



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
Silver Spring, Maryland 20910

NOV 15 2012

Collin O'Mara, Secretary
Delaware Department of Natural Resources
and Environmental Control
89 Kings Highway
Dover, Delaware 19901

Dear Secretary O'Mara:

Enclosed are the final evaluation findings for the Delaware Coastal Management Program (DCMP) for the period from January 2006 to September 2011.

The fundamental conclusion of this evaluation is that the DCMP is adhering to its programmatic obligations as defined by its approved program document, the terms of federal financial assistance awards, and the Coastal Zone Management Act of 1972, as amended. This evaluation findings document contains numerous program accomplishments as well as a couple recommendations, none of which are mandatory.

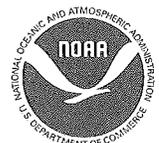
We greatly appreciate your cooperation and assistance, and that of your staff, during the accomplishment of this evaluation.

Sincerely,

Margaret A. Davidson
Acting Director

Enclosure

cc: Sarah Cooksey, Delaware Coastal Programs, DNREC
Robert Scarborough, Delaware Coastal Programs, DNREC
Diana Olinger, Coastal Programs Division, OCRM
Cathy Coletti, New Hampshire Coastal Program



Final Evaluation Findings

Delaware Coastal Management Program

January 2006 – September 2011

November 2012



Office of Ocean and Coastal Resource Management
National Ocean Service
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I. EXECUTIVE SUMMARY

Section 312 of the Coastal Zone Management Act of 1972, as amended (CZMA), requires the National Oceanic and Atmospheric Administration's (NOAA) Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally approved coastal management programs. This review examined the operation and management of the Delaware Coastal Management Program (DCMP) by the Delaware Department of Natural Resources and Environmental Control (DNREC), the designated lead agency, for the period from January 2006 to September 2011.

This document describes the evaluation findings of the Director of OCRM with respect to the DCMP during the review period. These evaluation findings include discussions of major accomplishments as well as recommendations for program improvement. This evaluation concludes that DNREC is successfully implementing and enforcing its federally approved coastal program, adhering to the terms of the Federal financial assistance awards, and addressing the coastal management needs identified in §303(2)(A) through (K) of the CZMA.

The evaluation team documented numerous DCMP accomplishments during this review period, not all of which could be captured in this document. Overall, OCRM finds that the DCMP is successfully addressing coastal management issues through coordination and collaboration with partners at local, state, regional and federal levels. In addition, the Coastal Program's thoughtful integration with the Delaware National Estuarine Research Reserve (DNERR) continues to allow the programs to provide seamless science-to-management support for current and emerging coastal issues. The DCMP demonstrated leadership in the development of policy direction for the State's Sea Level Rise Initiative and the advancement of the Mid-Atlantic Regional Council on the Ocean, as well as provided critical support to its local partners to help inform and advance coastal community resilience. The Coastal Program also improved the implementation of their federal consistency program by updating its enforceable policies and including interstate consistency provisions.

The evaluation team also identified a few areas where DCMP implementation could be strengthened. The new location for DCP within the Office of the Secretary appears to provide a higher profile for the DCMP and new opportunities for greater integration, collaboration, and support for and from other programs within DNREC. It was noted, however, that the DCP was unable to take advantage of some opportunities during the evaluation period (e.g., funding for a NOAA Coastal Services Center fellow) due to DNREC's concerns about identifying match. OCRM encourages the Department to undertake the review and characterization of funding sources as described by DNREC personnel, which would not only benefit the DCP but also other federally funded programs by helping to identify appropriate state match. In addition, while the evaluation team found that the DCMP has been successful in land acquisition through the Coastal and Estuarine Land Conservation Program (CELCP), OCRM noted that it is important for the Coastal Program to clarify the nexus with the State's Open Space Program and finalize the state CELCP Plan.

II. PROGRAM REVIEW PROCEDURES

A. OVERVIEW

The National Oceanic and Atmospheric Administration (NOAA) began its review of the Delaware Coastal Management Program (DCMP or Coastal Program) in July 2011. The §312 evaluation process involves four distinct components:

- An initial document review and identification of specific issues of particular concern;
- A site visit to Delaware, including interviews and a public meeting;
- Development of draft evaluation findings; and
- Preparation of the final evaluation findings, partly based on comments from the state regarding the content and timetables of recommendations specified in the draft document.

The recommendations made by this evaluation appear in boxes and bold type and follow the findings section where facts relevant to the recommendation are discussed. The recommendations may be of two types:

Necessary Actions address programmatic requirements of the CZMA's implementing regulations and of the DCMP approved by NOAA. These must be carried out by the date(s) specified;

Program Suggestions denote actions that NOAA's Office of Ocean and Coastal Resource Management (OCRM) believes would improve the program, but which are not mandatory at this time. If no dates are indicated, the state is expected to have considered these Program Suggestions by the time of the next CZMA §312 evaluation.

A complete summary of accomplishments and recommendations is outlined in Appendix A.

Failure to address Necessary Actions may result in a future finding of non-adherence and the invoking of interim sanctions, as specified in CZMA §312(c). Program Suggestions that are reiterated in consecutive evaluations to address continuing problems may be elevated to Necessary Actions. The findings in this evaluation document will be considered by NOAA in making future financial award decisions relative to the DCMP.

B. DOCUMENT REVIEW AND ISSUES DEVELOPMENT

The evaluation team reviewed a wide variety of documents prior to the site visit, including: (1) DCMP §312 evaluation findings dated 2006; (2) federally approved program documents; (3) financial assistance awards and work products; (4) semi-annual performance reports; (5) official correspondence; and (6) relevant publications and information on natural resource management issues in Delaware.

Based on this review and on discussions with OCRM, the evaluation team identified the following priority issues:

- major accomplishments during the review period;
- the effectiveness of the state in implementing, monitoring, and enforcing the core authorities that form the legal basis for the CMP;
- implementation of state and federal consistency authority;
- the manner in which the CMP is addressing coastal habitat protection, coastal hazards, water quality, public access and coastal dependent uses and community development;
- the manner in which the Coastal Program coordinates with other governmental and non-governmental organizations and programs in the state and region;
- status of CMP staffing and needs; and
- the manner in which the Coastal Program has addressed the recommendations contained in the §312 evaluation findings released in 2006. The DCMP's assessment of how it has responded to each of the recommendations in the evaluation findings dated 2006 is located in Appendix B.

C. SITE VISIT TO DELAWARE

Notification of the scheduled evaluation was sent to the Delaware Department of Natural Resources and Environmental Control (DNREC) and regional newspapers. In addition, a notice of NOAA's "Intent to Evaluate" was published in the Federal Register on August 3, 2011.

The site visit to the State was conducted concurrently with the site visit by a separate team evaluating the Delaware National Estuarine Research Reserve. Both the Coastal Management Program and the Reserve are parts of Delaware Coastal Programs within the DNREC Office of the Secretary. Both are well integrated with each other and partner with or provide support to many of the same state and local government agencies and non-governmental organizations. Therefore, for two days of the site visits, both evaluation teams met together with various partners, individuals, and groups.

The site visit to Delaware was conducted from September 19 – 22, 2011. The Coastal Program evaluation team consisted of Ms. Kim Penn, Evaluation Team Leader, National Policy and Evaluation Division, OCRM; Ms. Diana Olinger, Program Specialist, Coastal Programs Division, OCRM; and Ms. Cathy Coletti, Communications Director, New Hampshire Coastal Program.

During the site visit, the evaluation team met with Coastal Program staff, the Secretary and senior staff from DNREC, other state agency staff, local government staff and officials, and non-profit organizations. Appendix C lists people and institutions contacted during this review.

As required by the CZMA, NOAA held an advertised public meeting on Monday, September 19, 2011, at 6:00 p.m. at the Delaware Reserve's St. Jones Visitor Center, 818 Kitts Hummock Road, Dover, Delaware. This was a joint public meeting for the Delaware Coastal Management Program and Reserve. The public meeting gave members of the general public the opportunity to express

their opinions about the overall operation and management of the Coastal Program and Reserve. Appendix D lists individuals who registered at the meeting. NOAA's responses to written comments submitted during this evaluation are summarized in Appendix E.

The DCMP staff members were crucial in setting up meetings and arranging logistics for the evaluation site visit. Their support is most gratefully acknowledged.

III. COASTAL PROGRAM DESCRIPTION

Delaware's Coastal Management Program (DCMP or Coastal Program) was approved by NOAA in 1979. The Coastal Program's lead agency is the Department of Natural Resources and Environmental Control (DNREC), where it is administratively located in the Office of the Secretary.

Delaware has defined its Coastal Management Area as the entire state for the purposes of the federally approved coastal management program. Prior to the DCMP, however, the State promulgated the Delaware Coastal Zone Act (*7 Del. C.*, Chapter 70) in the early 1970s. This law also allows DNREC to regulate industry in the Coastal Strip of Delaware. The Coastal Strip, averaging four miles in width, is approximately any lands and waters east of State Routes 13, 113, and 1 (north-south corridors), and an area on the north and south of the Chesapeake and Delaware Canal. The Delaware Coastal Zone Act is incorporated into the DCMP.

As Delaware's coastal landscape continues to develop in a low-density and sprawling manner, the health of valuable natural resources, many of which sustain local economies, is increasingly at risk. Managing the demands for protecting critical habitat areas, providing recreational opportunities, allowing port access, and managing water resources is a complex and continuously changing challenge in Delaware.

The DCMP aims to preserve, protect, develop and enhance the state's coastal resources and resolve conflicts related to coastal zone issues. Specifically, the Delaware Coastal Management Program:

- Manages coastal resources through innovative research projects, education and grant programs, and policy development;
- Administers the Coastal Zone Federal Consistency Certification program;
- Provides special area management planning;
- Provides assistance to state and local governments for local land use planning;
- Offers other special on-the-ground projects related to Delaware's coastal resources; and
- Offers technical assistance to communities interested in restoring open space as natural habitat.

IV. REVIEW FINDINGS, ACCOMPLISHMENTS, AND RECOMMENDATIONS

A. OPERATIONS AND MANAGEMENT

The Delaware Coastal Management Program (DCMP) and Delaware National Estuarine Research Reserve (DNERR) together are known as the Delaware Coastal Programs (DCP). DCP is administratively located in Department of Natural Resources and Environmental Control's (DNREC's) Office of the Secretary. This location is new to the DCP, as the Secretary of DNREC reorganized the agency shortly after he was appointed in 2009. During the reorganization he retained the co-location of the two programs within a single office, but moved the DCP from the Division of Soil and Water Conservation into the Office of the Secretary.

Based upon input from several people with whom the evaluation team met and general observations by the team, it appears that the location within the Office of the Secretary provides a higher profile for the DCP and new opportunities for greater integration, collaboration, and support for and from other programs within DNREC.

The evaluation team also finds that co-location of the DCMP and DNERR within the Office of the Secretary continues to benefit the integration of coastal science, policy and management. Many examples of how the programs effectively support each other, and leverage their strengths and resources to amplify their impact across Delaware were observed during the site visit. Some of these efforts will be highlighted throughout these findings; one particularly good example of the DCP's development and application of science for management is the Delaware Bay Benthic Mapping Project.

The Delaware Bay Benthic Mapping Project (a benthic and sub-bottom imaging project) represents the integrated efforts of the Coastal Program, DNERR, and the University of Delaware to identify and map the benthic habitat and sub-bottom sediments of Delaware Bay and River. Three types of acoustical systems were used, and verification of the data was performed through the collection of grab and core samples and underwater video images. (Additional background information on this project can be found in the last Delaware evaluation findings.)

As of the time of the site visit, the project mapped 146 square miles of benthic oyster habitat and identified 40 oyster beds in the Delaware and New Jersey portions of Delaware Bay. Benthic and sub-bottom data have been used to identify sand borrow sites within the Bay for beach renourishment projects for three coastal communities and will help determine sand resources for an additional four coastal communities. These sand borrow sites were identified in areas that would minimize the impact upon essential fish habitat.

In addition, approximately 40 square miles of Atlantic sturgeon feeding and spawning habitat were mapped in the Delaware River. The data are being used by several entities to better understand the distribution of juvenile and adult sturgeon and to better manage research efforts within the estuary. Working with The Nature Conservancy, DCP is developing benthic habitat maps for the Delaware Estuary. The project has developed a habitat model and is now incorporating data from

Atlantic sturgeon and sand tiger sharks to determine the effectiveness of the model. This is the first benthic habitat model ever created for the Delaware Estuary. If funding and boat time are available, the project partners intend to finish mapping the Delaware state territorial waters in the lower Delaware Bay (approximately 85 square miles). If this mapping is completed, then 100% of Delaware state territorial waters in the Delaware Estuary will be mapped.

OCRM strongly supports keeping the DCMP and NERR as an integrated program, as they have clearly demonstrated the success of this arrangement. The co-location of the programs not only supports a strong partnership and leverages critical resources, but also allows for seamless transfer of science-based information to policy and management.

Accomplishment: The Delaware Coastal Management Program and Delaware National Estuarine Research Reserve are well integrated, and continue to demonstrate success in leveraging their individual strengths and resources to advance coastal management.

The evaluation team noted numerous accomplishments of the DCMP which are directly attributable to the Program's dedicated and knowledgeable staff. Staff demonstrate a keen understanding of current coastal issues, and of the opportunities for cooperative management of them. They continue to do an excellent job of engaging and collaborating with regional and local partners in coastal stewardship, and leading new initiatives to advance coastal management. Some of these efforts will be discussed in greater detail throughout the findings.

During the site visit, the evaluation team also learned that as part of the ongoing departmental reorganization, DNREC was planning to explore a new method for identifying match for federal funding sources. The Department plans to catalog all funding sources that are supporting programs, which of these sources require non-federal or state match, and what sources could provide that match. It was noted that DCP was unable to take advantage of supplemental NOAA support (e.g., that for a Coastal Services Center fellow) due to DNREC's concerns about identifying match. A review and characterization of funding sources such as that described would greatly benefit both DCMP and DNERR by helping to strategically identify appropriate match for federal funds.

Program Suggestion: OCRM encourages the Department of Natural Resources and Environmental Control to identify and compile the sources of funding that come to the Department and its programs, what sources require non-federal or state match, and what sources could provide that match.

B. PUBLIC ACCESS

In its recent §309 Assessment and Strategy (2011), the DCMP concluded that public access is a low priority area. While demand for public access in Delaware continues to be high (from the State's Comprehensive Outdoor Recreation Plan), the assessment found that the current degree of threats to public access are low (e.g., private residential development, encroachment on public land) to medium (e.g., erosion, sea level rise). In addition, how DCMP is addressing the latter

issues (erosion, sea level rise, discussed under Coastal Hazards) will also address some of the threat to public access.

The Coastal Program primarily addresses public access through land conservation and acquisition efforts. During this evaluation period, the Coastal Program also completed two regional public access guides. The guides cover northern Delaware and the coastal beach region, and provide details for public access sites including recreation options and amenities available.

OCRM finds that the DCMP is supporting public access to Delaware's coastal resources. The Coastal Program's efforts will continue to help ensure opportunities for recreational use of the water by residents and tourists alike.

C. COASTAL HABITAT

Delaware saw an overall 14% increase in its population in the last decade. With the pressures of development and changing land uses associated with such growth, Delaware is at risk of losing the natural landscapes that are important to its natural and cultural heritage as well as to its economic vitality. In addition, Delaware's coastal areas and natural resources are increasingly vulnerable to climate change impacts, most notably sea level rise. Habitat loss and fragmentation from these combined stressors are having significant effects on the State's native flora and fauna, highlighting the importance of properly managing growth and coastal habitat protection. The Coastal Program includes various enforceable policies dealing with wetlands, beach, and natural areas management, and has ranked wetlands management as a high priority in its 2011 §309 Assessment and Strategy.

During this evaluation period, the DCMP supported important initiatives that contribute to the protection and restoration of critical coastal habitats, including continuing coordination with DNREC's regulatory programs, and implementation of the Coastal and Estuarine Land Conservation Program and the Sustainable Communities Grant Program. It should be noted, however, that the DCMP also conducts and funds activities that contribute to coastal habitat protection that fall more generally under the categories of water quality, coastal hazards, and community development (discussed elsewhere in this document).

Delaware is able to access land acquisition funds through the Coastal and Estuarine Land Conservation Program (CELCP), established by Congress in 2002 to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical or aesthetic values. This program provides state and local governments with matching funds to purchase significant coastal and estuarine lands, or conservation easements on such lands, from willing sellers. Lands or conservation easements acquired with CELCP funds are protected in perpetuity so that they may be enjoyed by future generations. The program is coordinated at the state level through each state's CELCP lead within the state's lead coastal management agency. According to the CELCP guidelines, a state must have an approved CELCP plan in order to compete for funding.

DNREC is the designated lead agency for Delaware's CELCP, and the State currently has a draft CELCP Plan (2007) in place to guide the prioritization of coastal and estuarine land conservation

projects. The Delaware CELCP protects significant coastal and estuarine areas in a manner that improves biodiversity, inhibits habitat loss and degradation, protects against coastal hazards, and promotes passive, ecologically compatible public access to protected properties. Delaware received approximately \$7 million in federal CELCP funds during this evaluation period to fund three acquisition projects at Blackbird Creek.

The evaluation team was able to visit Blackbird Creek, and meet with a number of the partners engaged in these acquisitions. It was clear that DCMP staff have built good relationships with these partners and the local community, which has contributed to their acquisition success. The evaluation team also spoke with DNREC colleagues in the Open Space Program to learn more about how they work with the DCMP to identify match opportunities (cash or other properties) for CELCP properties. The Open Space Program oversees the protection (acquisition) of designated "State Resource Areas", which can include parks, fish and wildlife areas, forests, nature preserves and cultural sites. At the time of the site visit, it appeared that the criteria and ranking system that the Open Space Program and Open Space Council used to prioritize areas for acquisition was somewhat fluid, which meant that identifying match for CELCP properties tended to be more difficult and somewhat opportunistic. It is critical to the success of Delaware's CELCP that DNREC more clearly articulates how the two Programs can and will work together in the future. At the time of the site visit, Open Space Program staff indicated that they were in the process of reviewing the criteria and developing a more transparent ranking system for project identification and prioritization. DCMP should consider this information when finalizing their CELCP Plan, and clarify the role of the Open Space Program in providing match to CELCP acquisition projects in the future.

OCRM commends Delaware on its land acquisition efforts. Delaware's draft CELCP Plan meets the current requirement for participating in the national competition, however, it is anticipated that soon the requirement will be for final, approved plans. During the site visit, DCMP also expressed interest in revising their draft plan to include additional discussion of how climate impacts, particularly sea level rise, are affecting land acquisition priorities. OCRM encourages the DCMP to continue to work with NOAA to obtain final approval of its CELCP Plan, and supports the effort to consider climate impacts in the State's land acquisition planning.

Program Suggestion: OCRM encourages Delaware to finalize its Coastal and Estuarine Land Conservation Program Plan, which should include clarification on the role of the State's Open Space Program.

D. WATER QUALITY

One of the main objectives of the Coastal Zone Management Act (CZMA) is "the management of coastal development to improve, safeguard, and restore the quality of coastal waters, and to protect natural resources and existing uses of those waters" (Section 303(2)(C)). As such, the Coastal Nonpoint Pollution Control Program was established by Congress in 1990 (under Section 6217 of the Coastal Zone Act Reauthorization Amendments) to encourage better coordination between state coastal zone managers and water quality experts to reduce polluted runoff in the coastal zone.

Delaware's state Coastal Nonpoint Pollution Control Program was fully approved in 2002, and the DCMP continues to support programs including the Delaware Clean Marina Program. In addition, Delaware approved and released the Inland Bays Pollution Control Strategy in 2008, in order to reduce the amounts of nitrogen and phosphorus entering the Indian River, Indian River Bay, Rehoboth Bay, the Little Assawoman Bay, and their tributaries. Regulations were developed for the Strategy to comply with the Total Maximum Daily Loads (TMDLs) calculated for the waterbodies. New policies were developed based on the regulations, and incorporated into the comprehensive update of the DCMP for use in Federal Consistency.

OCRM finds that the DCMP continues to support the protection and improvement of coastal water quality through a variety of initiatives.

E. COASTAL HAZARDS

DCMP's most recent §309 Assessment and Strategy reports that coastal hazards and coastal resilience continue to be a high management priority. In response to continuing upward trends in coastal population growth and development, and impacts anticipated due to sea level rise, the DCMP has been focused on increasing knowledge on sea level rise in order to inform sound policies and regulations; improving communities' abilities to assess their vulnerability to coastal hazards; and building community resiliency through adaptation planning. During this evaluation period, DCMP's coastal hazards work was significant and included policy development, pilot projects with coastal towns, education and outreach, and technical support.

OCRM finds that the DCP has made great progress during this evaluation period in addressing the State's priority coastal hazards issues through numerous activities and initiatives, including but not limited to leadership in the State's Sea Level Rise Initiative and advancement of coastal community resilience. It should be noted that both DCMP and DNERR contributed to the success of these efforts, which are described in more detail below. The evaluation team has attempted to focus on DCMP contributions here.

1. Sea Level Rise Initiative

Delaware, like many coastal states, is beginning to prepare for the inevitable effects of sea level rise. Sea level rise (SLR) will affect coastal ecosystems, communities and economies. In Delaware, impacts will likely include: inundation of low lying areas, causing losses to tidal wetlands and wildlife habitat; higher water tables and salt water intrusion, interfering with the septic systems and drinking water; and increases in the effects of storm surge, flooding communities that may have never previously been susceptible.

In order to help assess, prepare for, and minimize the potential impacts of sea level rise, the Coastal Programs are leading a multi-year Sea Level Rise Initiative. The overall goal of the initiative is to reduce Delaware's vulnerability to the effects of sea level rise, and it includes:

- providing scientific and technical support for decision-making;
- implementing on-the-ground projects in partnership with stakeholders;
- providing educational and outreach opportunities for stakeholders and the public; and

- improving existing policies and management practices and/or developing new policies and management practices where necessary.

One initial accomplishment of the Sea Level Rise Initiative was the development of a sea level rise policy that will inform and guide decision-making within DNREC. This policy requires all Department programs to consider the effects of sea level rise and assess potential risks for projects and activities. DCP developed the policy with input from a technical workgroup comprised of scientists from DNREC, University of Delaware, Partnership for the Delaware Estuary and the Center for the Inland Bays. Tasked with providing the State with sea level rise scenarios up to the year 2100, the workgroup proposed the use of three planning scenarios for local sea level rise: 0.5, 1.0, and 1.5 meters. Using statewide LiDAR data and bathtub inundation modeling, GIS layers depicting these scenarios were developed and have been made available to all interested parties. The sea level rise policy was signed in January 2010 and was made effective that February. It is the intention of the DNREC SLR workgroup that these scenarios be reviewed and updated periodically as new information and federal guidelines become available.

DCP also developed a five-part seminar series for DNREC staff on the new SLR policy, with the goal of increasing program awareness and knowledge of risk assessments and tools that can be used to evaluate vulnerability. In addition, a comprehensive outreach strategy for the Initiative was developed in partnership with DNREC's Watershed Stewardship Division, the Delaware Estuary Program and Delaware Sea Grant. The goal is for all tools and data developed during the Initiative to be communicated to the public through websites, presentations, public events, articles and decision-maker workshops.

As part of the effort to develop the DNREC policy and a Statewide Sea Level Rise Adaptation Plan, the DCMP has been supporting a Sea Level Rise Advisory Committee comprised of representatives from each State Cabinet Department and representatives from municipal governments, business and citizen advocacy organizations. The evaluation team met with members from this very diverse committee, all of whom were extremely complimentary regarding DCMP staff's professionalism, responsiveness and efficiency. While not always sharing the same viewpoints as staff, the stakeholders clearly respected their knowledge and honesty, and consider them trusted partners in the effort. This Advisory Committee will ensure that the Adaptation Plan reflects a wide-range of possible strategies, to be useful to the breadth of stakeholders in the State. DCMP has outlined the next steps for the SLR Initiative in their 2011 §309 Assessment and Strategy. These include developing SLR inundation maps and continued work on the Statewide Sea Level Rise Adaptation Plan. OCRM encourages DCP in this important initiative to help Delaware prepare for the effects of sea level rise using the best science available.

OCRM commends the DCMP on its leadership role in Delaware's Sea Level Rise Initiative. The DCP has played a critical role in building the foundation for the State to be able to plan for sea level rise, including providing scientific and technical assistance, policy development, and education and outreach.

Accomplishment: The Delaware Coastal Management Program has played a central role in advancing Delaware’s Sea Level Rise Initiative. The Coastal Program has provided leadership and technical assistance to help guide the Initiative and encouraged and supported stakeholder engagement in it.

2. Coastal Community Resiliency

The DCMP is also working proactively with coastal communities to address coastal hazards by providing technical and financial assistance for vulnerability assessments and the development of coastal resiliency plans. The Coastal Program accomplishes this through their Sustainable Communities Grant Program (discussed further in the following section) and by working closely with DNERR. These efforts are designed to help coastal communities reduce coastal hazard vulnerabilities that currently exist, and that could potentially increase in severity in the future due to sea level rise. They also help to advance the SLR Initiative goal of “implementing on-the-ground projects in partnership with stakeholders”.

During this evaluation period, the DCP was focused on two pilot projects with communities that were interested in developing community-wide action plan to increase resiliency. The evaluation team had the opportunity to visit both the Town of Bowers Beach and the City of New Castle to meet with community leaders and partners, and learn more about these projects. The team was highly impressed by the impact DCP has had in the communities – building partnerships and capacity and increasing public knowledge of, and support for, building resilience. Community partners clearly valued their enthusiasm and engagement, knowledge, patience, and professionalism. They also noted staff’s willingness to, and skill at, leading *with* them.

- The Town of Bowers Beach is a small Bay front community in Kent County. Located between the St. Jones and the Murderkill River, it is known for both commercial and recreational fishing. The Town has been experiencing a number of coastal hazard impacts including flooding, coastal erosion and episodic storm damage. With projected levels of sea level rise, the Town will increasingly experience flooding of critical evacuation routes, the fire station, and homes during high tides. Assistance from the DCMP allowed Bowers Beach to complete an initial flooding and coastal hazards vulnerability assessment and to begin to develop mitigation strategies. Staff helped to bring together stakeholders including the Mayor, citizens and business owners, to educate and empower them to think about community resiliency and develop a vision and priorities. Improving water drainage after flood events was identified as a primary goal by a project steering committee, and so DCMP provided funding to help support an engineering study on the subject. The final report provided general recommendations and conceptual designs for the Town’s three highest priority areas. The Town will now be working to develop a community coastal resilience adaptation plan. The evaluation team was able to meet with representatives from Bowers Beach, who were grateful for the assistance and close working relationship the Town has had with the DCP. They indicated that the Coastal Programs staff engendered a great deal of trust within the local community and that having a single staff person as the Town’s point of contact has been an instrumental aspect of the project. This project has been embraced as “the model” for Bay Beach community resilience planning efforts.

- The City of New Castle, in New Castle County, is a historic community located adjacent to the Delaware River. The City is protected by four flood control dikes that were constructed over 300 years ago. Like many waterfront communities, New Castle is experiencing both development pressures and the effects of sea level rise, which are further exacerbating the issues of aging and improperly maintained flood control structures that are eroding on both the bay and marsh sides. These dikes, and the homes and infrastructure they protect, are becoming increasingly vulnerable to damage from coastal storms and future sea level rise. The DCMP worked with the City to conduct a vulnerability assessment (through which the dikes were identified as a primary issue) and form a multi-agency Dike Management Advisory Committee to evaluate the long-term flood control requirements of the City and develop a maintenance and management plan for the dikes. The DCMP supported an engineering study that identified specific areas of concern with each of the four dikes that if not addressed could increase the risk of flooding. The Advisory Committee used the study to prioritize next steps. It was evident that the DCMP's expertise in community processes and technical knowledge, in addition to the seed money from the grant, has been successful. Community leaders who met with the evaluation team described how, with the help of DCP, the engineering report, and an empowered community, they have been able to leverage millions of dollars to implement the entire plan. For example, because of this project: the City has built stronger partnerships with the County and Delaware Department of Transportation for dike maintenance; worked with the State to acquire land and a conservation easement; and successfully lobbied the State legislature to support a bond authorization bill to support some of the work.

OCRM finds that the DCMP is providing critical assistance to coastal communities, helping to better understand and prepare for impacts from coastal hazards. Through these projects, communities have also increased public awareness and built capacity and relationships with new partners, which will continue to provide long-term support for, and benefits to, community resilience.

Accomplishment: The Delaware Coastal Management Program is integral in building community resiliency in coastal Delaware. By providing both technical and financial assistance, the DCMP helps communities build local capacity and leverage additional resources to better prepare for coastal hazards and sea level rise.

G. COASTAL DEPENDENT USES AND COMMUNITY DEVELOPMENT

The DCMP supports coastal communities and coastal dependent uses in a variety of ways, some examples of which have been described throughout this document, such as: benthic mapping to identify key habitats for important fisheries; coastal resource protection; and support for community resilience planning. During this evaluation period, the Coastal Program has also continued to focused on providing technical and financial support to local governments through the Sustainable Communities Grant Program (discussed in the 2006 evaluation findings as well).

DCMP's Grant Program has provided assistance to enable local governments and decision makers to develop strategies and tools to assess the risks of, and plan for, coastal hazards and

development, and to mitigate the resulting impacts. The Program has included the following set of opportunities:

- *Coastal Management Assistance* - to improve sea level rise adaptation planning, increase coastal resiliency and reduce coastal hazard related impacts;
- *Natural Resource Management* - to enhance habitat and natural resource planning, management and protection; and
- *Community Open Space Technical Assistance* – to improve the ability of communities to restore, manage, and maintain large tracts of land as natural habitat to reduce the cumulative and secondary impacts of development.

Later during the evaluation period, however, the DCMP shifted the focus of the overall program slightly to better serve current coastal communities issues, which include the impacts related to coastal hazards and sea level rise. The grant program now includes the following focus areas:

- Preparation of local or regional plans aimed at reducing the impacts resulting from coastal hazards;
- Development of local ordinances that will incorporate coastal management issues and/or help minimize the impacts of coastal hazards;
- Assessment of risks and vulnerabilities to coastal hazards such as coastal storms and sea level rise of developed areas, infrastructure, or natural resources and habitat; and
- Design of innovative solutions (creative building, engineering, landscape, etc. design) to address coastal hazards that improve local resiliency.

Funding is awarded annually on a competitive basis. During this evaluation period, the DCMP awarded over 22 grants to local governments, community civic associations, maintenance corporations, Sea Grant, universities, nonprofits, and state agencies. As recommended in the last evaluation findings, the Program established a formal agreement process for both internal and external award recipients. The grants provide “seed money” and technical assistance for activities such as developing local ordinances that will help protect natural resources and habitat; developing environmental conservation design standards for inclusion in local comprehensive land use plans; completing natural resource and habitat assessments (including GIS mapping and analysis of natural resources); and implement habitat restoration and management projects.

The evaluation team met with a number of partners who received both technical and financial assistance during the evaluation period. Grantees provided examples that demonstrate how, with support from the DCMP, they have increased community engagement in coastal issues, improved community and ecosystem resilience, increased local government capacity, and leveraged additional resources. Two great examples were provided in the section above (E. Coastal Hazards). DCMP also increased its coordination with state and federal resource agencies during this evaluation period, e.g., DNREC Division of Fish & Wildlife, DNREC Division of Watershed Stewardship, Delaware Department of Agriculture’s Forest Service, Natural Resources Conservation Service, and US Fish & Wildlife Service.

The DCMP identifies specific staff members to provide technical assistance to successful applicants throughout the implementation of their projects. While certainly time consuming and

limiting, this technique has undoubtedly increased success rate of projects. Coastal Program staff are often *the* face of DNREC in communities, and they were praised for their attentiveness and willingness to listen, and ability to problem-solve and identify additional resources. Many partners remarked that by working in such a positive, collaborative way with communities, DCMP has both increased the visibility, and improved public perception, of DNREC.

The DCMP also completed its work on the South Wilmington Special Area Management Plan (SAMP, discussed in detail in the 2006 evaluation findings document) during this evaluation period. DCMP partners, the City of Wilmington and the Southbridge Coordination Group, have taken over the responsibility of implementing the results and recommendations of the SAMP. OCRM commends the DCMP on the successful transition and conclusion of this project.

OCRM finds that the DCMP supports coastal communities by providing critical technical and financial assistance to help plan for and manage coastal resources and support community development. It was evident that local partners greatly value the Coastal Program's involvement and expertise in community planning and development initiatives, and that even with limited resources, the program is making an impact. The evaluation team also acknowledges that the staff time commitment required to ensure success of many of these projects is high. OCRM commends DCMP on prioritizing this type of assistance to coastal communities, as it clearly provides an excellent return on investment.

H. GOVERNMENT COORDINATION AND DECISION-MAKING

OCRM finds that the DCMP successfully supports government coordination and coastal management decision-making in Delaware through a variety of activities. It appears that future administration of the Coastal Program within the Office of the Secretary will provide additional opportunities for the Program in policy and management coordination.

1. Federal Consistency

The CZMA's federal consistency provision (§307) is a primary incentive for states to participate in the national coastal zone management program. It is also a powerful tool that states use to manage coastal uses and resources and to facilitate cooperation and coordination with federal agencies. Effective administration of federal consistency assures that State agencies and citizens have a strong voice in Federal activities occurring in the State. The federal consistency provision requires that federal agency activities that have reasonably foreseeable effects on any resource in the coastal zone must be consistent to the maximum extent practicable with the enforceable policies of a state's coastal management program. In addition, non-federal applicants for federal licenses or permits and state agency and local government applications for federal funding must be fully consistent. Federal consistency reviews are the responsibility of the lead state agency that implements or coordinates the state's federally-approved coastal management program.

The DCMP implements the State's federal consistency provision, coordinating with the other State agencies whose policies are incorporated into the Program when necessary. Each year, staff review approximately 160 federal activities within the State, including federal licenses and

permits, direct federal actions, and federal assistance to state and local governments. The DCMP designates one staff person as the lead for consistency reviews. This person receives the applications, inputs preliminary information into the database and assigns to other DCP staff according to area of expertise. The assigned staff person decides if the applications are complete, inputs detailed information into the database and drafts the public notice (if applicable). Overwhelmingly, the projects requiring the most amount of staff review time are federal licenses and permits, particularly Army Corps of Engineers 404 and Section 10 Permits.

DCMP staff play an important role in federal consistency, helping to ensure that permitting agencies make sound, non-contradictory decisions. The majority of projects receive a consistency concurrence; often after making recommended changes to fully comply with the DCMP's policies. The evaluation team was able to meet with many consistency partners (including applicants, contractors, and other state agencies) who all praised DCMP staff for their availability to answer questions, knowledge, efficiency, coordination with other agencies, and the transparency of the process. Partners were also appreciative of the monthly Joint Permit Process meetings, which provide an opportunity for applicants to present their proposed project and work with DCMP staff on any potential issues in advance.

Given their demonstrated success in working with the Department's key partners, the DCMP has also increasingly taken the lead role for DNREC in coordinating comments and review of large-scale or more complicated projects. This includes review of dredging, transportation, and energy projects with the potential to create substantial impacts to natural resources, as well as Department responses to NEPA documents. One good example of the DCMP's skill at bringing partners to the table and working together to find solutions for permitting issues is the Rehoboth Beach ocean outfall project. DNREC worked with the Environmental Protection Agency and the City of Rehoboth to coordinate data collection and analysis in order to identify acceptable options for the outfall's location. There was a lot of public interest in the project given its nature, construction of a new outfall to discharge treated effluent, and the economy of the City of Rehoboth, which is reliant on tourism. The draft Environmental Impact Statement was released earlier in 2012. In addition, the evaluation team noted that DCMP's relationship with federal agencies is particularly strong, and one of the most collaborative individuals have observed (e.g., with the U.S. Army Corps of Engineers and the Bureau of Ocean Energy Management, Regulation and Enforcement). OCRM commends DCMP on fostering these relationships.

The DCMP also completed important efforts during this evaluation period that improved federal consistency implementation, including an update of the program document and development of a new database. The DCMP program update was major effort, through which the Program eliminated non-enforceable policies and included changes due to new State statutes, Department regulations and executive orders. This was the first update since August 2004, and resulted in a much more streamlined and accessible program document. The new document, Comprehensive Update and Routine Program Implementation, was published in 2011 and has become invaluable to partners. DCMP has also become one of the few coastal programs to establish an interstate federal consistency process. The approved list of activities subject to interstate consistency review was also published in the updated document, and provides an opportunity to better coordinate in advance regarding issues including off-shore alternative energy development and dredging in the

Delaware River. The document is clearly written and easy to use. OCRM commends DCMP on this major undertaking.

OCRM also encourages DCMP to continue to work with federal agencies and neighboring state coastal management programs to develop a process for interstate consistency reviews to help coordinate future large-scale projects such as those on the outer continental shelf. For example, it is evident that off-shore alternative energy development will be increasingly important to Delaware, and the region as a whole in the future, as demonstrated by the establishment of the Delaware Renewable Energy Taskforce and the current number of proposals to develop wind turbines offshore in both State and Federal waters. Development of this energy resource is seen as a way to stimulate the economy as well as meet alternative energy portfolio goals. The DCMP proactively included in its program update a modified list of federal licenses and permits under the Outer Continental Shelf Lands Act and Federal Power Act to include alternative energy projects and established geographic location description subject to review. Working with its Federal and state partners through federal consistency, the Coastal Program is uniquely situated to advise on and support the sustainable development of these resources.

During this evaluation period, DCMP also developed a new database for better tracking of federal consistency project impacts and performance measures. The database was designed to be accessible to networked partners within the Department, which has increased efficiencies as well as inter-agency coordination. The enhanced system is also able to generate necessary reports and public notices. DNREC plans to further expand the database to allow for inclusion of GIS information and scanned documents.

Accomplishment: The Delaware Coastal Management Program has made important improvements to its federal consistency implementation, including the completion of a comprehensive program update and inclusion of interstate consistency provisions, producing a revised and streamlined program document, and development of a tracking database.

2. Regional Collaboration for Ocean Resource Management

Regional collaborations focused on managing shared coastal and ocean resources can be extremely valuable to states in achieving their coastal management objectives. In the most recent §309 Assessment and Strategy, DCMP reports that ocean resource management continues to be a high management priority. One way that DCP is advancing ocean management is through leadership and engagement in the Mid-Atlantic Regional Council on the Ocean (MARCO) during this evaluation period. MARCO was created in 2009 by the Governors of New York, New Jersey, Delaware, Maryland and Virginia to provide a comprehensive, regional approach to sustain healthy and productive ocean ecosystems in the Mid-Atlantic.

The Governors' MARCO Agreement outlines the significance of the Mid-Atlantic region, guiding foundations of the agreement, and four priority issue areas. Subsequently a fifth priority issue, coastal and marine spatial planning, was added as a tool to help accomplish the other priorities. The five issues and goals are: coordinate protection of important habitats and sensitive unique offshore areas on a regional scale (Habitat Protection); collaborate on a regional approach to support the sustainable development of renewable energy in offshore areas (Offshore Renewable

Energy); prepare the region's coastal communities for the impacts of climate change on ocean and coastal resources (Climate Change); promote improvement in the region's coastal water quality (Water Quality); and build capacity for coastal and marine spatial planning (Coastal and Marine Spatial Planning). MARCO has set action items to address these priority issue areas.

The MARCO Council is composed of the five Mid-Atlantic Governors, and is supported by an Executive Committee (which includes state agency heads) and a Management Board (of state coastal program directors and senior policy advisors). The Management Board is led by an informal rotating state chair, which Delaware held at the time of the evaluation. In addition, there are five Action Teams which include staff with expertise in the four priority issue areas plus a team for coastal and marine spatial planning. Delaware has led both the Climate Change and Offshore Energy Action Teams. OCRM commends Delaware and DCP staff on their engagement and leadership in this important effort, which is improving regional coordination on critical coastal and ocean management issues on a number of levels. In addition to building relationships and capacity within the Mid-Atlantic region, MARCO's accomplishments during this evaluation period include:

- Developed and launched an online Mapping and Planning Portal that allows state, federal, and local decision-makers and the public to visualize, query, map, and analyze ocean and coastal data in the Mid-Atlantic region. The Portal will help advance the objectives of the Habitat Protection, Offshore Renewable Energy, and Coastal and Marine Spatial Planning Action Teams;
- Completed a comprehensive review of existing high resolution elevation data (LiDAR) that is needed in order to create regional sea level rise inundation maps; and
- Funded and released a Climate Change and Sea Level Rise Information Exchange White Paper.

MARCO has built partnerships with numerous regional organizations and federal agencies and has engaged members from these entities in its Action Teams. In addition, MARCO sponsored a Mid-Atlantic Ocean Stakeholder Conference to gather input on the effort. Because the DCP often represents MARCO nationally, these activities have helped to raise the visibility of the Coastal Program and its initiatives with new audiences. For example, DCP's leadership responsibilities in MARCO have necessitated increased interaction with Delaware's gubernatorial staff and State legislators, as well as those of neighboring states, thus increasing their awareness of both MARCO and the Coastal Program. OCRM commends Delaware and the DCP on their leadership in MARCO.

Accomplishment: Delaware and the Delaware Coastal Management Program have been leaders in the development of the Mid-Atlantic Regional Council on the Ocean. Through this effort, the DCMP has built strong new partnerships and accomplished a number of initiatives, advancing coastal management not only in the state, but also across the region.

Each MARCO state has devoted significant time and resources to advancing the priority issue areas. For example, MARCO holds weekly conference calls and gathers regularly throughout the year for Management Board meetings. Exclusive of staff time, the states have also dedicated approximately \$300,000 to the formation of MARCO and implementation of initial actions. The evaluation team recognized that the DCMP, as well as other state coastal programs, might require additional support to effectively participate in cross-boundary coordination and management of

regional resources. Sustained involvement in regional partnerships, especially in the types of leadership roles that the DCMP often occupies, can either enhance or come at a cost to state-specific priorities. The evaluation team did not note this as an issue right now, but as MARCO efforts continue to grow, OCRM encourages the DCMP to think strategically about how to best balance state and regional initiatives. OCRM will work with the DCMP to identify leveraging opportunities that may arise from this new structure.

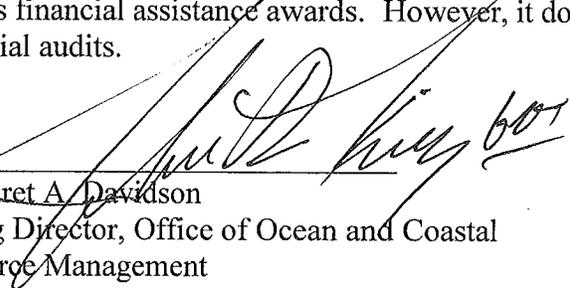
V. CONCLUSION

For the reasons stated herein, I find that the State of Delaware is adhering to the programmatic requirements of the Coastal Zone Management Act and its implementing regulations in the operation of its approved DCMP.

The DCMP has demonstrated many accomplishments, and made notable progress in the following areas: ensuring that coastal management decisions are based on best available science; providing leadership regarding policy issues such as sea level rise adaptation and offshore alternative energy; advancing resilience to coastal hazards and sea level rise at local to regional levels; supporting coastal community development; and improving implementation of their federal consistency program.

These evaluation findings also contain two Program Suggestions. Program Suggestions should be addressed before the next regularly-scheduled program evaluation, but they are not mandatory at this time. Summary tables of program accomplishments and recommendations are provided in Appendix A.

This is a programmatic evaluation of the DCMP which may have implications regarding the State's financial assistance awards. However, it does not make any judgment about or replace any financial audits.


Margaret A. Davidson
Acting Director, Office of Ocean and Coastal
Resource Management

11/15/12
Date

VI. APPENDICES

APPENDIX A: SUMMARY OF ACCOMPLISHMENTS AND RECOMMENDATIONS

Accomplishments

Issue Area	Accomplishment
Operations and Management	The Delaware Coastal Management Program and Delaware National Estuarine Research Reserve are well integrated, and continue to demonstrate success in leveraging their individual strengths and resources to advance coastal management.
Coastal Hazards	The Delaware Coastal Management Program has played a central role in advancing Delaware's Sea Level Rise Initiative. The Coastal Program has provided leadership and technical assistance to help guide the Initiative and encouraged and supported stakeholder engagement in it.
Coastal Hazards	The Delaware Coastal Management Program is integral in building community resiliency in coastal Delaware. By providing both technical and financial assistance, the DCMP helps communities build local capacity and leverage additional resources to better prepare for coastal hazards and sea level rise.
Government Coordination and Decision-Making	The Delaware Coastal Management Program has made important improvements to its federal consistency implementation, including the completion of a comprehensive program update and inclusion of interstate consistency provisions, producing a revised and streamlined program document, and development of a tracking database.
Government Coordination and Decision-Making	Delaware and the Delaware Coastal Management Program have been leaders in the development of the Mid-Atlantic Regional Council on the Ocean. Through this effort, the DCMP has built strong new partnerships and accomplished a number of initiatives, advancing coastal management not only in the state, but also across the region.

Recommendations

All recommendations are in the form of Program Suggestions.

Issue Area	Recommendation
Operations and Management	OCRM encourages the Department of Natural Resources and Environmental Control to identify and compile the sources of funding that come to the Department and its programs, what sources require non-federal or state match, and what sources could provide that match.
Coastal Habitat	OCRM encourages Delaware to finalize its Coastal and Estuarine Land Conservation Program Plan, which should include clarification on the role of the State's Open Space Program.

APPENDIX B. DCMP'S RESPONSE TO 2006 EVALUATION FINDINGS

Program Suggestion: OCRM encourages Delaware Coastal Programs to develop a strategy to disseminate information obtained from benthic mapping project to coastal managers and decision makers so that it can be used for coastal management applications, as well as policy updates.

Response: The Delaware Coastal Programs exports the data into a file package that is updated with the new data each season. This information is then transferred to anyone that requests it. As we near the completion of the mapping of the entire Bay, efforts are underway to have the final product distributed through the NOAA CSC digital coast data viewer. It will also be added to DNREC GIS drives, and offered to the Delaware Datamil for distribution.

Program Suggestion: OCRM is encouraged by the conversion of five contract positions to state merit positions, but strongly encourages the Delaware Coastal Programs to continue to pursue opportunities to increase state funding for Program positions. This will ultimately enhance the Delaware Coastal Programs' ability to invest federal resources to address priority coastal management issues for the state.

Response: The DCMP have continued to seek State funding support. In 2010, the Coastal programs secured \$100 K in non federal funds from the DNREC penalty account to provide match for the DCP pass through grant program. In 2011, the DCP had a State general fund position associated with the Delaware Estuary Program transferred into the DCP.

Program Suggestion: OCRM encourages the DCMP to establish an application and performance review process for projects supported internally to DNREC. The DCMP has established an excellent grants program for recipients external to DNREC and should consider it a model for developing a similar process for DNREC recipients.

Response: The DCMP developed a performance review program for internal projects. All internal projects now require formal agreements, mandatory and timely reporting, and sign off of the distribution of funds by the DCP manager. Internal grants are now treated identically to grants to entities external to the Department.

APPENDIX C. PERSONS AND INSTITUTIONS CONTACTED

Delaware Department of Natural Resources and Environmental Control (DNREC)

Collin O'Mara, Secretary

Sarah Cooksey, Administrator, Delaware Coastal Programs

Dave Carter, Manager, Delaware Coastal Programs

Tricia Arndt, Delaware Coastal Programs

Bonnie Arvay, Delaware Coastal Programs

Pat Hoffman, Delaware Coastal Programs

Brian Kelly, Delaware Coastal Programs

John Kennel, Delaware Coastal Programs

Susan Love, Delaware Coastal Programs

Drexel Siok, Delaware Coastal Programs

Kenny Smith, Delaware Coastal Programs

Mark Wolanski, Delaware Coastal Programs

Bartholomew Wilson, Delaware Coastal Programs

Carl Yetter, Delaware Coastal Programs

Laura Miller, Division of Water

Stewart Michels, Division of Watershed Stewardship

Lara Allison, Division of Watershed Stewardship

Sara Wozniak, Division of Watershed Stewardship

David Twing, Division of Watershed Stewardship

Maria Sadler, Division of Watershed Stewardship

Dan Brower, Division of Watershed Stewardship

Matt DiBona, Division of Fish and Wildlife

Gary Creamer, Division of Fish and Wildlife

Craig Rhoades, Division of Fish and Wildlife

Wayne Lehman, Division of Fish and Wildlife

Edna Stetzar, Division of Fish and Wildlife

Shelly Tovell, Division of Fish and Wildlife

Ray Bivens, Division of Parks and Recreation

Ron Vickers, Division of Parks and Recreation

Brian Leahy, Office of the Secretary, Financial Services

Rebecca Zink, Office of the Secretary, Financial Services

Brenda DeLong, Office of the Secretary, Financial Services

Kim Cole, Delaware National Estuarine Research Reserve

Jennifer Holmes, Delaware National Estuarine Research Reserve

Dr. Bob Scarborough, Delaware National Estuarine Research Reserve

Kelly Valencik, Delaware National Estuarine Research Reserve

Charles Bishop, Delaware National Estuarine Research Reserve

Wes Conley, Delaware National Estuarine Research Reserve

Kate Marvel, Delaware National Estuarine Research Reserve

Mike Mensinger, Delaware National Estuarine Research Reserve

State and Federal Agency Representatives

Michael Kirkpatrick, Delaware Department of Transportation

Kurt Reuther, Delaware Department of Safety and Homeland Security
Marcia Fox, Delaware Department of Agriculture, Forestry Service, Delaware Invasive Species Council
Cathy Martin, Delaware Invasive Species Council
Syd Swann, Delaware Government Information Center
Dr. Tom McKenna, Delaware Geological Survey
Gloria Henry, Delaware Department of State
Steve Allen, US Army Corps of Engineers
Ed Bonner, US Army Corps of Engineers
Michelle Morin, Bureau of Ocean Energy Management, Regulation and Enforcement
Jean Thurston, Bureau of Ocean Energy Management, Regulation and Enforcement
Charlie Meyers, US Army Corps of Engineers
Michael Stroch, US Fish and Wildlife Service
Susan Guiteras, US Fish and Wildlife Service

Local Government Representatives

Karl Kalbacher, New Castle County
Ron Hunsicker, Mayor, Town of Bowers Beach

Academic/Educational Representatives

Dr. Nancy Targett, University of Delaware/Delaware Sea Grant
Kevin Brinson, University of Delaware
Dr. John Madsen, University of Delaware
Dr. Michael O'Neal, University of Delaware
Stephanie Stotts, University of Delaware
Dr. Richard Chapas, University of Delaware, Experimental Program to Stimulate Competitive Research (EPSCoR)
Amy Broadhurst, EPSCoR
Jeanette Miller, EPSCoR

Other Organizations and Individuals

Dr. Evelyn Maumeyer, Coastal & Estuarine Research, Inc.
Andy Manus, The Nature Conservancy
Cathie Thomas, City Administrator, City of New Castle
Dave Carpenter, New Castle County Emergency Response
Dennis Coker, Lenapi Tribe of Delaware
Rich Collins, Positive Growth Alliance
Dr. Chad Tolman, Delaware League of Women Voters
John Taylor, Delaware Chamber of Commerce
Jennifer Adkins, Partnership for the Delaware Estuary
Dr. Danielle Kreeger, Partnership for the Delaware Estuary
Lisa Wool, Partnership for the Delaware Estuary
Ed Lewandowski, Center for the Inland Bays
Sally Boswell, Center for the Inland Bays
Jim Martin, Town of Bowers Beach
Bill Swiatek, Wilmington Area Planning Council

APPENDIX D: PERSONS ATTENDING THE PUBLIC MEETING

The public meeting was held on Monday, September 19, 2011, at 6:00 p.m. at the Delaware Reserve's St. Jones Visitor Center, 818 Kitts Hummock Road, Dover, Delaware. This was a joint public meeting for the Delaware Reserve and the Delaware Coastal Management Program. The following people signed in at the meeting:

Jim Bailey, Broadkill Beach Preservation Association
Mary Burke, Kitts Hummock resident
Barbara Cooney, Kitts Hummock resident
Carol Costello, Kitts Hummock resident
Michael Costello, Kitts Hummock resident
James Keating, Kitts Hummock resident
Jim Kirkbride, Pickering Beach property owner
Nancy Lawson, Pickering Beach property owner
Cheryl Lord, Kitts Hummock resident
Frank Lord, Kitts Hummock resident
Jim Martin, Bowers Beach property owner
James Sullivan, DNREC, Division of Watershed Stewardship
Dorothy Welliver, Pickering Beach property owner

APPENDIX E: OCRM'S RESPONSE TO WRITTEN COMMENTS

OCRM received one set of written comments regarding the Delaware Coastal Management Program. Comments are summarized below and followed by OCRM's response.

Kit Carson

Kitts Hummock property owner

Comment: Kit Carson wrote that Kitts Hummock is a historic beachfront community and not a poorly thought-out new development. He hopes it will be treated fairly in terms of sand replenishment and protection from sea level changes.

OCRM's Response: The evaluation team thanks Kit Carson for the comments. However, the Delaware Coastal Management Program (DCMP) is not responsible for sand replenishment as protection from sea level change. Kitts Hummock might consider working with the DCMP to assess its vulnerability to sea level rise and other coastal hazards.