Virginia Coastal Zone Management Program
Semiannual Section B.1 Report on Section 312 Evaluation and Metrics
For the Period from April 1, 2014 – September 30, 2014

<table>
<thead>
<tr>
<th>SECTION B.1.A: Section 312 Evaluation Progress</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coastal Policy Team</td>
<td>2</td>
</tr>
<tr>
<td>2. Grants Management</td>
<td>2</td>
</tr>
<tr>
<td>3. Water Quality</td>
<td>3</td>
</tr>
<tr>
<td>4. Coastal Hazards</td>
<td>3</td>
</tr>
<tr>
<td>5. Federal Consistency</td>
<td>4</td>
</tr>
<tr>
<td>6. Public Participation and Outreach</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION B.1.B: Section 312 Metrics</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seaside Habitat Restoration</td>
<td>7</td>
</tr>
<tr>
<td>A. Bay Scallops Released</td>
<td>7</td>
</tr>
<tr>
<td>B. Eelgrass Planted</td>
<td>8</td>
</tr>
<tr>
<td>2. Shoreline Management Plans</td>
<td>11</td>
</tr>
</tbody>
</table>
B.1.A. SECTION 312 EVALUATION PROGRESS

The Virginia Coastal Zone Management Program was last evaluated in May 2006.

1. Coastal Policy Team

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

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

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

STATUS: Completed: October 2008

2. Grants Management

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

DESCRIPTION OF PROGRESS/RESPONSE: While it is understandable that NOAA would like to see the CZM funds that DEQ retains for its own staff be matched task by task, it is not realistic to expect in this economic climate that the Commonwealth can afford to allocate new funds to the Virginia CZM Program. Like most states, Virginia has been through several rounds of state budget cuts and more are expected. Fortunately, the WQIF funds that are used to match DEQ tasks have been maintained and the Commonwealth is actually spending millions more dollars on sewage treatment plant upgrades than are captured as match for our CZM awards. Also in light of Congress’ failure to fund the Coastal Nonpoint Program, these sewage treatment plant upgrades funded with matching dollars are one of the few water quality projects the Virginia CZM Program has. The Virginia CZM staff diligently attempt to complete grant tasks within 18 months, and most tasks are, however, unforeseeable circumstances such as staff
turnover, weather, and difficulties in obtaining various approvals at all levels of government do often necessitate extension requests. With funding so reduced, it is essential to try to reprogram any unspent funds toward the end of each year.

STATUS: Completed: October 2007

3. Water Quality

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

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

STATUS: Completed: October 2013

4. Coastal Hazards

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

DESCRIPTION OF PROGRESS: Virginia has used the concept of focal areas since 1999 in order to concentrate financial and policy efforts on a particular resource or geographic region for a three-year period. The Sustainable Community Planning Focal Area, was chosen after extensive input from partner agencies and through discussions of the Coastal Policy Team in 2008 and included the concept of coastal hazards. As a result, Virginia CZM resources, including staff time and grants, were directed at state agencies and coastal planning district commissions to help coastal localities plan for adaptation to climate change and to protect blue
and green infrastructure. The Virginia Coastal Zone Management Program has supported the recurrent flooding / sea level rise adaptation efforts of four coastal planning district commissions (PDCs) since 2008. Total funding so far is $435,345. The Hampton Roads PDC received FY 11, 12 and 13 competitive PDC grant to continue its work on climate change adaption in the region. Also, for FY 11, 12, 13 and 14, the Accomack-Northampton Planning District Commission included climate adaptation in its Technical Assistance grants. The Virginia CZM program has also supported numerous shoreline management planning initiatives, including the use of living shorelines as a means of preserving wetlands in the face of rising sea levels. Coastal GEMS is an important means of communicating information on resiliency-related topics, and a number of local government training sessions have been conducted by Virginia CZM staff (see Suggestion 6). Each of these initiatives, but especially climate change adaptation, addresses the NOAA suggestion for a community resiliency initiative.

STATUS: Ongoing

5. Federal Consistency

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

DESCRIPTION OF PROGRESS: In response to this suggestion, the Coastal Policy Team asked Virginia CZM staff to evaluate options for protecting endangered species through federal consistency. The Virginia CZM Program contracted with the Environmental Law Institute (ELI) to prepare routine program change submissions and then to address concerns raised about the expansion of authority regarding endangered species. The Virginia CZM Program is currently trying to resolve this issue through the dispute resolution provisions in the Program’s Executive Order. Virginia CZM staff are also working to provide routine program changes to NOAA and to identify the enforceable policies among the changes.

STATUS: Ongoing

6. Public Participation and Outreach

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

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

Virginia CZM’s “focal area” during the fiscal years 2008 -2010 was “Sustainable Communities: Protecting Blue-Green Infrastructure and Adapting to Climate Change.” Representatives from each of Virginia’s eight coastal planning district commissions helped refine this “focal area” during the 2007 Coastal Partners Workshop where the need for more education for local planners and decision-makers was identified as a high priority. Community planning occurs at the local government level and grants to the coastal PDCs continue to be the most effective and efficient means for the Virginia CZM Program to provide education and training to local planners and officials. The 2011 and 2012 focal area continues competitive grants for the PDCs. This has allowed them to prioritize internally their needs for local training efforts – some have continued in this area while others have chosen to undertake public access projects. The PDCs are coordinating with Virginia NEMO and support for NEMO is helping to provide direct technical assistance to those localities requesting it. The focal area projects have resulted in better-informed local planning staff and decision-makers and better protection and management of important coastal resources through adoption of local plans and ordinances. Coastal GEMS has also become a trusted source of information for local planners.

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

Virginia CZM staff continues to take advantage of several opportunities to improve coordination with our NOAA “sister” programs: Chesapeake Bay National Estuarine Research Reserve (CBNERRS) and Sea Grant. Virginia CZM staff participates in Virginia Sea Grant strategic planning sessions and evaluations and Virginia CZM and CBNERRS staff occasionally holds “collaboration meetings.” The Director of Virginia Sea Grant and Manager of CBNERRS are members of the Coastal Policy Team and Virginia CZM staff serves on the CBNERRS Coastal Training Steering Committee. These are all important venues for identifying common goals,
priorities and programs. Virginia CZM staff is collaborating with Virginia Sea Grant and CBNERRS communication staff on shared issues and projects, including working with Sea Grant to develop and implement a media strategy in advance of a February 2014 Working Waterfronts Workshop, resulting in very good press coverage.

Virginia CZM staff has engaged local and regional government partners in Coastal Partners Workshops. The 2012 Virginia Coastal Partners Workshop in December 2012 focused on improving stakeholders engagement in coastal management and coastal issues. The 2014 Coastal Partners Workshop, to be held in December, will be the first step in Virginia’s 2016-2020 Coastal Enhancement Program process, and will include the participation of local and regional stakeholders. A pre-workshop survey is being distributed to gather initial feedback on a coastal assessment and prioritization. Registrations for the workshop are coming in quickly and responses to the survey were immediate.

The topic of native plant use has enabled the Virginia CZM to engage a great variety of partners, including businesses. Virginia CZM staff continue to coordinate the Plant ES Natives campaign on the Eastern Shore, and the program is funding and guiding implementation of campaigns in Northern Virginia – Plant NoVA Natives (coordinated by the Northern Virginia PDC through a Virginia CZM grant) and on the Northern Neck – Plant NNK Natives (coordinated by the Virginia Native Plant Society through a grant to the Northern Neck PDC). Virginia CZM staff works with a locally based multi-partner planning team, including governmental, non-governmental and business partners, on each of these regional native plant campaigns. The Hampton Roads PDC is working with local partners to develop a campaign in that region through a FY2013 grant to the PDC. Virginia CZM sponsored printing of the new Flora of Virginia, published in December 2012, and is encouraging use of the Flora to develop regional native plant lists. In 2011, the Virginia CZM Program reached out to other state, regional and local partners engaged in native plant marketing efforts to initiate the Virginia Native Plant Marketing Partnership - a forum to collaborate and coordinate, leading to more consistent messaging to the general public and greater efficiencies in the use of limited resources. Virginia CZM staff continues to coordinate and chair the Virginia Native Plants Marketing Partnership, and is currently working with members to draft a 3-5 Year Action Plan for the partnership and to conduct a facilitated workshop for the partners to review the draft plan’s goals and strategies and determine next steps in finalizing the plan in early 2015. Virginia CZM, through the partnership, has been collaborating with partners to focus on building a rapport with the business community to increase the availability of Virginia native plants, including a presentation and exhibit at the Virginia Nursery and Landscape Association’s Annual Field Day in August 2014, and development and distribution of a market survey to native plant grower, suppliers and specifiers. Feedback from the businesses serving on the partnership’s steering team has been very instructive and positive – recently a VNLA board rep highlighted all the positives she has seen already resulting from the Partnership, including a first time highlight of native plants in the Virginia Growers Guide (2014).

STATUS: Ongoing
**B.1.B. SECTION 312 METRICS**

**Section 312 Metrics - Seaside Habitat Restoration**

**Goal:** Sustain and enhance healthy habitats (on the seaside of Virginia’s Eastern Shore) that are resilient and support thriving coastal resources.

**Objective 1:** By October 2017, *seed scallops* that are hatchery reared and released on the seaside of Virginia’s Eastern Shore will increase.

**Strategy 1:** Historically, the bay scallop was a commercially harvested species on the seaside of Virginia’s Eastern Shore. Following dramatic declines in eelgrass on the seaside during the 1930’s, bay scallops, which depend upon the grass beds as habitat for juveniles, went locally extinct. The Virginia Coastal Zone Management program has provided funding to increase eelgrass habitat on the seaside of Virginia’s Eastern Shore since 1999. Seagrass acreage is now at a level that could support a viable bay scallop population.

Therefore, to re-establish a self-sustaining bay scallop population, the Virginia Coastal Zone Management program provides funding for a restoration program that involves the hatchery production of bay scallops that will be deployed in cages within the eelgrass beds, where they will serve as spawning stock to re-populate the grass beds. The Seaside Habitat Restoration grants are designed to meet Executive Order 18 goals and ultimately establish not only a viable population of bay scallops but also a recreational fishery that will help support a vibrant ecotourism industry on Virginia’s Eastern Shore.

At level funding based on the 2012 budget, on average 40,000 adult scallops per year can be produced, deployed and maintained in the eelgrass beds, and an annual population census of the developing wild scallop population in the grass bed can be conducted. Reaching this target number is dependent upon environmental conditions (especially water temperature), primarily as they relate to rearing early juvenile scallops through the nursery phase.

**Performance Measure 1:** By October 2017, the number of seed scallops that are hatchery reared and released on the seaside of Virginia’s Eastern Shore using CZM Federal and match funds.

**Target 1:** By October 2017, 200,000 seed scallops will be hatchery reared and released on the seaside of Virginia’s Eastern Shore using CZM Federal and match funds.

**Annual Data:** Between October 1, 2013 and September 30, 2014, 50,000 scallops produced in spawns from 2013 were maintained in the South Bay seagrass bed. During the summer of 2014 an additional 700,000 small juvenile scallops were transferred to cages in the grassbed. Following 2 months of growth, the 200,000 largest scallops in this group were placed into larger mesh bags and the remaining small scallops were released into the grassbed.

**Cumulative Data:** To date approximately 275,000 juvenile (seed) scallops have been reared to spawning age in cages within the grassbed and another approximately 500,000 have been
released as small juveniles.

**Documentation:**
- A map is provided showing where bay scallops were released during this time period.
- This project (both bay scallop and eelgrass restoration) is being funded under cooperative agreement NA12NOS4190168 Task 11 (open from April 2013 through September 2014), and NA13NOS4190135 Task 11 (open from April 2014 through March 2015).

**Narrative:** The Virginia CZM Program provided $341,000 in CZMA funding ($180,000 in FY2012 and $161,000 in FY2013) and the state contributed $260,000 ($130,000 in FY 2012 and $130,000 in FY2013) towards the seaside restoration project. The other major partner who assisted during this timeframe was the Virginia Marine Resources Commission’s Recreational Fishing License Fund. The Nature Conservancy provided in-kind support for facilities and volunteer support. The project is somewhat behind schedule in meeting the target due largely to weather conditions but it is hoped that the five-year target can still be met.

In addition to the 25,000 juvenile scallops planted in the grass bed during this period, 110,000 juvenile scallops were also produced from a spawn in August 2013. These scallops are currently being reared in a field-based nursery and all animals that survive the winter (estimate ~ 50%) will be placed in the grass bed during spring 2014. Additionally, from a spawn conducted in September 2013, we produced and released 1,560,000 scallop larvae. Because it was too late in the season to rear these animals in a nursery system, all 1.56 million larvae were released into the grass bed. While these scallops are expected to contribute to the overall restoration effort, they are not counted here in our target for placing juvenile scallops in the grass bed.

**Objective 2:** By October 2017, the acreage of eelgrass on the seaside of Virginia’s Eastern Shore will increase.

**Strategy 2:** Eelgrass is one of the most productive habitats in the Chesapeake Bay and seaside bays of Virginia’s Eastern Shore. During the early 1930s, eelgrass declined in the seaside bays due to a wasting disease and was completely eliminated by 1933. In 1997, several small natural patches were observed in South Bay on the seaside of Virginia’s Eastern Shore. Since 1999, through VA CZM grants to the Virginia Institute of Marine Science, eelgrass seeds have been broadcast into 350 acres in four seaside bays, which have now spread naturally to over 4,370 acres in these same bays.

The Virginia Coastal Zone Management program continues to provide funds to increase eelgrass acreage on the seaside of Virginia’s Eastern Shore through seeding areas in these bays. This ensures that this important habitat is restored and continues to thrive to support the many species that depend on it. With an increase in healthy eelgrass beds, habitat and resources for bay scallops, finfish, sea turtles, and avian species can be supported. Reaching the proposed target in this metric is dependent upon favorable environmental conditions. If certain unfavorable conditions occur, especially storm events, the amount of seeds recovered from the eelgrass beds and thus broadcast out into the seaside bays could be negatively impacted.
**Performance Measure 2:** By October 2017, the total number of acres seeded/planted with eelgrass on the seaside of Virginia’s Eastern Shore using CZM Federal and match funds.

**Target 2:** By October 2017, 150 acres of eelgrass seeded/planted on the seaside of Virginia’s Eastern Shore using CZM Federal and match funds.

**Annual Data:** Between October 1, 2013 and September 30, 2014, 40 acres were planted with eelgrass seeds in Spider Crab Bay and Cobb Bay.

**Cumulative Data:** The cumulative total of eelgrass planted = 85 acres.

**Documentation:**
- A map is provided showing the plots that were seeded during this time period.
- This project (both bay scallop and eelgrass restoration) is being funded under cooperative agreement NA12NOS4190168 Task 11 (open from April 2013 through September 2014), and NA13NOS4190135 Task 11 (open from April 2014 through March 2015).

**Narrative:** The Virginia CZM Program provided $341,000 in CZMA funding ($180,000 in FY2012 and $161,000 in FY2013) and the state contributed $260,000 ($130,000 in FY 2012 and $130,000 in FY2013) towards the seaside restoration project. The other major partner who assisted during this time frame was VMRC’s Recreational Fishing License Fund. The Nature Conservancy provided in-kind support for facilities and volunteer support. The Coastal Program is on track to meet its five-year target and no resource issues are foreseen.
Section 312 Metrics - Shoreline Management

**Goal:** Living Shoreline practices are adopted where feasible in all shoreline erosion control and related development projects, expanding and enhancing viable natural shoreline habitats for coastal species, and affording protection to shorefront landowners and businesses.

**Objective:** Virginia’s coastal counties and cities will develop new local shoreline management plans as a result of assistance from the Virginia CZM Program.

**Strategy:** Some shoreline erosion control practices currently used can negatively affect the habitat and water quality protection functions of natural shorelines. “Living Shoreline” techniques are appropriate in many of these cases, and can maintain or increase these natural shoreline functions. Recent state legislation requires coastal localities to adopt shoreline management plans as a component of their comprehensive plan. The shoreline plan must recognize living shorelines as the preferred erosion control alternative and map areas suitable for their use. The Virginia CZMP provides funding to the Virginia Institute of Marine Science to help develop draft local plans to help meet this requirement. The plans are designed to protect shoreline habitats; minimize nutrient runoff from uplands; protect properties from coastal erosion and help encourage appropriate shoreline management techniques. Once the draft plans are developed by VIMS, they are submitted to the local planning commission for consideration under the locality’s required 5-year comprehensive plan update. If approved by the planning commission (a process which Virginia CZM Program cannot control), the comprehensive plan is then submitted to the local county board of supervisors (or city council) for final consideration and eventual adoption (again, a political action that the CZM Program cannot undertake or control).

**Performance Measure:** By 2017, the number of local shoreline management plans developed and submitted to local planning commissions for consideration.

**Target:** By 2017, 7 local shoreline management plans developed and submitted to local planning commissions for consideration.

**Annual Data:** Between October 1, 2013 and September 30, 2014, two shoreline management plans were developed and submitted to local planning commissions for consideration.

**Cumulative Data:** To date, four shoreline management plans have been developed and submitted to local planning commissions for consideration.

**Documentation:**
- York County Shoreline Management Plan, January 2014
- City of Suffolk Shoreline Management Plan, April 2014

The project was funded under cooperative agreement NA12NOS4190168 Task 93.01. Information on these plans, along with all the other information and data contained on the Comprehensive Coastal Resource Management Portal is available to local planning commissions and all stakeholders.
Narrative: Shoreline Management Plans were generated for York County located on York River, and the City of Suffolk on the James River. These documents are available on the Shoreline Studies Program website at VIMS (http://www.vims.edu/research/departments/physical/programs/ssp/shoreline_management/planning/shore_plan_reports/index.php) and as an additional resource in the “Toolbox” under the localities’ Comprehensive Coastal Resource Management Plan (http://ccrm.vims.edu/ccrmp/index.html). Shoreline Management options recommended for these localities range from planting marsh grasses, performing upland modifications, to construction of sizeable offshore breakwater systems. The Shoreline Management Plans reflect a desire to use the minimal amount of erosion control required based on the setting and the conditions observed. For both localities, the need for traditional erosion control structures was found not be necessary along significant lengths of shoreline.