons. Thirty-three percent (n = 33) of the nests found in 2007 were lost to overwash and the fate of the remaining 5% (n = 5) were unknown.

2008 Preliminary Results

The field season was still under way at the time of this writing, thus the 2008 results presented here are very preliminary. Crawl surveys indicated that June was the peak laying month and highest daily crawl total was 38 recorded on June 16. Crawl activity dropped dramatically after July 20 and ceased by August 1. We located a total of 60 terrapin nests this year, all of which were found in tact. This represents a 41% decrease from the number of nests (n = 102) found in 2007. Eight-eight percent (n = 53) of this year's nests were located on the ocean side berm and dunes (transects #'s 3, 6 and 7), 10% (n = 6) were found on the backside berm and dunes (Transects #'s 1 and 2), and 2% (n = 1) on the ocean-facing shellflats (transect # 5). Zero nests were discovered on backside sandflats near the old breach (transect #4; Table 1).

Thus far, 75% (n = 45) of the nests found have known fates and the remaining 25% (n = 15) are still being monitored. Of the nests for which final fate is known, 47% (n = 21) hatched at least one egg, 53% (n = 24) were depredated by ghost crabs and 0% have been lost to overwash. No nests have been disturbed or destroyed by mammalian predators and little to no sign of quadruped predators has been observed on South Cedar Island this year. This strongly suggests that predator control efforts in 2007 and 2008 may have been effective at minimizing the potential threat posed by raccoons and foxes.

Table 1. 2008 preliminary summary of Diamondback Terrapin nesting activity on South Cedar Island, Virginia, May 30 - September 19, 2008.

Transect #	Habitat type	Total # nests	# nests still being monitored (%)	# nests depredated (%)	# nests washed Out (%)	# nests hatched (%)
1	Backside berm/dunes	3	1 (33)	1 (33)	0 (0)	1 (33)
2	Backside berm/dunes	3	0 (0)	2 (67)	0 (0)	1 (33)
3	Ocean berm/dunes	2	2 (100)	n/a	n/a	n/a
4	Backside sand flats	0	n/a	n/a	n/a	n/a
5	Ocean Shellflats	1	1 (100)	n/a	n/a	n/a
6	Ocean Berm/dunes	20	1 (5)	11 (55)	0 (0)	8 (40)
7	Ocean Berm/dunes	31	10 (32)	10 (32)	0 (0)	11 (36)
TOTALS		60	15 (25)	24 (40)	0 (0)	21 (35)

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) and funded in part by the VA CZM Program. 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. Department staff also assisted with this year's annual dolphin survey that was conducted in July.

During this reporting period, VDGIF continued to maintain the state's loggerhead sea turtle nesting database. From 1970 – 2008, a total of 112 loggerhead nests have been documented in Virginia, the majority of which have occurred on the southern mainland beaches near the NC/VA border. In 2008, eight confirmed nests were reported; two on the barrier islands (1 on Assateague Island, 1 on Wallops Island) and six on the southern mainland beaches (1 at Sandbridge, 5 at Back Bay NWR). The outcomes of these nests are still pending.

VDGIF staff also continued to respond to sea turtle strandings throughout the Eastern Shore and remote barrier islands and conducted necropsies on fresh to moderately decomposed carcasses. In 2007, 208 strandings were documented in Virginia and they were comprised of 168 loggerheads, 17 Kemp's ridleys, 15 green turtles, 2 leatherbacks and 6 unidentified turtles. So far in 2008, 193 sea turtle strandings have been reported in the Commonwealth (159 loggerheads, 26 Kemp's ridleys, 4 green turtles, 1 leatherback and 3 unidentified) and because there is typically a second peak in strandings in the fall (the first predictably occurring in May/June), it is likely this year's total will exceed last year's by a small margin. VDGIF responded to eight Loggerhead and three Kemp's ridley (*Lepidochelys kempii*) strandings during this reporting period. In addition, Department staff assisted with the recovery of a live stranded loggerhead that washed ashore on a bayside beach on Virginia's Eastern Shore. This animal was successfully rehabilitated by VAQS and released several months later.

VDGIF staff continued to work on establishing a Section 6 Cooperative Agreement with National Marine Fisheries Service to obtain federal funding for the conservation and management of threatened and endangered sea turtles and marine mammals in Virginia. The application is nearly complete and will undergo review by the state's attorney general sometime during the next reporting period.

B. FEDERAL CONSISTENCY

During the second half of FY 2007, the Office of Environmental Impact Review/Federal Consistency (OEIR) reviewed 129 development projects and management plans for consistency with the Virginia Coastal Zone Management Program. This represents 74.6% of the total amount of projects (173) reviewed during this period. Major state projects accounted for 39 projects, 64 were federal actions, and 26 were federally funded projects (predominantly local government projects). The 64 federal projects included 49 federal agencies activities (including those reviewed as residual category of Subpart C such as HUD Mortgage insurances) and 15 federal licenses and approvals.

The OEIR continues to maintain a webpage for Federal Consistency for the Commonwealth. This can be accessed through DEQ's main website 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 public notices of Federal consistency reviews. The webpage is updated weekly.

Table 1 depicting federal projects in Tidewater, Virginia reviewed from April 1, 2008 through September 30, 2008.

TYPE OF FEDERAL PROJECTS REVIEWED*	NUMBER OF PROJECTS COMPLETED	REVIEW PERIOD
Federal Agency Activities	49	30-60 Days
*Federal Actions (approvals, licenses & permits)	15	90-180 days
Federally Funded Projects	26	30 Days
Outer Continental Shelf	0	45-60 Days
TOTAL	90	30- 180 DAYS

*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).

SIGNIFICANT FEDERAL PROJECTS REVIEWED FOR CONSISTENCY WITH THE VA CZM Program 4/1/2008 to 9/30/08.

I. Federal Agency Projects

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

Implementation of the 2005 BRAC Recommendation 133, Washington Headquarters Services, Fort Belvoir – DEQ completed the coordinated review of a final Environmental Assessment and federal consistency determination submitted by the Army for the relocation of the Washington Headquarters Services offices to one of three alternative sites located in Fairfax County and the City of Alexandria. The proposed relocation of over 6,400 personnel would require up to 1.8 million square feet of existing or newly-constructed space, and 1.3 million square feet of associated parking facilities. The three alternative sites evaluated include: **GSA Site-**

owned by the General Services Administration (GSA) in Springfield; **Victory Center Site**-a privately owned office complex in Alexandria; and **Mark Center Site**-a privately owned office complex in Alexandria. According to the DEQ Air Quality Division, activity at any one of these proposed sites may affect the area's ability to comply with the National Ambient Air Quality Standards. The Division indicated that the cumulative emissions impact of ozone precursors attributable to the BRAC projects will exceed the general conformity thresholds for the Northern Virginia region. Accordingly, air quality mitigation measures must be developed and applied to all of the proposed alternative sites. DEQ objected to the Army's consistency determination because the document submitted for State review does not provide sufficient information to support the Army's consistency determination and lacks air quality mitigation measures for the two sites located in Alexandria. Based on the information provided, the proposal is inconsistent with the air pollution control enforceable policy of the Virginia Coastal Resources Management Program. The Virginia Secretary of Transportation also informed the Army that the proposal could have a profound impact on traffic congestion and operational problems. Subsequent to the DEQ's objection, the Army and DEQ's Air Quality Division held a conference call on September 5, 2008 to discuss the requirements listed in the objection and the necessary commitments from the Army needed to lift the objection. In a September 8, 2008 letter the Army agreed to meet the requirements outlined in the Commonwealth's response. Accordingly, DEQ lifted the Commonwealth's September 2, 2008 objection to the Army's consistency determination for the proposed relocation of the Washington Headquarters Services.

Combat Service Support Facilities at Fort Eustis – In accordance with Base Realignment and Closure (BRAC) recommendations, the Army proposes to construct facilities to support stationing of a combat service support sustainment battalion-sized unit at Fort Eustis in the City of Newport News. During the course of DEQ's coordinated review of the consistency determination submitted for the proposal, the DCR-Division of Chesapeake Bay Local Assistance determined that the proposed footprint of the Company Operations Facility encroached upon an area analogous to a Chesapeake Bay Resource Protection Area. In a conference call with the Army, its consultant, Corps of Engineers, DCR and DEQ, it was agreed that the Army and its contractor would work with DCR to identify modifications to the footprint of the proposed facility that would address the agency's concerns. As allowed by the Coastal Zone Management Act, DEQ and the Army agreed to extend the consistency review for an additional 60-days. Based on the modifications proposed by the Army and the comments submitted by agencies administering the enforceable policies of the VCZMP, DEQ conditionally concurred that this proposal is consistent to the maximum extent practicable with the VCZMP provided the recommendations of the following enforceable polices are met:

- Department of Environmental Quality recommendations with respect to anticipated water quality and wetland impacts of the proposal as they pertain to the Virginia Water Protection Permit Program and the Army's existing Virginia Pollutant Discharge Elimination System permit for stormwater discharges;
- Department of Conservation and Recreation-Division of Chesapeake Bay Local Assistance recommendation that the Army submit a Water Quality Impact Assessment for DCR-DCBLA review and approval for the encroachment of the Company Operations Facility within an area analogous to a Resource Protection Area; and
- the acquisition of all other applicable permits and approvals as described below.

In accordance with 15 CFR Part 930, Subpart A, §930.4, this conditional concurrence is based on the Army obtaining all necessary permits and authorizations prior to any ground disturbance. Also the Army must adhere to all the conditions of applicable permits and approvals. If the requirements of paragraphs (a)(1) through (2) of 15 CFR Part 930, Subpart A, §930.4 are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, Subpart C, §930.43.

Relocation of Waterfront Operations- DEQ completed the Commonwealth's review of a Federal Consistency Determination for the relocation of Naval Surface Warfare Center from Fort Monroe to Naval Station Norfolk.

The new location must meet certain requirements for physical and operational security and have sufficient water depth for launching, berthing and recovering watercraft. The move will include repositioning numerous combatant craft and support equipment and major renovation of existing facilities. Project activities include: renovating and reconfiguring existing building space; providing a boat launch ramp, travel lift pier and floating docks; constructing a breakwater to shelter the boat launch ramp; and the dredging of Willoughby Bay to a depth of 15 feet. Based on reviewers' comments, DEQ conditionally concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The conditional concurrence was based on the Navy's need to secure all permits and approvals and adhere to all the conditions of the Virginia Water Protection permit, the Virginia Pollutant Discharge Elimination System permit, the Subaqueous Lands permit, Virginia Erosion and Sediment Control and Stormwater Management laws and regulations, and carry out the subsequent development consistently with the Coastal Lands Management enforceable policy. The Commonwealth's response also included recommendations for registering any proposed storage tanks and mitigation measures for hazardous waste, including petroleum contaminated soils.

Selected Capital Improvement Projects at Langley -DEQ completed a coordinated review of an environmental assessment (EA) and federal consistency determination submitted by Langley Air Force Base (AFB) in Hampton. Langley AFB proposes to construct, renovate or demolish several facilities located on the base, the Landings at Langley Housing Area and the Big Bethel Reservoir during the next several years. More than 371,000 square feet of new construction is planned including a new fuels system maintenance hangar, a replacement for Hanger 753, an airman family readiness center, a replacement security forces operations center, two additional dorms, a fuels automated system complex and the Langley Chapel. According to the EA, the proposed activity would have no effect on the following enforceable policies: fisheries management, subaqueous lands management, dunes management and shoreline sanitation. However, based on a review of the EA, it is possible that the subaqueous lands management policy may be affected. Based on the information provided in the EA and federal consistency determination, and the comments of reviewing agencies, DEQ concurred that the proposed activity is consistent with the Virginia Coastal Zone Management Program, provided that Langley AFB complies with all requirements of applicable permits and other authorizations that may be required.

Great Bridge Battlefield and Waterways History Park - DEQ completed the Commonwealth's review of a federal consistency determination and final Environmental Assessment for the U.S. Army Corps of Engineers (Corps). The Corps proposes to lease or sell land to the City of Chesapeake for the construction of the Great Bridge Battlefield and Waterways History Park. The two parcels are located along the Albemarle and Chesapeake Canal of the Atlantic Intracoastal Waterway adjacent to Battlefield Boulevard and the Great Bridge Lock. The proposed construction includes a one-story Interpretive and Visitor's Center, a 1.5-acre commemorative park and a one-acre landscaped plaza and platform. Associated facilities include walkways, parking lots and access roads. The facilities are intended to educate the public about the first land engagement of the Revolutionary War in Virginia. After construction, the Great Battlefield and Waterways History Foundation, a non-profit, citizen organization, will operate the Park. The changes recommended by reviewers during the Commonwealth's review of the Draft EA were adequately addressed in the Final EA. Based on reviewers' comments, DEQ concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ made several recommendations including mitigation of impacts on Chesapeake Bay Protection Areas.

2008 Eastern Shore of Virginia Broadband Effort -DEQ completed the coordinated review of a federal consistency determination submitted by the National Aeronautics and Space Administration (NASA) for the construction of the Eastern Shore of Virginia Broadband Network in Accomack and Northampton Counties. The fiber optic network would deliver an advanced broadband network to rural communities of the Eastern Shore to foster economic development. The three-phase project would include the installation of approximately 30 miles of fiber optic cable from the Chesapeake Bay Bridge-Tunnel to the intersection of U.S. Route 13 and the Bay Coast Railroad; the installation of over 50 miles of fiber optic cable into Cape Charles and north to the

NASA Wallops Flight Facility at Wallops Island; and cable installation on the Wallops Main Base and Wallops Mainland. The cable would be installed using a “plow” system, which cuts a small slit in the ground and feeds the fiber optic cable and conduit underground to a minimum depth of 36 inches. Based on the information submitted and the comments of reviewing agencies, DEQ concurs that the proposed construction of a fiber optic network on the Eastern Shore of Virginia is consistent with the Virginia Coastal Zone Management Program, **provided** that NASA (i) coordinate with the Department of Game and Inland Fisheries and follow recommendations to protect fisheries and other aquatic resources (ii) obtain all approvals not yet secured that are applicable to the enforceable policies, and (iii) adhere to all the conditions of the Virginia Water Protection permit, the Subaqueous Lands permit, Virginia Erosion and Sediment Control and Stormwater Management laws and regulations, and carry out the subsequent development consistently with the Coastal Lands Management enforceable policy governed under the Chesapeake Bay Preservation Act (*Virginia* Code sections 10.1-2100 *et seq.*) and the regulations that implement the Act.

Special Operations Force Operations Facility – DEQ completed the coordinated review of a Final Environmental Assessment (EA) submitted by the Navy for the construction of a Special Operations Force Facility at Naval Air Station Oceana, Dam Neck Annex in Virginia Beach. Two alternative sites are considered in the EA: **Alternative Site 1**, a mostly forested 132-acre site with 86.9 acres of forested wetlands; and **Alternative Site 2**, a 27.6-acre site with 18 acres currently developed and the northern 9.6 acres consisting of a maritime sand dune-and-swale community. The Navy prefers Alternative Site 1. DEQ previously responded to a federal consistency determination for the proposal. Based on the comments submitted by agencies administering the enforceable policies of the VCZMP, DEQ concurred that the proposal is consistent with the VCZMP provided all applicable permits and approvals are obtained as described. However, the Commonwealth found that the redevelopment of Alternative Site 2 for the facility would result in significantly fewer impacts to natural resources. DEQ, the Department Conservation and Recreation, the City of Virginia Beach and the Hampton Roads Planning District Commission found that the redevelopment of Alternative Site 2 would significantly reduce or eliminate impacts on wetlands, natural heritage resources, state-listed threatened species, habitat fragmentation and associated adverse effects on the ecosystem. Therefore, if practicable, the Commonwealth recommended Alternative Site 2 as the site for the Operations Facility. Based on comments submitted during the review of the EA, DEQ, on behalf of the Commonwealth, again strongly recommended Alternative Site 2 for construction of the facility.

Constructing and Operating Explosive Ordnance Field Training – DEQ completed a coordinated review of a final Environmental Assessment (EA), which included a federal consistency determination (FCD), on a proposal by the Army to add 1,025 acres to the explosives ordnance disposal field training area at Fort A.P. Hill, Caroline County. The expansion would include training sites, observation bunkers, training towers, and a range of new buildings including new barracks. About 278 acres of largely undeveloped, forested land would be cleared for the project. As proposed, the subaqueous lands management, wetlands management, non-point source pollution control, shoreline sanitation, air pollution control and coastal lands management enforceable policies may be affected. Based on the information provided in the EA and FCD, and the comments of reviewing agencies, DEQ concurred that the proposed activity is consistent with the VCZMP, provided that Fort A.P. Hill complies with all requirements of applicable permits and other authorizations that may be required. In addition to the coordination required for the proposed actions to remain consistent with the enforceable policies of the Virginia Coastal Resources Management Program (VCZMP), additional coordination by Fort A.P. Hill with Virginia’s natural resource agencies will be necessary to ensure protection of natural heritage and wildlife resources.

Implementation of Measures to Reduce Ship Strikes to Right Whales – DEQ completed the coordinated review of a Final Environmental Impact Statement (FEIS) submitted by the National Marine Fisheries Service (NMFS) for the implementation of vessel operational measures to reduce ship strikes to North Atlantic right whales. Six alternatives are evaluated in the FEIS with Alternative 6 being the preferred alternative. The measures considered in Alternative 6 include the following: Seasonal Management Areas (SMAs) - predetermined and

established areas within which seasonal speed restrictions apply; Dynamic Management Areas (DMAs) - temporary areas consisting of a circle around a confirmed right whale sighting; and Routing Measures - consisting of a set of routes designed to minimize the co-occurrence of right whales and ship traffic. The DEQ response contained historical information on ship strikes, ship traffic, and whale migration routes in Virginia coastal waters. The response included the recommendation that the NMFS coordinate closely with the U.S. Fish and Wildlife Service and the Virginia Department of Game and Inland Fisheries to ensure that impacts on protected species including whales, sea turtles and marine mammals are adequately avoided and minimized.

New Chesapeake Facilities - DEQ completed the Commonwealth's review of a Draft Environmental Assessment and consistency determination for the National Oceanic and Atmospheric Administration's (NOAA) proposal to relocate its staff to a new facility within the City of Chesapeake. NOAA is seeking vacant land to lease for the construction of a new office and warehouse facility containing approximately 38,000 square feet. The proposed facility would provide office space for 40 staff members, house specialized instruments and equipment, and provide parking for agency vehicles, including boat trailers and other large equipment. The preferred alternative site is located at the Battlefield Corporate Center and the second site is located northeast of the intersection of Knells Ridge Boulevard and Battlefield Boulevard. 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 several recommendations pertaining to wetlands permitting and hazardous waste management.

Grow the Force Project - DEQ completed a coordinated review of an Environmental Assessment and federal consistency determination submitted by the Army for the construction of four support facilities at Fort Eustis in the City of Newport News. The Army proposes to construct facilities to support stationing of a combat service support sustainment battalion-sized unit. During the course of the review, the Department of Conservation and Recreation (DCR)-Division of Chesapeake Bay Local Assistance determined that the proposed footprint of the Company Operations Facility encroached upon an area analogous to a Resource Protection Area (RPA). Land disturbance in an RPA is limited to uses that are water dependent or constitute redevelopment. Therefore, as originally proposed, the project is inconsistent with the coastal lands management enforceable policy of the Virginia Coastal Zone Management Program. As allowed in the federal consistency regulations, DEQ and the Army agreed to extend the review period in order to address DCR's concerns. Based on the design modifications, DEQ conditionally concurred that this proposal is now consistent, to the maximum extent practicable, with the VCZMP provided the Army complies with the conditions listed in DEQ's letter. One of the conditions of DEQ's concurrence requires the Army to submit a Water Quality Impact Assessment to DCR-DCBLA for its review and approval.

Fireworks Safety Zones - DEQ completed the Commonwealth's review of a federal Negative Consistency Determination for the U.S. Coast Guard (USCG) to revise the list of permanent safety zones established for fireworks displays within the Fifth Coast Guard District. Safety zones are established to protect life and property of the maritime public from the hazards posed by fireworks displays. In Virginia, 7 new safety zone locations will be added to the list of permanent safety zones. One permanent safety zone in Virginia Beach (Zone A) will be modified. A safety zone is used to control vessel movement within a specified distance surrounding launch platforms to ensure the safety of persons and property. Prior to the enforcement period, maritime advisories will be issued. Vessels may enter, remain in or transit through the safety zones during these times if authorized by USCG personnel. Based on reviewers' comments, DEQ concurred that the proposal would have no effect on the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response included comments from the City of Virginia Beach on additions and revisions to the safety zones within its jurisdiction.

Regional Permits Norfolk District revised and reissued six existing Regional Permits (RP-15, RP-17, RP-18, RP-19, RP-22, RP-40) and two Letters of Permission (LOP-01 and LOP 02). The Corps' public notice was submitted to DEQ as its determination of Coastal Zone Management Act federal consistency. The Norfolk

District also requested water quality certification under Section 401 of the Clean Water Act for those RPs and LOPs that will result in a discharge within the Commonwealth. Based on the information submitted and the comments of reviewing agencies, DEQ concurred that the proposed activity is consistent with the Virginia Coastal Zone Management Program, provided that the Corps, and RP and LOP holders comply with: the section 401 Clean Water Act certification provided by DEQ, including the requirement that applicants obtain Virginia Water Protection General or individual Permits for activities covered under LOP-01; permitting requirements for encroachments on subaqueous lands and tidal wetlands administered by the Marine Resources Commission; and the land use and development performance criteria in the *Chesapeake Bay Designation and Management Regulations* administered by the Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance.

Buildings Demolition at Langley Research Center – DEQ completed a coordinated review of an environmental assessment, including a consistency determination, by the National Aeronautics and Space Administration (NASA) to demolish 13 buildings at Langley Research Center in Hampton. The buildings are abandoned or are in the process of being closed. Prior to demolition, asbestos-containing materials and lead-based paints would be removed according to the applicable regulations. The buildings would be completely demolished, including slabs and foundations. Utilities would be capped below grade, and the area would be graded to match the existing landscape. No adverse impacts to the policies of the Virginia Coastal Zone Management Program (VCZMP) from the proposed action were identified. Based on the information provided in the environmental assessment and federal consistency determination, and the comments of reviewing agencies, DEQ concurred that the proposed activity is consistent with the VCZMP, provided that NASA complies with all requirements of applicable permits and other authorizations that may be required.

Integrated Support Command Portsmouth facility - DEQ completed the coordinated review of a federal consistency determination submitted by the Coast Guard to rehabilitate waterfront bulkheads at the Integrated Support Command Portsmouth facility. The Facility is located southwest of the confluence of Craney Island Creek and the Elizabeth River. The work includes cleaning and recoating 388 linear feet of existing sheet pile bulkhead, installing timber pile-supported timber fender panel, removing and replacing existing waterfront utilities and removing and replacing the existing gas and diesel fuel piping, pumps, and dispensers. Based on reviewers' comments, DEQ concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ made several recommendations including mitigation of impacts on Chesapeake Bay Protection Areas and the proper use of erosion and sediment control measures.

Navy Marina Improvements - DEQ completed the Commonwealth's review of a federal Consistency Determination for the U.S. Navy's proposal to modernize the existing Sailing Center and Marina (LAG marina) located at Naval Station Norfolk. The LAG Marina is located within an 830-foot by 620-foot inland basin southwest of the terminus of Willoughby Spit on Willoughby Bay. Upgrades to the marina include the removal of three existing timber, open-pile piers, a sewage pump-out pier and a sewage vacuum shack. In their place, three new 194-foot long floating piers will be constructed, along with a 248-foot long floating pier (J) and a 205-foot long floating pier (I). In addition to the piers, a new equipment storage and boat maintenance building will be constructed. Based on reviewers' comments, DEQ concurred that the proposal is consistent to the maximum extent practicable with the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response included guidance on the mitigation of hazardous waste, including asbestos and lead-based paint, and conditions for redevelopment of an area analogous to a Resource Protection Area as defined in Norfolk's Chesapeake Bay Preservation Area program.

Construction of Maneuver Corridors – DEQ completed the Commonwealth's coordinated review of an Environmental Assessment and federal consistency determination submitted by the Army. The Army proposes to construct and operate three maneuver corridor (MC) lanes at Fort A.P. Hill designated as Delta (D), Echo (E) and Foxtrot (F), for tactical vehicle maneuver training. The total area proposed for the MC-DEF would be 563 acres comprised mainly of upland forests. At each site, approximately 15 acres would be cleared and grubbed

to accommodate an assembly area, objective area and after action review area. The site contains environmentally sensitive areas analogous to Chesapeake Bay Preservation Areas. 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 several recommendations pertaining to coastal lands management, threatened and endangered species and archaeological resources.

George Washington Memorial Parkway North Section Rehabilitation – DEQ completed the Commonwealth's review of a federal Environmental Assessment and Consistency Determination. The National Park Service, in cooperation with the Federal Highway Administration, proposes to rehabilitate the northern section of the George Washington Memorial Parkway (GWMP). The improvements are located between Spout Run and the Capital Beltway (Interstate 495). The Preferred Alternative provides for a comprehensive rehabilitation program of the northern section of the Parkway. DEQ concurred that the proposed rehabilitation is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response included several recommendations to protect natural resources (including protected species and Chesapeake Bay Preservation Areas) and recreational resources such as scenic rivers and byways.

Demolition of NASA Wind Tunnel Buildings – DEQ completed the Commonwealth's review of a federal Environmental Assessment and Consistency Determination for the proposal by the National Aeronautics and Space Administration (NASA) to demolish various wind tunnel buildings and infrastructure at Langley Research Center (LaRC) in Hampton. NASA Headquarters approved the demolitions based on the confirmation of no current or future government need to use the tunnels and lack of interest from nongovernmental entities to operate or adapt the structures for use. However, the Department of Historic Resource (DHR) indicated that the structures are considered National Historic Landmarks for their connection with the American Space Program. Also, the Hampton Roads Planning District Commission stated that because of the historic nature of these structures, the plans for demolition should be postponed until a significant need for the removal of these buildings is identified. While DEQ concurred that the proposed demolition is consistent with the enforceable policies of the of the Virginia Coastal Zone Management Program, DEQ's report recommended that NASA coordinate project activities with agencies interested in the historic nature of the buildings.

Cultural Resources Management Plan – DEQ completed a coordinated review of a federal Environmental Assessment and Consistency Determination for the implementation of an Integrated Cultural Resources Management Plan (ICRMP) at Fort A.P. Hill. The purpose of the ICRMP is to provide Fort A.P. Hill staff with information, guidance and standard operating procedures and to facilitate integration of cultural resource management requirements and responsibilities into its broader military mission. Implementation of the plan would mean that training mission operations and facilities construction on the post would be conducted in a manner that protect and preserve cultural resources. 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 several recommendations to coordinate individual projects with state agencies to protect resources such as coastal lands, threatened and endangered species and archaeological resources.

Expansion of the Army National Guard Readiness Center – DEQ completed the coordinated review of a Draft Environmental Assessment and Federal Consistency Determination for the expansion of the Army National Guard Readiness Center in Arlington County. The proposed expansion is intended to accommodate the 1,200 personnel who will be vacating government-leased space in accordance with the Base Realignment and Closure (BRAC) recommendations. The expansion would include: construction of an approximately 250,000-square-foot, multi-story ARNGRC building addition; construction of a multi-level employee parking garage east of the existing East Parking Garage; and construction of security infrastructure, outside lighting, and below-ground, stormwater retention tanks. Based on comments from reviewers, DEQ concurred that the project is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ's response contained

several recommendations to protect natural resources such as designing stormwater controls to replicate and maintain the hydrographic condition of the site prior to the change in landscape, including: the utilization of bioretention areas; and the minimization of curb and gutter in favor of grassed swales.

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).

Harrison Creek Apartments - DEQ completed the coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development for the construction of a multifamily housing complex in Petersburg. HUD is processing an application for mortgage insurance to finance the private construction of the apartment complex which includes 14 buildings, community center, putting green, access roads, parking areas and stormwater management ponds. The 36.2-acre parcel is undeveloped, with 20 percent of the site wooded and the rest is covered with light vegetative growth, mulch piles and an abandoned pump house that was used to irrigate the golf course that was previously located at the proposed project site. DEQ's response included guidance on minimizing impacts to wetlands, limiting emissions of ozone precursors, proper use of erosion and sediment control and requirements for petroleum storage tank removal or registration.

Somerset Crossing Apartments - DEQ completed the coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development for the private construction of the Somerset Crossing Apartments, a HUD Section 221(d)(4) Multifamily Rental Housing for Moderate-Income Families project in Prince William County. The mortgage insurance application was submitted by Red Mortgage Capital, Inc. which will finance construction of the apartment complex. The apartments would be constructed on a 10.0-acre parcel located southeast of the intersection of Somerset Crossing Drive and Links Pond Circle. The Somerset Crossing Apartments would consist of a complex of 13 townhouse-style buildings that would house 174 apartment units. DEQ's response included the requirement that the project proponent conduct a wetland delineation of the site, approved by the Corps of Engineers, for submission to the DEQ Northern Regional Office for consistency with the wetlands management enforceable policy of the Virginia Coastal Zone Management Program and that erosion and sediment controls and stormwater quality requirements are consistent with the coastal lands management enforceable policy of the VCZMP as locally administered under the authority of the Chesapeake Bay Preservation Act.

Orchard Bridge Apartments - DEQ completed a coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development (HUD). HUD is processing an application for mortgage insurance to finance the construction of the 368-unit Orchard Bridge Apartment complex located in Prince William County. The proposed development will be located on a 24.66-acre site situated 200 feet from Bull Run stream. Based on the review of the consistency determination and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program, DEQ concurred that the proposal is consistent with the VCZMP. However, the applicant is required to conduct a wetland delineation of the proposed project area to determine if jurisdictional surface waters are present and to coordinate with Prince William County to ensure that the project complies with the local Chesapeake Bay Preservation Area program. Also, according to the Department of Forestry, approximately 20 acres of forest land would be cleared and converted. One potential mitigation step would be to replant pine and/or hardwood seedlings in areas half of one acre or larger in size. In addition, the Department of Historic Resources recommends that a Phase 1 archaeological survey be conducted on all areas that may be affected by construction-related activities, including utilities, because of the property's location within a Civil War battlefield and the location of a known archaeological site within the project area.

Multifamily Housing on Broad Street – DEQ completed the coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development for the construction of a

multifamily housing complex at 1800 East Broad Street Road in the City of Richmond. HUD is processing an application for mortgage insurance to finance the private construction of the apartment complex under the HUD Section 221(d)(4), Multifamily Rental Housing for Moderate-Income Families program. The proposed development is the construction of a 190-unit apartment complex on approximately 1.5 acres of currently developed land. DEQ's response included guidance on limiting emissions of ozone precursors, proper use of erosion and sediment control and requirements for petroleum storage tank removal or registration.

Residential Development in the City of Richmond – DEQ completed the coordinated review of a federal consistency certification submitted by the U.S. Department of Housing and Urban Development (HUD), which is providing partial funding for a proposed Habitat for Humanity development of fifteen one- and two-story single family residences on approximately 1.28 acres of wooded land in the block bounded by T and 33rd Street in Richmond. Based on the information provided in HUD's consistency certification and the comments submitted by agencies administering the enforceable policies of the Virginia Coastal Zone Management Program, DEQ concurred that the proposal is consistent with the VCZMP provided all applicable permits and approvals are obtained, including those related to erosion and sediment control, stormwater management, and the City's Chesapeake Bay Preservation Area program. Also, HUD must consult with the Department of Historic Resources to ensure compliance with Section 106 of the National Historic Preservation Act.

Miller Manufacturing Building – DEQ completed the coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development for the redevelopment of the Miller Manufacturing Building located at 500 Stockton Street in the City of Richmond. Mortgage insurance would be provided to Capmark Finance Inc. through the Section 221(d)(4) program administered by HUD for the redevelopment of the structure into multi-family rental housing for moderate-income families. The existing 73,871 square foot building is located on a 1.966-acre parcel. The property would be redeveloped into a 99-unit multi-family apartment complex with a swimming pool and dog park. The Department of Conservation and Recreation, Division of Chesapeake Bay Local Assistance determined that the subject property is located outside of any designated Chesapeake Bay Preservation Areas (CBPA), as the subject property lies some 1,000 feet from the James River or any mapped watercourse. Since the property lies outside of the CBPA, there are no CBPA requirements and the project would be consistent with the coastal lands management enforceable policy of the Virginia Coastal Zone Management Program. However, because the project is a private development, in accordance with DCR's comments, the DEQ response directed the developer to obtain confirmation from the City of Richmond that the subject property is outside of the CBPA.

Dale Ave Development – DEQ completed the coordinated review of a federal consistency certification submitted by the U.S. Department of Housing and Urban Development (HUD), which is providing partial funding for a proposed Habitat for Humanity development in Richmond. Habitat for Humanity proposes to construct about forty one- and two-story single family residences on approximately 9.23 acres of wooded land in the 2400 block of Dale Avenue and 4500 Glasgow Street in Richmond. Approximately 1.53 acres of jurisdictional wetlands, confirmed by the U.S. Army Corps of Engineers (Corps), have been delineated on the site. Based on our review of HUD's consistency determination and the comments submitted by agencies administering the enforceable policies of the VCZMP, DEQ concurred that the proposal is consistent with the VCZMP provided all applicable permits and approvals are obtained, including those related to wetlands, sediment and erosion control, and stormwater management.

The River House – DEQ completed a coordinated review of a federal consistency determination submitted by the U.S. Department of Housing and Urban Development (HUD) for the construction of "The River House" development in the City of Norfolk. HUD is processing an application for mortgage insurance to finance the private construction of the apartment complex under the HUD Section 221(d)(4), Multifamily Rental Housing for Moderate-Income Families program. "The River House" development is a proposed 194-unit up-scale market-rate general occupancy apartment complex situated on a 7.5-acre site with frontage on the Lafayette River and Haven Creek. The Commonwealth's response included the requirement that the project proponent

conduct a wetland delineation of the site approved by the U.S. Army Corps of Engineers for submission to the DEQ Tidewater Regional Office. Also, the project proponent should coordinate the project with the U.S. Fish and Wildlife Service regarding the protection of colonial waterbird nesting colonies under the authority of the Migratory Bird Treaty Act of 1918, as amended. Based on comments submitted by reviewers, DEQ concurred that the proposal is consistent with the enforceable policies of the Virginia Coastal Zone Management Program.

Poultry House Construction – DEQ completed a coordinated review of a federal consistency determination submitted by the U.S. Department of Agriculture/Farm Service Agency (FSA) for the construction of four broiler houses in Accomack County. FSA is processing an application for a loan guarantee to finance the private construction of the broiler houses. The project site is located on a 63-acre tract of land of which 10 acres will be developed for the broiler houses and associated infrastructure. Each of the four broiler houses will contain 44,800 birds. Associated facilities include a well and access roads. 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 several recommendations pertaining to: local and state setback requirements; air permitting regulations governing hydrogen sulfide; construction of a manure barn instead of leaving manure on the ground (covered or uncovered); and the need for a Virginia Pollution Abatement permit prior to the facility beginning operation.

III. Federal Activities (Permits, Licenses and Approval)

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

Gate 313 Sanitary Sewer Service Project – The Metropolitan Washington Airports Authority (MWAA) proposes to install a sanitary sewer line at Washington Dulles International Airport in Fairfax County. The sanitary sewer line would be installed between Gate 313 to the sanitary lift station at the South Domestic Water Storage Tank Facility that is planned for future construction north of Gate 313 along Stonecroft Boulevard. MWAA submitted a federal consistency certification which found the sewer line installation consistent with the enforceable policies of the Virginia Coastal Zone Management. DEQ concurred with the consistency certification provided that MWAA develop and implement erosion and sediment control and stormwater management plans consistent with the *Virginia Erosion and Sediment Control Law and Regulations* and *Virginia Stormwater Management Law and Regulations*. The DEQ response also included the requirement that the project receive DEQ review and approval of the plans and specifications for the expansion of the sewage collection system under the *Sewage Collection and Treatment (SCAT) Regulations*.

Rehabilitate Airport Drainage System at Middle Peninsula Regional Airport – The Middle Peninsula Regional Airport proposes to replace an existing 5,400-foot drainage line running parallel to Runway 9-27 at the airport. Project activities include removing the overburden, crushing or filling the existing unreinforced concrete culverts, placing compacted backfill, installing, in-place, new reinforced concrete pipe and drop inlets, and backfilling the construction trench to grade. The Airport submitted a federal consistency certification that finds the proposed action consistent with the enforceable policies of the Virginia Coastal Zone Management Program. DEQ concurred with the consistency certification provided the Airport complies with the notification requirements under its existing VPDES General Stormwater-Industrial permit, air quality regulations, applicable Chesapeake Bay Preservation Act performance criteria, and erosion and sediment control and stormwater management provisions.

Hanover County Municipal Airport, Five-Year Development Plan – DEQ completed a coordinated review of a draft Environmental Assessment and a federal consistency certification for the Hanover County Municipal Airport Five-Year Development Plan. The Plan includes the construction of a new 5,400-foot x 35-foot east side parallel taxiway; a new east side terminal area facility with an aircraft parking apron, general aviation terminal building, maintenance/storage hangars, T-hangar facilities, fuel storage facilities, parking lot, access road, utility connections and security fencing; obstruction removal; runway navigational lighting; and the acquisition of approximately 80 acres of land and easements. DEQ concurred with the consistency certification

finding that the Development Plan is consistent with the enforceable policies of the Virginia Coastal Zone Management Program. Applicable requirements include: the Virginia Water Protection Permit, Air Pollution Control Law, Erosion and Sediment Control Law, Stormwater Management Law, Chesapeake Bay Preservation Act, and the National Historic Preservation Act.

Line VM-122 Exposed Pipe Remediation - The Columbia Gas Transmission Corporation proposes to remediate a section of pipe exposed by erosion along a portion of Line VM-122 in Surry County. The 8-inch pipeline has become exposed for approximately 50 feet at the crossing of an unnamed tributary of Lower Chippokes Creek. Columbia will use the dam and pump method to create a temporary dry working condition within the stream. The stream banks will be stabilized and restored to the original contour. Columbia submitted a federal consistency certification which finds the proposed remediation consistent with the enforceable policies of the Virginia Coastal Zone Management Program. The Commonwealth's response contained several recommendations to protect water quality and wetland impacts, anadromous fish, and Chesapeake Bay Preservation Areas. Also, Columbia must conduct an on-site delineation of Resource Protection Areas and submit a Water Quality Impact Assessment to Surry County.

Columbia Gas Transmission Line—DEQ completed the coordinated review of a federal consistency certification submitted by Columbia Gas Transmission for the recoating of line VM-108. Project activities include excavating and recoating approximately 400 feet of an existing 20-inch natural gas transmission line located south of the community of Chester, on the west side of Route 144 in Chesterfield County. The project is required for corrosion control and to comply with U.S. Department of Transportation pipeline safety regulations. The two enforceable policies of the Virginia Coastal Zone Management Program which are applicable are wetlands management and coastal lands management. Based on comments submitted by viewers, DEQ concurred that it is consistent with the VCZMP. However, consistency with the coastal lands management enforceable policy entails project conformance with Chesterfield County's Chesapeake Bay Preservation Area program, which requires Columbia's delineation of Resource Protection Areas on site and the submission of a Water Quality Impact Assessment for review and approval by the County.

Stafford Airport Acquisition of IDA Land – DEQ completed a coordinated review of a federal consistency certification submitted by the Stafford Airport Authority for the acquisition of 104.4 acres of land owned by the Stafford County Industrial Development Authority (IDA). In 1997 the Airport Authority acquired a navigation easement interest from the IDA on the parcel, which is located adjacent to, and northeast of, the airport. The easement was acquired for the protection of the approach to Runway 15, which allowed for obstruction removal by the airport as required under Federal Aviation Administration Regulations. According to the document, only the continued removal of selected obstructions in accordance with the Federal Aviation Regulation will be required for the property. The Commonwealth's concurrence included the requirements that the Airport Authority coordinate obstruction removal activities with DEQ, Virginia Marine Resources Commission, and Department of Conservation and Recreation with respect to potential impacts to wetlands, water quality, subaqueous lands, and Chesapeake Bay Preservation Areas on site.

Rehabilitation of Franklin Airport's Runway - DEQ completed the Commonwealth's review of a federal Consistency Certification for the rehabilitation of lighting at the Franklin Municipal Airport. The new lighting system will be installed by trenching the cable into the ground and installing a new lighting vault with controls for the vault inside the terminal building. All old fixtures will be removed and replaced with new fixtures. 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 several recommendations on reporting requirements if petroleum contaminated soils are found during construction and coordination with the local government to address local requirements.

Hawk's Nest Golf Course - DEQ completed the Commonwealth's review of an Environmental Impact Report (EIR) and a Federal Consistency Certification for the proposed Hawk's Nest Golf Course. The course is a

planned 18-hole, public-use golf course, located on a 460-acre parcel adjacent to and south of the Colonial National Historic Parkway, in York County. Facilities to be constructed include a clubhouse, maintenance building, practice greens, a driving range, parking lots, cart paths and access roads. The state-owned, “brown-field” site (formerly known as the Virginia Emergency Fuel Storage Facility), is leased to York County. During the review the Department of Historic Resources sought and obtained the National Park Service’s (NPS) input pertaining to potential impacts of the golf course on its easement along the Colonial National Historic Parkway. NPS indicated that their concerns were resolved. Also, the Department of Conservation and Recreation indicated that the golf course would affect Resource Protection Areas; the Virginia Department of Agriculture and Consumer Services requested that a new survey for small whorled pogonia, a state protected plant species, be conducted; and the Department of Historic Resources requested additional information related to a 100-year old cemetery.

In addition, because of the involvement of the Environmental Protection Agency, the requirements of the Coastal Zone Management Act and the Federal Consistency Regulations implementing the Act apply to this project. The consistency review was conducted concurrently with the State EIR review. Based on the comments submitted by reviewers, DEQ conditionally concurred that this proposal is consistent with the Virginia Coastal Zone Management Program. The conditional concurrence is based on the applicant obtaining all necessary permits and authorizations needed to construct the golf course prior to any ground disturbance. In addition, the applicant must provide additional, requested information to DCR’s Division of Chesapeake Local Assistance regarding reducing impacts to the RPA, posting signage for the protection of RPA areas and submitting a nutrient management plan for review and approval.

Liquefied Natural Gas (LNG) Ship Transit in Chesapeake Bays – Dominion Cove Point LNG, L.P. proposes to increase the number of liquefied natural gas ships authorized to transit to and from the Cove Point LNG Terminal located in Calvert County, Maryland. Dominion received authorization from the Federal Energy Regulatory Commission (FERC) in 2006 to expand the LNG import terminal. The expansion of the LNG terminal is currently underway. Ship transits are anticipated to increase from up to 120 ships per year to as many as 200 ships per year. The ships will operate in a federally-approved channel, which includes the main navigation channel of the Chesapeake in Virginia, en route to the LNG terminal. The U.S. Coast Guard submitted a Supplemental Environmental Assessment (EA), including a federal consistency certification, to the Commonwealth for review. The EA is supplemental to and adopts the April 2006 Environmental Impact Statement (EIS) issued by FERC for the proposed Cove Point Expansion Project, in which the Coast Guard was a Cooperating Agency. The enforceable policies of the Virginia Coastal Zone Management Program that apply to this action include fisheries management and air pollution control. However, no adverse impacts to these policies from the proposed action were identified. Therefore, the proposed action is consistent with the enforceable policies of the VCZMP.

IV. OCS and Alternative Energy Reviews

The following projects will be subject to consistency reviews if they are pursued.

Outer Continental Shelf (OCS) Oil and Gas Leasing Program –DEQ completed the coordinated review of scoping comments that were solicited by the U.S. Department of the Interior, Mineral Management Service (MMS). The MMS is considering whether to develop a 5-year OCS oil and gas leasing program to supersede the current 2007-2012 program. In a June 18, 2008 statement, the President asked Congress to pass legislation as soon as possible to lift the Congressional Moratoria on OCS oil and gas development in order to give states the option to recommend the opening of the OCS off their coasts to exploration for and development of hydrocarbon resources and sharing of revenues. The MMS is initiating the 5-year program development at this time, approximately 2 years ahead of schedule, as part of the federal government’s actions to address the existing domestic energy situation. The DEQ response included information on the natural and economic resources in the state’s coastal zone, uses of the sea and seabed, the environmental risk and potential for damage to coastal and marine resources, the relationship between OCS oil and gas activity and the state’s Coastal

Resources Management Program. DEQ reiterated the policy of the Commonwealth to support federal efforts to determine the extent of natural gas resources 50 miles or more off the Atlantic shoreline, including appropriate federal funding for such an investigation. The policy of the Commonwealth supports the inclusion of the MMS's Atlantic Planning Areas with respect to natural gas exploration 50 miles or more off the Atlantic shoreline.

Alternative Energy and Alternate Use on the Outer Continental Shelf - DEQ coordinated the review of the draft Environmental Assessment (EA) that evaluates the promulgation of proposed regulations for the Alternative Energy and Alternate Use program on the federal Outer Continental Shelf (OCS). The Minerals Management Service (MMS) published a notice in the Federal Register on regulations proposed to establish a program to grant leases, easements and rights-of-way for alternative energy projects on the OCS. Regulations will also be established for previously unauthorized activities that involve the alternate use of existing facilities located on the OCS. The proposed rule also discusses the methods of revenue sharing. The response noted that the Commonwealth issued the Virginia Energy Plan in September 2007, in which four broad goals, including increasing in-state energy production and increasing research and development of coastal energy production, were established. This proposed federal program, which provides a mechanism for the construction and operation of alternative energy projects on the OCS, could help Virginia achieve the goals stated in the Virginia Energy Plan. However, careful planning, including the establishment of the Federal, State and Local Joint Planning Agreement, is imperative to ensure that OCS activities are consistent with Virginia's energy goals and address potential use conflicts. DEQ recommended that MMS closely coordinate future coastal energy plans proposed off the coast of Virginia with Virginia's natural resources agencies, the Department of Mines, Minerals and Energy and "The Virginia Coastal Energy Research Consortium."

Virginia Capes Range Complex – DEQ completed a coordinated review of a Draft Environmental Impact Statement (EIS)/Overseas EIS for ongoing activities planned by the U.S. Navy for the Virginia Capes (VACAPES) Range Complex. The VACAPES 74,425 square nautical mile range extends east into the Atlantic Ocean from Virginia's 3-nautical-mile(nm) boundary, and also includes portions (420 nm square) of the lower Chesapeake Bay, where proposed mine warfare training would occur. The proposed actions are associated with Navy Atlantic Fleet training, research, development, testing, and evaluation activities, and associated range capabilities enhancements, including infrastructure improvements involving mine warfare, surface warfare, gunnery exercise, bombing exercise, air warfare, strike warfare, electronic combat, amphibious warfare, and testing and evaluations. The DEQ response recommended that the Navy coordinate with the Virginia Department of Game and Inland Fisheries, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service with regard to the possible impacts on protected state and federal species, and with the Virginia Coastal Energy Research Consortium with regard to the Commonwealth's offshore energy research and development activities.

C. PROGRAM CHANGES

Additional draft program change reports are being completed by the Environmental Law Institute (ELI). ELI's research staff reviewed changes to Virginia's air pollution law and regulations since approval of the Virginia Coastal Zone Management Program in 1986. ELI prepared a matrix indicating the connection between Virginia law and regulations changes and the requirements of the federal Clean Air Act, to support incorporation of the current versions of the law and regulations into the Virginia Coastal Program.

ELI has also reviewed amendments to Virginia's coastal dunes protection legislation and reviewed the relationship of the amendments to the existing approved dunes protection provisions in the Virginia CZM Program. ELI is in the process of preparing draft routine program change documentation for these provisions.

Based on a recommendation from the Coastal Policy Team, ELI has drafted a report covering potential impacts to coastal resources from off-shore energy exploration and development. The report also evaluates Virginia's core coastal zone management policies as to whether they provided adequate authority to manage potential impacts from these sources and how current policies could be used to manage impacts. The draft report will be presented to the Coastal Policy Team on November 5, 2008 and a final draft submitted to the Virginia CZM Program on November 15, 2008. The Coastal Policy Team will also consider future program changes at its November meeting.