

II. SUMMARY OF COMPLETED 309 EFFORTS (2006-2010)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	FY 06	FY 07	FY 08	FY 09	FY10	
Program Implementation (Administrative Actions)	\$20,000	\$67,898	\$70,000	\$62,344	\$30,000	\$250,242
CSI: Intergovernmental Decision-Making	\$158,000	\$70,000	\$50,000	\$38,350	\$98,000	\$414,350
CSI: Shoreline Management	\$150,000	\$150,000	\$150,000	\$191,590	\$150,000	\$791,590
CSI: Conservation Corridors			\$71,000	\$93,716	\$153,000	\$317,716
SAMP: Dragon Run	\$69,000	\$56,000	\$50,000	\$14,000	\$25,000	\$214,000
SAMP Seaside		\$52,102	\$75,000	\$80,000	\$80,000	\$287,102
Aquaculture & BMPs	\$139,000	\$140,000	\$70,000	\$56,000		\$405,000
TOTAL	\$536,000	\$536,000	\$536,000	\$536,000	\$536,000	\$2,680,000

Program Implementation

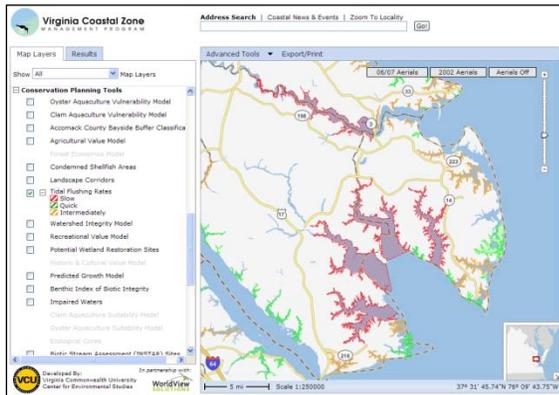
This portion of Section 309 funds, although not a separate strategy, was used to support administrative actions related to Virginia's Section 309 Needs Assessment and Strategy. A portion of the funds were used for contractual services from the Environmental Law Institute (ELI) to analyze past routine program changes regarding fisheries, sand dunes and beaches, wetlands, and state implementation of Clean Water Act and Clean Air Act provisions, and to prepare program change packages for submission to NOAA. NOAA approved Virginia's submission in June, 2010. Other funds were used for additional contractual services from ELI for a special study of potential impacts to Virginia's coastal environment from offshore energy development activities and the possible need for program changes related to these activities. In addition, funding was provided in years two and three to support one half of a Virginia CZM program staff position to manage the shoreline and conservation corridor portions of the Section 309 Strategy. In year four, funds were allocated to the Institute for Environmental Negotiation at the University of Virginia to assist in developing the 2010 Section 309 Needs Assessment.

Cumulative and Secondary Impacts

STRATEGY: Intergovernmental Decision-making

This strategy focused on identifying and minimizing coastal resource use conflicts, and creating stronger linkages between local land use plans and state and federal water use policies by exploring intergovernmental agreements to proactively consult the Coastal Geospatial and Educational Mapping System (Coastal GEMS), a tool-based Web resource, to view and analyze the state of Virginia's coastal resources in the face of increasing coastal development. Additionally, by providing the most up-to-date data to all stakeholders in the coastal zone through Coastal GEMS, all interested parties could help identify additional information (i.e. gaps) needed to better manage our coastal resources which could lead to modifications of the current regulatory structure.

During this 309 funding cycle the following actions toward Coastal GEMS expansion enhancement and promotion were undertaken:



The Coastal GIS Coordinator met with VCU and WorldView Solutions to facilitate workflow involved in maintaining, enhancing, and marketing Coastal GEMS. Over 20 data layers were either updated or added to Coastal GEMS during FY2007-2008. These data include: *Conservation Lands, Important Bird Areas, Essential Wildlife Habitat, Condemned Shellfish Areas, Private Oyster Leases, Constructed Oyster Reefs, Clam Aquaculture Vulnerability Model, Oyster Aquaculture Vulnerability Model, Tidal Flushing Rates and*

layers associated with the VCLNA (Recreational Value Model, Watershed Integrity Model, Agricultural Value Model, Forest Economics Model). Data layers were processed for effective display on Coastal GEMS and then uploaded to a test IMS site where CZM staff could review symbology before they were added to the Coastal GEMS application.

Instead of developing a separate Coastal GEMS Advisory Committee, it was decided that the Coastal GIS Coordinator would utilize the existing coastal policy team and other ad-hoc advisors to identify and prioritize geospatial projects.

Additionally, a Coastal GEMS training program was created and implemented. This program included a presentation about Coastal GEMS and why/how it was created, a live demonstration of the Coastal GEMS site tailored to the specific needs of the audience, and a handout with information about Coastal GEMS and available data layers. Information regarding GEMS training was posted to the GEMS website and publicized to CZM partners. Nine formal GEMS training sessions were also conducted during FY2007-2008.

Finally for Coastal GEMS, the development of MOU's and official data sharing agreements was explored, but ultimately deemed unnecessary due to existing willingness and support of partners to provide data and promote Coastal GEMS. The Coastal GIS Coordinator produced coastal resource maps and made GIS based calculations for CZM staff to utilize in meetings and presentations and for articles in the CZM magazine and produced maps as requested for CZM partners.

In addition to the enhancements to Coastal GEMS, this strategy included a two-year pilot project (FY06 & FY07) with the Middle Peninsula Planning District Commission (MPPDC) for applying GEMS as a tool to manage use conflicts. From this, the York River Use Conflict Roundtable was established among a cross section of representatives of varying, and often conflicting, uses of the York River. The Committee worked in small groups to analyze a York River study reach that consisted of comprehensive maps of the existing uses, demographics, and designations of the York River waterfront. This resulted in creation of a matrix of all identified use conflicts in preparation for the next phase of the project to frame the public policy question "Who should manage use conflict?" A York River Use Conflict Policy Recommendation

Committee was established, comprised of Roundtable members as well as state agency representatives to develop appropriate tools and policies. The Committee addressed known issues and conflicts affecting the study area to ensure that a comprehensive analysis of the issues had been achieved. The Committee arrived at seven recommendations for consideration by the Gloucester County Board of Supervisors:

Recommendation 1 –Develop and adopt a Coastal Living Policy to educate and inform County residents.

Recommendation 2 –Denote the County’s Land, Air and Water territorial boundaries in the County’s Comprehensive Plan and supporting maps.

Recommendation 3 –Take no action for now regarding aquaculture within the County’s jurisdiction.

Recommendation 4 –Develop and adopt a policy for the protection of working waterfronts.

Recommendation 5 –Develop and adopt a Waterfront Outdoor Lighting Ordinance.

Recommendation 6 –Develop and adopt a policy restricting floating homes within the County.

Recommendation 7 –Develop and implement a master plan for public access infrastructure to ensure safe and equal water access for all user groups to the waterways within the County.

All recommendations were adopted by Gloucester’s Board of Supervisors, and the county has established a “Coastal Community Committee” to address implementation. Currently, the Board is considering adoption of a draft Coastal Living Policy to pave the way for further action. Technical work and other products from the York River Use Conflict Committee are being incorporated in the comprehensive plan as it is updated. Examples include denotation of county’s land, air and water territorial boundary.

STRATEGY: Shoreline Management

Waterfront development has altered Virginia's shoreline, often in ways that can be detrimental to habitats and water quality. In particular, many low energy shorelines have been hardened with revetments and bulkheads where less damaging techniques for managing shoreline erosion could have been employed. In many of these cases shoreline erosion could have been managed through a "living shoreline" approach that maintains, or even expands, the habitat and water quality protection benefits of natural shorelines.



This strategy built on progress made during the previous 309 Strategy to integrate riparian and near-shore management objectives and improve shoreline management practices. As a result of this strategy, the various agencies involved in shoreline management are now better able to promote living shoreline techniques and reduce the cumulative and secondary environmental impacts of waterfront development on shorelines. The strategy included a number of components:

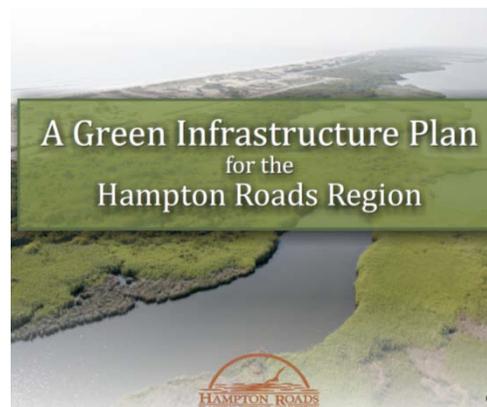
- A "Living Shoreline Summit," (held December, 2006) with peer reviewed proceedings, to advance the use of this management technique
- Revised "Wetlands Guidelines" to be used by the Virginia Marine Resources Commission, the Virginia Institute of Marine Science, local wetlands boards and others to guide decisions about shoreline and tidal wetlands management.

- Improved data in the form of local shoreline inventories and evolution reports to support more informed shoreline management decisions and provide background for local shoreline plans to be developed in the future
- Research to document the habitat value of living shorelines and to improve their design
- Guidance for local governments to use in shoreline management planning
- Outreach materials for land use decision-makers, landowners and contractors on living shoreline advantages and design principles
- A training program for contractors and local government staff on living shoreline practices
- A report on improving management of Virginia's dune and beach resources, including proposed revisions to the Coastal Primary Sand Dunes and Beaches Act
- Changes to the Coastal Primary Sand Dunes and Beaches Act by the Virginia General Assembly to expand the legislation to cover the entire coastal zone (submitted to and approved by NOAA as a Routine Program Change)
- Revisions to the Coastal Primary Sand Dunes and Beaches Guidelines
- A peer-reviewed manuscript *Using Science to Create Dune and Beach Protection Policy in Virginia* published in the Journal of Coastal Research.

STRATEGY: Conservation Corridors

Population growth and development in many urban and suburban areas of Virginia's coastal zone has resulted in significant habitat fragmentation and the loss of many wetlands and riparian buffers that help protect water quality. For this reason, the Virginia CZM Program has invested in the development of conservation corridors throughout the coastal zone beginning with a model system created in the Hampton Roads planning district which prioritizes areas for preservation and restoration based on a number of data layers and local input.

During this 309 funding cycle additional work was conducted to update the Hampton Roads conservation corridor network. The original green infrastructure network (FY2004 Task 51) was updated by incorporating more current data into the geographic information systems (GIS) model. There were also several discussions with a diverse group of stakeholders that led to improvements in the green infrastructure plan. The change between the original green infrastructure network and the update that was finalized in this project was also analyzed. A *Vulnerability to Development* model was also created in order to predict where future growth will occur in the region and how the green infrastructure network will be impacted. This gives planners a tool to prioritize land acquisitions in the face of limited funding. The project also analyzed the potential impact of sea level rise on the green infrastructure network. Additionally, an updated parks and recreation database was created in GIS.



To expand this system to a network of identified and locally accepted conservation corridors for Virginia's entire coastal zone, additional 309 projects were contracted for FY2009 and FY2010. Focused in Northern Virginia (Task 97.02) and Middle Peninsula (Task 97.01), these projects are

designed to identify green infrastructure and develop public policy recommendations. Anticipated outcomes for these grants include: mapped conservation corridors, analysis on the benefits of corridors for pollutant removal and carbon sequestration, an educational fact sheet on the practical uses and benefits of green infrastructure, public policy recommendations and their endorsement, an analysis on the economic impacts of conservation easements, and possible routes for the Potomac Heritage National Scenic Trail.

Finally, in FY08, the Middle Peninsula Planning District Commission conducted a project to analyze the effects that a change in Virginia Department of Health (VDH) Sewage Handling and Disposal Regulations in 2000 has had on development patterns within many Virginia localities. The regulations allowed new engineered onsite sewage disposal system (OSDS) technologies to be installed on “marginal lands,” or land that that would not normally support a traditional gravity fed septic systems. This change has resulted in erratic development patterns inconsistent with comprehensive planning goals of the affected localities.

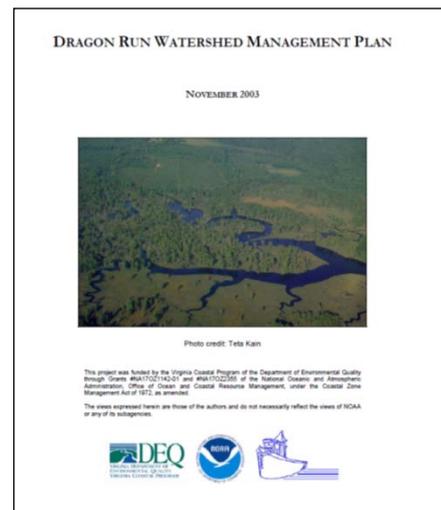
To inform local elected officials and local planning staff of various consequences of existing land use planning and to encourage the need for additional or amended public policy as it relates to land development and OSDS, this project inventoried and mapped permitted engineered OSDS across the Middle Peninsula. MPPDC staff worked closely with VDH to collect spatial data of engineered OSDS permitted from 2004-2008. This project was a continuation of a previous CZMA grant (NA17OZ2335 Task 84), where OSDS installed and permitted from 2000-2004 were inventoried and mapped. Therefore, data from the previous project was combined with data collected in this year’s project in order to generate both county and town maps of OSDS proliferation from 2000-2008 within the Middle Peninsula.

Through an assessment of the maps, MPPDC staff found that within the Middle Peninsula [from 2000-2008] there were 1,208 installed OSDS and 2,006 permitted OSDS awaiting installation; this infrastructure equates to approximately \$57,852,000.00 in total private sector investments. From this analysis MPPDC staff can work with local elected official and local planning staff to convey the implications of these land use development issues and policies.

Special Area Management Plans (SAMPs)

STRATEGY: Dragon Run

The Virginia CZM program has been investing in the Dragon Run watershed through a Special Area Management Plan (SAMP) since 2001. The Dragon Run SAMP mission has been to support and promote community-based efforts to preserve the cultural, historic and natural character of the Dragon Run, while preserving property rights and the traditional uses within the watershed. The Dragon Run Watershed Management Plan developed through this effort was originally adopted in 2003 by Essex, Gloucester and King and Queen Counties.



During the 2006-2010 grant cycle, the SAMP focused on three areas of implementation: 1) new zoning and comprehensive plans, 2) public access/conservation lands management and 3) sustainable economic development practices.

Land-use planning has been an instrumental component of the Dragon Run SAMP. Assisting the watershed localities with developing tools to facilitate the long-term protection of the watershed through compatible and consistent comprehensive plan and zoning ordinance language has been integral to SAMP goals. During this grant cycle, the SAMP has focused on working with county planning staff, planning commissions, boards of supervisors and comprehensive plan steering committees to integrate language recommendations into planning tools. Based on Dragon Run SAMP recommendations, King and Queen County adopted revised zoning ordinance language to reconfirm its commitment to recognize the Dragon Run as a significant area. Gloucester County has included a substantial section on the Dragon Run in its draft comprehensive plan based on the SAMP recommendations and is hoping for plan adoption in the summer 2011. Essex County has included Dragon Run recommendations in the working draft of their update to the comprehensive plan and hopes to adopt the plan in Spring 2011. Middlesex County adopted a comprehensive plan that includes some of the Dragon Run land-use recommendations, and has recognized the importance of other land-use tools recommended by the SAMP, including Agricultural and Forestal Districts, Purchase of Development Rights (PDR), Transfer of Development Rights and the use of conservation easements by private landowners.

As public access opportunities have increased throughout the Dragon Run watershed, understanding public and private rights for access and reducing the potential for conflict between public resource users and private landowners is becoming increasingly important. MPPDC staff developed a code of conduct that is based on the Public Trust Doctrine as it pertains to the public's right for ingress and egress of waterways such as the Dragon Run. This guidance was integrated into a brochure and its principles were conveyed to public access entities, such as the Middle Peninsula Chesapeake Bay Public Access Authority. Additionally, these entities were asked to apply the code of conduct to their holdings in the watershed. Specifically, four of these entities adopted site specific management plans that included the code of conduct in 2008 and early 2009 (see next section).

Public and non-governmental organizations (NGOs) acquiring conservation lands in the Dragon Run Watershed have become increasingly successful. It has since become a priority to assure that these entities are managing their acquired lands in such a way that is consistent and compatible with the Dragon Run watershed management plan. Therefore, the SAMP, via coordination with managing entities and related partners, developed four management plans (Dragon Bridge – CBNERRs and Dragon Flats – TNC) utilizing Dragon Run Steering Committee conservation holding management recommendations both of which were accepted. MPPDC also drafted management plans for the Middle Peninsula Chesapeake Bay Public Access Authority (PAA) and the Friends of Dragon Run. The Friends of Dragon Run adopted its plan in early October 2008 and the PAA adopted in February 2009.

To promote the sustainability of traditional industries, such as farming and forestry, the Dragon Run SAMP identified a biodiesel partnership as a feasible watershed program. This partnership includes the role of portions of the biodiesel chain, including the soybean farmers, fuel distributors, biodiesel refinery, private fleets and school bus fleets to support the mission of sustainability of agriculture. Substantial work has been completed on the partnership, particularly gaining the commitment of the watershed school boards in using biodiesel in their fleets. The multiple prongs of the program include: 1) a purchase program for the schools and private industry, 2) education regarding utilizing blend levels to manage cost and 3) watershed education and market to expand the market. All of these aspects combined are aimed to provide both direct and indirect economic benefit to the watershed farming community.

The SAMP also initiated development of the Dragon Run Estate Planning Network Initiative (DREPNI). The purpose of the initiative is to provide collaboration between estate planning stakeholders to create a conservation hub in the Dragon Run watershed. Currently, 20,645 acres (or 23% of the Dragon Run Watershed) have been protected during this initiative. The majority of that acreage has been protected since the DRSC/SAMP started focusing on conservation planning in early 2006.

Finally, research through the Dragon Run SAMP, focused on gaining a quantitative understanding of conservation easements and their current fiscal impacts on Middle Peninsula localities, has clarified information on potential benefits that conservation easements provide to localities through their local composite index. In clarifying composite index calculations, the SAMP has identified a path for increased state funding for local schools based on the total value of land held within a county, less the easement value. This establishes quantitative proof that the locality is not as wealthy as it would be without the easement designation on land values, thus making the locality eligible for additional support for local schools. This information will supplement upcoming discussions among stakeholders in the Dragon Run watershed as well as within the Middle Peninsula region aimed at development of policy options and recommendations to address land conservation and its local fiscal impacts.

To date, all six Middle Peninsula commissioners of revenue have significantly increased their comprehension of the impact of conservation easements to their local tax base and its impact on the aid received from the state via the Composite Index. At least five have updated their valuation process to adequately and consistently account for the impact of the conservation easements. At least one of the commissioners of revenue has already had a dialog with the firm preparing the county's reassessment to discuss the assessment of conservation easements. At least one has changed administrative policies to better coordinate between the clerk's office and the commissioner's office due to this project.

Essentially, as a result of the SAMP governances have changed to be more efficient.

Additionally, interest in the model is being observed statewide. Lead conservation entities, like Piedmont Environmental Council, are starting to try to implement some of the recommendations from this project in other parts of the state. MPPDC staff has been invited to regional and statewide events to make presentations on the findings and recommendations.

STRATEGY: Seaside Special Area Management Plan

The Seaside SAMP strategy began in Year 2 (FY 2007) with two land-based projects and one water-based project. In the first land-based project Accomack County (Task 96.03) took the bold step of developing and adopting an Atlantic Preservation Area Ordinance that mirrors the protections afforded by the Chesapeake Bay Preservation Act. This protection now extends down the entire Seaside length of the Eastern Shore. The second project was establishment of CommunityViz software in both counties (Accomack and Northampton) that allowed them to project build-out of all lots give current zoning conditions. Results showed that current zoning would allow for nearly a tripling of current population – a concept that shocked many county planners however the Boards of Supervisors have still not acted on this information. The first water-based project was a grant to the Virginia Institute of Marine Science (VIMS) (Task 96.01) to assess high priority estuarine areas (blue infrastructure) on the Seaside where multiple resources (e.g. oysters, SAV) were co-located or closely grouped.

In Year 3 (FY 2008), the Seaside SAMP Project Team was established consisting of the CZM Manager, The Nature Conservancy (TNC), VIMS, the Marine Resources Commission

(MRC), representatives of the shellfish cultivation industry, and the Eastern ShoreKeeper. The overriding goal of the team is to design a management strategy that will maximize ecological and economic productivity of this extremely dynamic barrier island lagoon system. As barrier islands roll over on themselves and each new storm changes the bathymetry of this shallow area, conditions for bird nesting and foraging, shellfish and SAV growth change. Through grants to TNC, VIMS, and the ShoreKeeper (Tasks 96.01, 96.02 and 93.04 respectively), the Seaside SAMP Team is reviewing and analyzing existing spatial data to map current and potential future conditions as well as possible. Spatial analyses were conducted for bird nesting, foraging and resting areas; current and potential shellfish grounds and SAV beds; and heavily used recreation areas. Important bird habitats were widely distributed across the barrier island lagoon system with highest concentrations on edges of barrier islands and marshes. Maps are available in the final report. For shellfish and SAV, current distributions were mapped in relation to public (Baylor) shellfish grounds. Map analysis revealed that only 63 percent of the public grounds on the seaside are appropriate for wild clams and oysters and only 32 percent is appropriate for SAV restoration. It also revealed that while the current extent of SAV is only 20 km², the potential area is 131 km². Recreational use was more difficult to determine scientifically and to map definitively. However, results did reveal a pattern of use on the barrier island beaches, especially those places where beaches have washed over the islands completely or where they wrap around the tips of the islands to provide easy boat access from the western side of the island. Most boaters stayed close to channels near major launch sites. On the southern end of the system, there was a slight trend toward more divergent use of the marshes as boaters have less defined options for getting out to the inlets. Rather clear patterns were noted for fisherman departing from the E. Shore National Wildlife Refuge and Wachapreague and recreational boaters departing from Chincoteague tended to remain within that Bay.

In Year 4 (FY 2009), which was not underway until June 2010, the Seaside SAMP Team is targeting three representative areas for more in-depth spatial analyses of bird, shellfish and SAV data. The three areas are Central Hog Island Bay, South & Magothy Bays and Chincoteague Bay. The team will develop spatially explicit draft conservation and restoration objectives for oyster and eelgrass habitats. VIMS will conduct a statistical comparison between current use designations and those suggested by habitat suitability assessments with tin the three target study areas.

As the spatial data emerges, it has become clear that a large proportion of the public Baylor grounds (37%) are no longer productive for public shell fishing and that, at times, shellfish growers may be underutilizing their leased areas and would benefit from leasing other areas if we had a more nimble, flexible leasing system. What is needed is a dynamic management system that matches the dynamics of this ecological system. The Seaside SAMP has evolved into a complex “marine spatial planning” effort that could serve as a pilot for larger geographic areas.

In Year 5 (FY 2010) which will begin in winter 2010/11, the Project Team will seek to broaden its representation and begin to bring information to the public and solicit public response to various management options as they are developed.. The Seaside SAMP will extend for two additional years into FY 2011 and 2012.

Aquaculture

Strategy #1: Aquaculture BMP Provisions in Permits

This strategy was originally planned as a two-year, \$50,000 effort in years 3 and 4 (FY 08 and 09). Instead it was a two-year \$28,000 effort in years 1 and 2 (FY 06 Task 92.03 and 07 Task 92.03). Through grants to the Virginia Institute of Marine Science, this strategy completed development of a set of Best Management Practices for shellfish farming (including clams, oysters and any other shellfish that are likely to be cultivated in Virginia in the near future) for all of Virginia's waters. The shellfish aquaculture industry in Virginia continues to grow and shellfish farmers recognize their responsibilities to be good stewards of the environmental resources upon which their industry depends. At the same time, increasing coastal development and water-related activities contribute to user conflicts and misunderstandings surrounding the industry. In an effort to reduce these conflicts and better explain the shellfish cultivation process, an environmental code of practices (ECP) and best management practices (BMP) for the industry were developed by VIMS staff with input from industry and other interested individuals.

After two years in development, with public input sessions and draft documents mailed to industry participants, two separate documents were created. The first, "Environmental Code of Practices for the Virginia Shellfish Culture Industry," lays out the basic principles upon which all shellfish aquaculture should be based. It also served as the base from which the second document was developed. The second document is the "Best Management Practices for the Virginia Shellfish Culture Industry." This document identifies area of concern and offers suggested best management practices designed to minimize environmental or societal impacts by the culture industry. In addition, both the ECP and BMP received official endorsements from the Virginia Department of Agriculture and Consumer Services (VDACS), the VDACS governor-appointed Aquaculture Advisory Board, and the Virginia Farm Bureau Federation Aquaculture Advisory Committee. Both of these final documents were mailed to over 125 shellfish growers, along with a cover letter encouraging the voluntary adoption of the ECP and BMP principles. The industry and legislators were not receptive to including these BMPs as permit or lease conditions. Since these BMPs were developed and distributed to industry, they have been generally well-followed. In addition, on the Eastern Shore where shellfish cultivation is most extensive, the Eastern ShoreKeeper continues to monitor cultivation practices and work with growers to ensure the BMPs are followed.

Strategy #2: Re-evaluation of Public Use of Baylor Grounds & Creation of Aquaculture Enterprise Zones

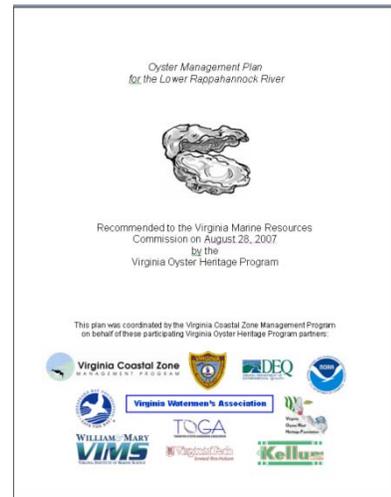
This strategy sought to identify and develop options to ensure adequate space for shellfish aquaculture and continue the development of information necessary to manage aquaculture activities in order to avoid conflicts with other permissible uses of state waters and State-owned submerged lands. This included re-enactment of the water column leasing legislation (which had lapsed due to the failure of the General Assembly to appropriate funds for its implementation) and the consideration of opportunities for the public use of Baylor Grounds and "unassigned grounds" for aquaculture activities. Unfortunately, given the current economic recession the GA has never funded the water column leasing program. Finally it sought to develop options for

local ordinances designed to manage land use adjacent to areas designated for aquaculture and stimulate the creation of aquaculture enterprise zones.

The first step, taken in Year 1 (FY 2006 Task 92.01), was for VIMS to make adjustments to the “Aquaculture Use Suitability Model” developed under the previous Section 309 strategy. VIMS used GIS software to map high medium and low risk areas for shellfish aquaculture in Gloucester, Accomack and Northampton Counties. The original model considered basic physical and biological conditions necessary for aquaculture such as water depth, salinity, shellfish condemnation areas, and the presence of submerged aquatic vegetation. This new model includes the potential impacts from current land use by incorporating the local zoning that is adjacent to growing areas. Final products included a set of easy to understand maps and GIS shape files now available on the Virginia CZM Program’s “Coastal GEMS” site. Also in Year 1, VIMS developed a report summarizing potential management options for promoting shellfish aquaculture. Key among them was the concept of developing “aquaculture enterprise zones.”

With pervasive difficulty in the restoration of wild oysters, it became important to provide adequate opportunity for the production of cultivated shellfish. In response to the VIMS options report and the dire situation of wild shellfish, Delegate Albert Pollard (D – Lively) introduced legislation authorizing the Marine Resources Commission to establish aquaculture enterprise zones for the propagation of commercial shellfish. This law was fully enacted in March 2010. Under this law the Commission may set a single fee for the application and use of the zones.

In addition to the work above, the Virginia CZM Program reconvened the Oyster Heritage Program partners to resolve shellfish conflict issues on the lower Rappahannock River. Since the Baylor Grounds were surveyed and established in the late 1800’s the management of these areas has historically included harvest restrictions and the transplantation of shell and seed. Recent management efforts under the Oyster Heritage Program included the establishment of brood stock reefs and designation of adjacent harvest areas. Watermen began to argue arduously for the opening of those sanctuary areas to harvest. In response, the OHP partners developed a new management plan that incorporates a 3-year rotational harvest of 3 areas below the Route 3 bridge and 3 areas above the bridge. It also created a 4 inch maximum size limit on oysters and a buy-back program for those larger oysters so that they could be placed back on sanctuary reefs. The plan was adopted by the Marine Resources Commission and remains in effect. Part of the rationale for this plan was derived from the work completed in FY 2001 Task 92.04, Economic Analysis of Rappahannock Oyster Plan



Although this Section 309 strategy proposed identification of suitable areas within the Baylor grounds (as well as in “unassigned” subaqueous bottom), the conversion of public Baylor grounds to any other uses coastal zone-wide was deemed too politically charged. Thus the decision was made to test this concept in a smaller geographic area where support for shellfish cultivation was strong. The chosen area was the Seaside of Virginia’s Eastern Shore. So this