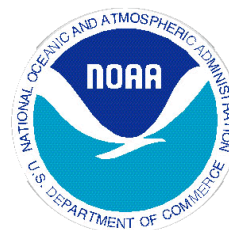


State of Delaware Coastal and Estuarine Land Conservation Program Plan

2014



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List of Acronyms

AON	Assessment of Need
CELCP	Coastal and Estuarine Land Conservation Program
CZMA	Coastal Zone Management Act
DCP	Delaware Coastal Programs
DDA	Delaware Department of Agriculture
DE CELCP	Delaware Coastal and Estuarine Land Conservation Program
DHCA	Delaware Division of Historical and Cultural Affairs
DNERR	Delaware National Estuarine Research Reserve
DNREC	Department of Natural Resources and Environmental Control
DNS	Delaware Nature Society
DU	Ducks Unlimited
DWL	Delaware Wild Lands
HCC	Habitat of Conservation Concern
NERR	National Estuarine Research Reserve
NOAA	National Oceanic and Atmospheric Administration
SGCN	Species of Greatest Conservation Need
SRA	State Resource Areas
TNC	The Nature Conservancy

I. Introduction

The National Coastal and Estuarine Land Conservation Program

The United States' Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act of 2002 (Public Law 107-77), which was re-authorized in 2009 under the Omnibus Public Land Management Act (Public Law 111-11), tasked the Secretary of Commerce with establishing the Coastal and Estuarine Land Conservation Program (CELCP) as part of the National Ocean and Atmospheric Administration (NOAA). CELCP provides matching funds to state and local governments for "protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses."

The intent of the CELCP is to further the goals and priorities of the Coastal Zone Management Act (CZMA) which include:

- Protection of coastal ecosystems, including wetlands, corals, and natural shorelines
- Preservation of natural features that provide storm protection such as dunes and barrier islands
- Minimizing the loss of life and property by directing development out of high risk areas
- Safeguarding coastal water quality
- Preservation of historic, cultural, and archeological features
- Protection of aesthetic coastal features such as scenic vistas
- Providing opportunities for public access to the coast

NOAA administers the CELCP and established guidelines for a nationally competitive grant program that includes eligibility requirements and project selection criteria. Final guidelines appeared in the Federal Register of June 17, 2003. Updates to the guidelines, such as to reflect the 2009 reauthorization, will also be published in the Federal Register.

The Delaware Coastal and Estuarine Land Conservation Program Plan

The Delaware Coastal and Estuarine Land Conservation Program (DE CELCP) Plan was developed in cooperation with existing land protection efforts in the coastal region to allow the state to participate in the national program as administered by NOAA. The DE CELCP Plan identifies conservation focus areas for land acquisition that tailors the national program to the state's coastal conservation needs. Delaware's Plan also gives clear guidance for the nomination and selection of land conservation projects within the state.

This plan was developed through a process of interagency coordination and public involvement. The Delaware Coastal Programs (DCP) coordinated and hosted two public meetings in 2007 to explain the CELCP and the plan development process. Participants received an overview of the program, legislative history and were invited to provide comments. All state government organizations that are authorized to acquire land or interests therein were provided information about CELCP and were invited to participate in the plan development process. The following groups were contacted and offered the opportunity to be directly involved in the development of this plan:

- Delaware Department of Natural Resources and Environmental Control
 - Division of Soil and Water Conservation
 - Division of Parks and Recreation

- Division of Fish and Wildlife
 - Green Infrastructure Committee
- Delaware Department of State
 - Division of Historical and Cultural Affairs
- Delaware Department of Agriculture
 - Farmland Preservation
 - Delaware Forest Service
- Kent County
 - Land Use Planning Office
 - Department of Parks and Recreation
- New Castle County
- Sussex County
- Delaware Wild Lands
- St. Jones Greenway Commission
- Sussex County Land Trust
- The Nature Conservancy
- The Conservation Fund
- Trust for Public Land

In December 2007, DCP staff forwarded a draft DE CELCP Plan to NOAA for review. NOAA responded with comments that have been incorporated in the most recent update to the DE CELCP Plan. Additional meetings and outreach with partner agencies occurred through the update to the most current plan to ensure that the Focus Areas and the Project Areas of the DE CELCP Plan are consistent with each organization’s goals and objectives and to receive any pertinent feedback.

Interagency coordination will continue throughout the remainder of the development and implementation of Delaware’s CELCP Plan. State agencies, including DCP and the Delaware National Estuarine Research Reserve, will be directly involved in establishing land acquisition priorities, selection of projects, and ensuring all NOAA CELCP guidelines are administered.

II. Geographic Extent of Delaware’s Coastal and Estuarine Areas

Delaware has roughly 28 linear miles of ocean shoreline and approximately 381 miles of tidal estuarine, bay shoreline, and coastal shoreline, including the tributaries into the Chesapeake Bay in the western part of the state. Delaware’s location at the northern end of the Delmarva Peninsula, flanked by the Delaware Bay to the east and the Chesapeake Bay to the west, results in no location in the state being more than twelve miles from tidally influenced waters. Considering Delaware’s relatively small area (1948 sq. mi. (U.S. Census Bureau 2013)) and its location, all three counties (New Castle, Kent, and Sussex) have been federally designated as coastal by the Coastal Zone Management Act. The State of Delaware has additionally designated a “coastal strip” which receives special zoning protection from industrial development through the Delaware Coastal Zone Act of 1971 (7 Del.C.70). The coastal strip averages four miles in width and follows the Delaware Bay shoreline as shown in Figure 1.

Delaware has selected the federally designated coastal zone boundary through the Coastal Zone Management Act, which encompasses all three counties, as the state’s CELCP boundary.

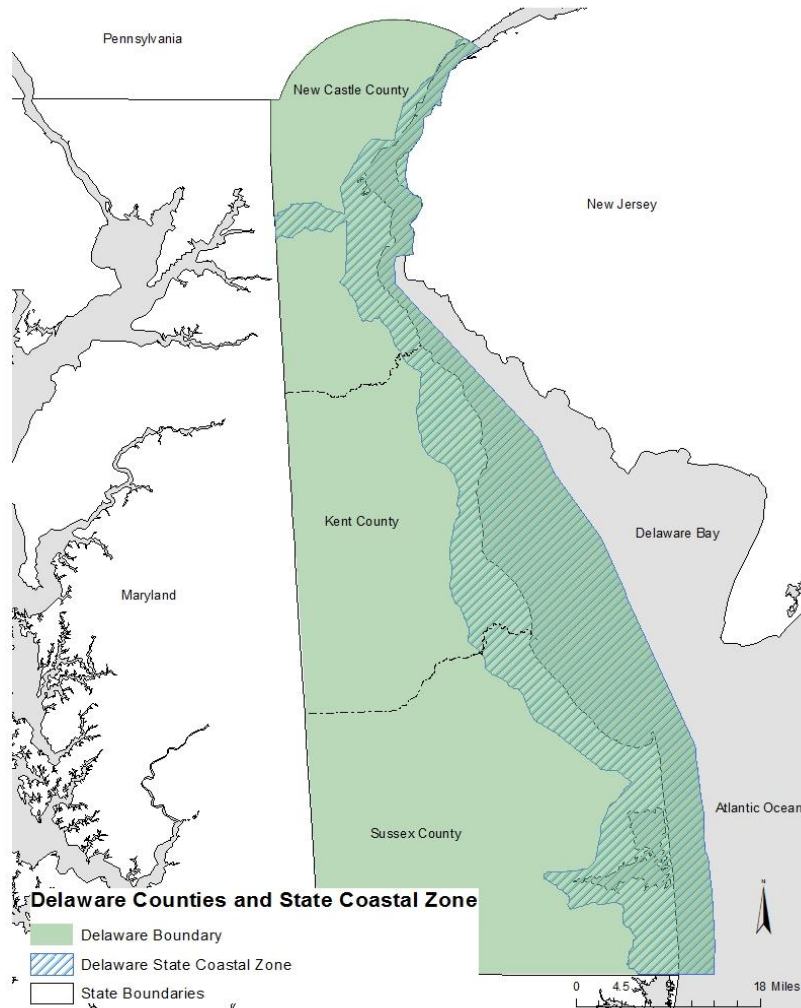


Figure 1. Delaware Coastal Boundary (Coastal Counties) and Coastal Strip (designated by Delaware Coastal Zone Act).

III. Coastal and Estuarine Land Conservation Focus Areas

The national CELCP was established by congress to protect important coastal and estuarine areas that have significant conservation, ecological, recreation, historical, or aesthetic values. Priority is given to those lands that can be effectively managed and that will maintain significant ecological values.

Delaware CELCP Plan's additional conservation focus augments the national areas by addressing one of the greatest threats to identified significant ecological and cultural resources in the state: sea level rise. Delaware's location and topography render it particularly vulnerable to sea level rise from both the effects of climate change as well as land subsidence (DNREC 2013). Sea level rise trends for Delaware are almost twice the global average based on long term data collected from the NOAA Lewes tide gauge, rising by 0.13 inches per year compared to the eustatic sea level rise of 0.07 inches per year (DNREC 2013).

Need for Conservation of Focus Areas

The types of lands discussed below are valued as part of the larger coastal plain ecosystem and the need for their conservation through acquisition is great. In Delaware, land is often valued highest for its development potential, rather than for its role in ecosystem maintenance and function. The DE CELCP Plan has several focus areas of conservation. These areas include any of the coastal and estuarine lands that protect and enhance ecosystem values and protect the state's unique historic and cultural heritage. In addition, any areas that aid in adaptation measures to accommodate for sea level rise while creating research opportunities to better understand coastal resiliency to rising sea levels are also a focus.

In Delaware, the coastal zone provides critical habitat for many wildlife, fisheries and plant species, while also providing recreational opportunities, port access, and water resources critical to the State's economy (DNERR 2013). As the lands considered most suitable for development are converted, the ensuing pressure to develop will extend further into fringe areas. The critical functions of these natural coastal ecosystems which include high order streams, forests, and tidal and non-tidal wetlands, will be critically threatened.

Delaware is the sixth most densely populated state in the United States (NAUS 2013) and the coastal and estuarine areas are most vulnerable to impacts associated with increased coastal population (DNERR 2013). Increases in residential and commercial development result in secondary and cumulative impacts. These impacts include increased storm water runoff from developed lands, increased sewage, trash, and greenhouse gas emissions all which adversely impact environmentally important areas. The Delaware Population Consortium (2012) projects Delaware's population to increase 22% by 2040. This trend threatens the very resources that draw people to the state. Increased populations threaten ecological processes and functions by direct impacts associated with land conversion and habitat fragmentation, and indirect impacts associated with non-point source pollution. Because of this demographic migration, degradation of the state's coastal ecosystems is occurring at an accelerated pace, making the protection of sensitive and poorly represented natural environments even more important.

Delaware's shoreline is also impacted by coastal storms that bring strong winds and flooding. These storms cause severe coastal damage to property and infrastructure, along with beach erosion. While periodic beach nourishment efforts are utilized to help maintain the dune system, the protection of coastal wetlands is also needed. Coastal tidal and non-tidal wetlands provide important protection from flood and storm damage by absorbing stormwater runoff and buffering a storm's energy while also reducing storm related erosion; making protection of these habitats a focus area in the DE CELCP.

The need for Delaware to maintain land acquisition programs such as the DE CELCP is vital to protecting Delaware's important natural resources. This plan allows Delaware to invest in a coastal land conservation program which provides the state with a thoughtful process to ensure lands critical to the maintenance of natural coastal systems and processes are protected into the future. Additionally, the DE CELCP is able to provide protections for lands that can increase the coastal resiliency of both the ecosystems and citizens of the state.

The conservation focus areas for the DE CELCP Plan have been developed congruently with other statewide land preservation and conservation goals to emphasize the protection and preservation of habitats and historical or culturally significant lands that have been identified as being the most vulnerable to sea level rise. Focusing on these areas for protection and conservation through the DE CELCP Plan will further ensure the protection of coastal ecosystems, the preservation of Delaware's

natural features that provide storm protection, and the protection, and at times enhancement of, coastal water quality. Focusing on these areas will also help maintain the way of life for many Delaware citizens by continuing to provide recreational opportunities, protecting significant historical areas, as well as conserving the aesthetic values for which the state is known.

Habitats

Specific habitat types used to determine focus areas are outlined in the Delaware Wildlife Action Plan as Habitats of Conservation Concern (HCC). HCCs are habitats that contain one or more of the following characteristics: are rare in Delaware; have special significance in Delaware; are particularly sensitive to disturbance; and/or have a high diversity of rare plants (DNREC 2006). These habitats are the ones most likely to provide suitable conditions for Delaware's species of greatest conservation need; species that are indicative of the overall health of the state's wildlife resources (DNREC 2006). The habitat focus areas derived from the Delaware Wildlife Action Plan are:

Tidal and Non-tidal Wetland Habitats

Delaware is estimated to have lost over 50% of its wetlands since the arrival of European colonists (DNREC 2006). The majority of these were freshwater wetlands that were lost due to ditching, stream channelization, conversion to ponds and filling for development. The wetlands also have long been subject to incremental degradation arising from incompatible land use practices upslope, often magnified by the frequent loss of adjacent buffers.

Extensive tidal marshes are a characteristic feature of the Delaware Estuary, providing habitat for waterfowl, fish and other wildlife. These marshes also provide many other ecosystem services to the region. As sea levels rise and salinity regimes change in the estuary, tidal marshes may be the most impacted by changing environments. The protection and conservation of these habitats and/or the restoration of degraded tidal marshes is important for a variety of species, particularly for overwintering waterfowl species that have become dependent on the tidal marshes of the Delaware Bay (TNC et al. 2011).

Tidal marshes are able to respond to sea level rise in two ways. They can accrete inorganic and organic sediment, thereby increasing elevation to keep pace with sea level rise, or they can migrate inland over natural lands. For tidal marshes to successfully migrate they need to be adjacent to gently sloping land with minimal elevation change. Additionally, these areas need a buffer area to migrate into, though, in Delaware, a majority of these marshes lack all of the necessary attributes to successfully adapt to sea level rise. The protection and conservation of suitable lands adjacent to tidal marshes and wise management of these lands can allow for the migration of tidal marshes inland.

Currently, tidal marshes and non-tidal wetlands in Delaware are provided certain regulatory protections from permanent, direct, man-made impacts, but continue to be threatened by sea level rise, ripping, bulk heading and indirect impacts from developments and associated infrastructure.

Specific wetland HCCs that are most threatened and/or vulnerable to sea level rise are:

- Freshwater Tidal Forested and Scrub-shrub Wetlands
 - Atlantic White Cedar – Red Maple – Pumpkin Ash Freshwater Tidal Swamp
 - Red Maple – Ash Tidal Swamp
 - Smooth Alder – Silky Dogwood Shrub Swamp

- Freshwater Tidal Marshes
 - Mixed Broadleaf Freshwater Tidal Marsh
 - Sea Level Fen
 - Freshwater Intertidal Quillwort Flat
- Saltwater and Brackish Tidal Marshes
- Tidal High Marshes
 - Spartina High Salt Marsh
 - Bishop-weed – Mixed Species Brackish Marsh
- Tidal Low Marshes
 - Spartina Low Salt Marsh
 - Unvegetated Intertidal Mudflat

Uplands Adjacent to Key Riparian Resources

Coastal plain upland forest

Coastal plain upland forests vary from mixed deciduous types – mostly oaks and hickories – in central Delaware, to pure stands of loblolly pine in the south (DNREC 2006). Likewise, vegetation on the forest floor may range from sparse heaths on dry sites to impenetrable thickets of sweet pepperbush in moist areas. Coastal plain upland forests, like all upland forest types in Delaware, continue on a projected long-term, severe decline. Reductions in total acreage of coastal plain upland forests in Delaware are negatively affecting sensitive wildlife species (Weber 2007). Bird species are particularly vulnerable to fragmentation because it reduces the amount of interior habitat that is important to these sensitive species (DNREC 2006, Weber 2007).

Compared to some other key habitats, relatively little upland forest has been protected through conservation ownership and minimal regulatory protection exists (DNREC 2006). Forested headwaters play a critical role in maintaining water quality within a watershed as well as the health of tidal marshes downstream, making them a conservation priority in Delaware (The Nature Conservancy et. al. 2011).

Specific coastal plain upland forests of HCCs that are most threatened and/or vulnerable to sea level rise are:

- Chestnut Oak – Hairgrass Forest
- Tuliptree Rich Wood (Coastal Plain variant)
- Ancient Sand Ridge Forest

Early successional upland habitats

Early successional upland habitats in Delaware historically resulted from the abandonment of agricultural fields, pastures or other cleared land that were once common land practices throughout Delaware's past (Weber 2007). In recent decades, these habitats have decreased in acreage due to more intensive farming practices, from natural succession on abandoned agricultural lands and increased residential development (DNREC 2006). However, certain lands are currently being managed for early successional habitats through the reduction of tillage on agricultural fields and through disturbance methods (mowing, grazing, or burning) which benefit wildlife habitat (DNREC 2006).

Maintaining and managing early successional habitats, especially where they surround headwater or riverine wetlands, is a priority for conservation since they accommodate the natural migration of adjacent marshes from sea level rise (TNC et al. 2011). Protecting and managing early successional

habitats can help both conserve aquatic resources as well as the wildlife habitats that are decreasing throughout the state.

Early successional HCCs most threatened and/or vulnerable to sea level rise are:

- Herbaceous Early Successional Upland Habitats
- Shrub/Brush Early Successional Upland Habitats

Beach and dune habitats

The most iconic coastal habitats in Delaware are the beach and dune areas along the Atlantic and Delaware Bay shores. These habitats are adapted to the dynamic conditions that come with being close to the water, where shifting sand, strong winds and salt spray have created unique habitats that support a variety of ecological and social uses. Beach and dune habitats occur from the tidal zone areas of the beaches to the first line of vegetated dunes and overwashes to a complex of shrub-dominated back dunes (DNREC 2006).

Delaware's beach and dune habitats make up most of the state's shoreline and are of significant importance to a variety of fish, wildlife and plant species. Of particular importance is the dependence of the red knot (*Calidris canutus*) migration on the horseshoe crab (*Limulus polyphemus*) spawning activities on the shores of the Delaware Bay (DNREC 2006). These areas also protect tidal marshes and provide storm protection for coastal communities (TNC et. al. 2011). Beaches represent one of Delaware's preeminent sources of tourism, attracting people from the major cities of the mid-Atlantic region and beyond. Residential development and associated infrastructure have continued to result in declines in overall acreages of undisturbed beach and dune habitats (DNREC 2006).

Beach and dune habitats are continuing to be threatened by developmental pressures combined with rising sea levels and climate change. These habitats are disturbance-dependent habitats that if given the opportunity to naturally respond to sea level rise and coastal storms may be able to accommodate for these impacts. Onshore and offshore coastal processes that facilitate such a shift, particularly sand transport, have been compromised by the development and hardening that has already occurred along Delaware's coast making the protection of these areas a conservation priority (DNREC 2006).

Beach and dune HCCs most threatened and/or vulnerable to sea level rise are:

- Dune grassland habitats:
 - Beachgrass- panicgrass dune grassland
 - Overwash dune grassland
 - Beach foredune
- Unvegetated sandy beach habitats.

Historical or Culturally Significant Lands

Delaware has a rich history that is uniquely tied to the coastal aspects of the region. The Delaware Division of Historical and Cultural Affairs has identified important pre-colonial, colonial and other important historical and culturally significant lands in the state. Archaeological sites of the prehistoric period and the early historic period are predicted to be disproportionately impacted in Delaware compared with other regions of the country by sea level rise (Delaware Division of Historical and

Cultural Affairs (DHCA) 2013). Vulnerable sites have been identified in the Lower St. Jones Neck Historic District, the Cape Henlopen Archaeological District as well as a number of areas near the Delaware River and Bay (DHCA 2013)

IV. Coastal and Estuarine Conservation Project Areas

Since the entire state is considered coastal by the CZMA, all land acquisition projects in the state are potentially eligible under the DE CELCP Plan. To refine eligibility, projects must be located within or serve to protect one or more of the following project areas within the conservation focus areas.

Forest and Wetland Blocks

Delaware's remaining forests tend to be fragmented into small, isolated, and degraded patches as a result of agriculture, residential and commercial development (Weber 2007). Large contiguous forest habitats protect headwater streams while also providing important interior habitat for forest dwelling wildlife and plant species (Weber 2007). To protect the remaining non-fragmented forest areas and known contiguous wetland areas, the Delaware Forest Legacy Program has designated four legacy areas in Delaware: the White Clay Creek, the Blackbird/Blackiston, the Redden/Ellendale, and the Cypress Swamp Forest Legacy Areas. These are the most important forests in the state and contain the highest concentrations of contiguous forest in Delaware, including significant acreage already protected through public and private ownership.

Wetlands have been adversely impacted from ditching, stream channelization, and permanent filling of wetlands for development (DNREC 2006). These actions have negatively impacted the role of wetlands in reducing effects from storms and floods, removing nutrients and pollutants from stormwater runoff, and providing adequate wildlife habitats (Environmental Law Institute 2010). While some wetlands are directly connected or adjacent to other surface waters such as salt marshes and floodplains, others are isolated areas surrounded by uplands such as forested flats and Delmarva Bays. Preserving the abundance, quality, diversity and proportion of different types of wetlands in the landscape is essential to protecting the natural resources and waters of Delaware (DNREC 2010). Currently the state is actively working in each of these areas to protect our high quality wetland resources and restore degraded systems on a watershed scale.

Continuing to protect forest and wetland blocks decreases direct impacts to these important areas of critical habitat for specific species. It limits opportunities for encroachment of non-native invasive species, provides quality habitat to many important wildlife species, and protects valuable water resources in these areas (Weber 2007). Areas that are 20 acres or more of contiguous forest or wetlands, or are adjacent to already protected forest or wetland areas, have been identified as project areas in the DE CELCP Plan.

Areas of Habitat Connectivity

Connecting large blocks of ecologically significant natural areas, such as forests, wetlands and other areas described as conservation priorities, with natural corridors creates an interconnecting network of natural lands across Delaware (Weber 2007). This connectivity helps sustain viable populations of most interior species, providing core habitat for many important wildlife and plant species, while also allowing for natural disturbance regimes to occur, such as wildfire or flooding (Weber 2007). Areas that enhance the domain, quality, or biodiversity by infusing adjacent, contiguous holdings to these previously acquired lands have been identified as project areas.

River corridors and Floodplains

As recently as 1975, Delaware routinely experienced serious water pollution and public health problems as a result of the discharge of untreated sewage and waste (DNREC 2010). As a result of voluntary efforts, regulatory actions, and significant private and public investments in wastewater treatment facilities, localized improvements in water quality have been achieved (DNREC 2010). Delaware has more than 2,509 miles of rivers and streams and 2,954 acres of lakes and ponds which have been classified based on their primary uses (DNREC 2010). Of these rivers and streams, 86 percent do not support swimming uses and 98 percent do not fully support fish and wildlife use (DNREC 2010). These waters do not meet the standards primarily from nonpoint source pollution impacts (DNREC 2010).

Protecting the state's rivers and streams that drain into the Delaware and Chesapeake Bays are of importance to the DE CELCP Plan. Maintaining good water quality in the river corridors and floodplains of Delaware subsequently protects the overall health of the estuaries. While laws in the state largely protect the rivers and streams themselves, the associated floodplains and adjacent uplands are not well protected. Due to the limited protection to the riparian buffers along rivers, streams, lakes and ponds they have been identified as project areas for protection in the DE CELCP Plan.

DNERR Core and Buffer Areas

Delaware has two components to its National Estuarine Research Reserves system (NERR): the Blackbird Creek Reserve and the St. Jones Reserve. Buffer areas of the Reserves are identified as those areas that are adjacent to, or surround, the key land and water (core) areas and are essential to maintaining their integrity. Buffer zones protect the core area and provide additional protection for estuarine-dependent species. Each Reserve component has a defined acquisition area. The identified areas allow the Reserve to focus on properties that border the current boundaries, and on properties that will ensure the continued environmental quality of the surrounding watersheds. The buffer areas given priority are the agricultural and wooded land within the DNERR boundaries immediately adjacent to the core areas.

Projects that justifiably protect resources surrounding DNERR properties, e.g. which are located within the DNERR Targeted Watersheds are considered within a project area. See Figures 2 and 3 in Section V for maps of DNERR's Targeted Watershed Boundaries or visit:

<http://coastalmanagement.noaa.gov/land/targetedpdfs/delaware.pdf>

Delaware Bayshore Initiative Area

Extending from the City of New Castle in New Castle County south to Cape Henlopen State Park in Sussex County, the Delaware Bay shoreline is widely recognized as an area of global ecological significance. Its expansive coastal marshes, shoreline, agricultural lands and forests provide diverse habitats to many species, including migratory shorebirds. This initiative collaboratively builds on the region's reputation as a unique natural resource with goals that include the protection and connection of existing wildlife areas, continuing and expanding habitat restoration efforts; enhancing public access to wild areas; increasing wildlife-viewing opportunities with interpretation and educational opportunities for youth; and supporting local volunteerism and resource stewardship. Delaware Bayshore Conservation Land maps have been developed that depict the Delaware Bayshore Initiative's area. Properties within the Delaware Bayshore Initiative's area will be considered within the CELCP project areas. This map can be accessed from the Initiative's website at:

<http://www.dnrec.delaware.gov/Pages/Delaware-Bayshore.aspx>.

Historical or Culturally Significant Lands

Delaware's Historic Preservation Plan (2013) has identified areas from the prehistoric and early historic periods that are disproportionately vulnerable to sea level rise as compared with other known historic sites in the state. Historic sites in the lower St. Jones Neck historic district and the Cape Henlopen Archaeological district have been identified through the Sea Level Rise Vulnerability Assessment as being some of the most vulnerable historic sites and are considered project areas.

V. Existing Plans Incorporated

As noted in the descriptions of priority lands and CELCP project areas, this plan incorporates and brings together conservation planning work done through several existing programs, described below:

Delaware Coastal Management Program – The Delaware Coastal Management Program was created and approved in 1979 as part of the national Coastal Zone Management Act (CZMA), to preserve, protect, develop, and enhance the coastal resources of the state and resolve conflicts related to coastal zone issues. It is housed within DNREC's Division of Soil and Water Conservation. The two-tiered boundary established under this program, as well as the priorities outlined in the Coastal Management Program's planning documents (management plan, 5-year assessment and strategy, and vulnerability assessment) have been incorporated into this CELCP plan. These documents can be accessed at: <http://de.gov/coastal>

Delaware National Estuarine Research Reserve Management Plan--

In 1993, The Delaware National Estuarine Research Reserve was designated as a part of a national system established under the CZMA for the purpose of long-term research, environmental monitoring, education and stewardship. The Delaware Reserve, also led by DNREC, consists of two components: 1,087 acres of freshwater wetlands, ponds and forest lands in Blackbird Creek; and 5,119 acres of salt marsh and open water habitats on the St. Jones River on Delaware Bay. The Reserve's management plan and other planning documents identify the core, buffer, and targeted watershed boundaries for the two Reserve components identified in this plan. These documents can be accessed at: <http://de.gov/dnerr>

Delaware Forest Legacy Program Assessment of Need --

Delaware participates in the national Forest Legacy Program, through the U.S. Department of Agriculture. To participate, each state develops an Assessment of Need (AON), which describes the state's forests, the threats to the forests, and those areas within the state that contain the most important forests, which are called the Forest Legacy Areas. Delaware's AON, approved in 1998, identifies the four designated legacy areas in Delaware, which have been incorporated as project areas within this CELCP plan. Delaware's Forest Legacy Program is administered by the Delaware Department of Agriculture. More information can be found at: <http://dda.delaware.gov/forestry/legacy.htm>. The AON and 2009 Statewide Forest Assessment can be accessed via links provided in Appendix B.

Delaware Wildlife Action Plan –

Delaware participates in the U.S. Fish and Wildlife Service's State Wildlife Grant Program. To participate, each state develops a State Wildlife Action Plan, which represents a comprehensive strategy for conserving the full array of native wildlife and habitats – common and uncommon – as vital components of the state's natural resources. Led by DNREC's Division of Fish and Wildlife, Delaware completed its Wildlife Action Plan in 2006; it is currently in the process of being updated. This plan identifies many of the priority habitats that are incorporated within this CELCP plan, and can be accessed at: <http://www.dnrec.delaware.gov/fw/dwap/Pages/default.aspx>

Delaware Historic Preservation Plan –

Under the National Historic Preservation Act, Delaware’s State Historic Preservation Officer is responsible for developing a Historic Preservation Plan to evaluate and prioritize protection of the state’s historic and cultural heritage. Completed in 2013 by the Delaware Department of State’s Division of Historical and Cultural Affairs, Delaware’s State Historic Preservation Plan identifies priority historic sites for preservation. Historic sites that are vulnerable to sea level rise have been incorporated as priorities within the CELCP plan. The plan can be accessed at:

<http://history.delaware.gov/pdfs/Preservation%20Plan%202013-2017.pdf>

Delaware River Basin Priority Conservation Areas and Recommended Conservation Strategies --

With support from the National Fish and Wildlife Foundation, The Nature Conservancy, Partnership for the Delaware Estuary, and Natural Lands Trust, a framework for evaluating and prioritizing a set of freshwater, estuarine, and bay-related ecosystems and habitat-forming species of the Delaware River Basin was created. The goal was to develop a biodiversity-driven conservation blueprint for the Basin that would help to ensure a healthy Delaware River and Bay. Many of the priority habitats identified within this plan are incorporated into Delaware’s CELCP plan. This plan is available for download via The Nature Conservancy’s Conservation Gateway at: www.conservationgateway.org, and is most easily found via a web search engine.

Delaware Open Space Council – State Resource Areas and Ranking Criteria Matrix

The Delaware Land Protection Act (7 Del Code Chapter 75) created the Open Space Council and established a system for identifying State Resource Areas (SRAs) as valuable open space lands worth preserving. The Open Space Program oversees the protection of designated [State Resource Areas](#). The Delaware Open Space Council, comprised of 9 members, advises the DNREC Secretary on all matters relating to the administration, implementation and financing of the protection of designated SRAs, and established a ranking criteria matrix for evaluating projects brought before the Council. The Open Space Council’s ranking criteria served as the basis for developing the ranking criteria matrix for this CELCP plan. The Open Space Program also serves as an important source of potential funding to match Federal CELCP funds. Information about the Open Space Program and Council can be found at: <http://www.dnrec.delaware.gov/OpenSpaces/Pages/OpenSpaceProgram.aspx>

VI. Delaware Coastal and Estuarine Land Conservation Plan Implementation

State Lead Agency

The Delaware Coastal Programs (DCP), within DNREC, is the lead agency for coordinating the establishment and implementation of the Delaware Coastal and Estuarine Land Conservation Program Plan. The DCP will be responsible for soliciting projects that are consistent with the Conservation Priorities and Project Areas outlined in this Plan, reviewing them for completeness, prioritizing them according to state ranking criteria, and nominating projects to the national selection process. The DCP will be the primary applicant for federal CELCP funds. The DCP will also be responsible for passing through and ensuring that allocated funds are used for the purposes of and in a manner consistent with this program.

Solicitation of Projects

The National Oceanic and Atmospheric Administration (NOAA) will notify all coastal states participating in the national CELCP of annual funding opportunities, recognizing that actual funding is dependent upon Congressional appropriations. At that time, states will have an opportunity to submit priority projects to compete for funding in the national selection process.

Upon notification of a funding opportunity from NOAA, the DCP will solicit land acquisition projects from eligible entities, including local governments and state agencies. All projects will be reviewed in accordance with the DE CELCP Plan to ensure that each project is located within a project area and contains one or more of the conservation focus areas as described in the plan. Applicants will be instructed to prepare applications according to the Federal Funding Opportunity published in the Federal Register. A site visit to the proposed project area by DCP staff may also be required.

Applications for funding will be received by the DCP and reviewed for completeness and adherence to the state CELCP Plan. Late applications will not be considered. Incomplete applications may be resubmitted if received before the deadline.

Who May Apply

NOAA may make financial assistance awards to eligible coastal states, including the state's lead agency, for implementing the CELCP, the state's coastal management program, and its National Estuarine Research Reserve (NERR). The recipient may in turn allocate grants or make sub-awards to other state agencies, local governments as defined by 15 CFR 24.3, or entities eligible for assistance under section 306A(e) of the CZMA (16 USC 1455a(e)) to carry out the execution of fee-simple acquisitions and conservation easements.

In particular the following may hold title to land and conservation easements acquired with CELCP funds:

- Designated State of Delaware Agencies that have a mission that is consistent with ownership and management of public lands for long-term conservation.
- All incorporated cities and towns
- New Castle, Kent and Sussex Counties

The recipient of CELCP funds, or other appropriate public agency designated by the recipient in their application, will hold title to the land or interests in the land in perpetuity.

Qualifying Projects

To be eligible for CELCP funding, a project must:

- Be located within the DE CELCP boundary area;
- Be located within a project area described in the DE CELCP Plan;
- Contain one or more of the conservation focus areas described in this plan;
- Meet the National Eligibility Criteria (provided below);
- Match federal CELCP funds with non-federal match at a ratio of 1:1;
- Be held in public ownership (fee simple or conservation easements) and provide conservation in perpetuity; and
- Provide public access or other public benefits.

National Eligibility Criteria

To be eligible for the national CELCP, projects must meet the following criteria:

- Protects important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses;
- Gives priority to lands which can be effectively managed and protected and that have significant ecological value;
- Directly advances the goals, objectives, or implementation of the state's coastal management plan or program, NERR management plans approved under the CZMA, national objectives of the CZMA, or a regional or state watershed protection plan involving coastal states with approved coastal management plans; and
- Is consistent with the state's approved coastal management program.

Eligible Uses

CELCP funds may be used for the following purposes as per the Final Program Guidelines published June 6, 2003 (Note: please refer to revised national CELCP Program Guidelines once they are published as final).

- Acquisition Projects: Acquisition of properties or interests in properties from willing sellers, provided that the terms and conditions will ensure that the property will be administered for conservation in perpetuity, including direct expenses relating to the acquisition of lands and interests in lands acquired under the authority of the CELCP; and
- Certain initial costs for land stewardship, not to exceed 5 percent of the award and not to exceed 3 years or the duration of the award period, to allow for signage, public safety, or other stewardship purposes.

The federal share of CELCP funds may not be used for the following purposes (Note: please refer to revised national CELCP Program Guideline once they are published as final):

- Funding long-term operations, maintenance, and management of the land;
- Construction of buildings, boat launching facilities, docks or piers, shoreline armoring, or other facilities;
- Research;
- Acquisition of lands, or interests in lands, that completely restrict access to specific persons (e.g. non-residents of a community, though limited hunting and fishing opportunities are allowed);
- Acquisition of lands, or interest in lands, to comply with mandatory or compensatory mitigation for recent or pending habitat losses resulting from the actions of agencies, organizations, companies, or individuals;
- The sole or primary purpose of enforcing fish, wildlife, or other regulations, except when necessary for the accomplishment of approved project purposes;
- Acquisition of land for active recreation, such as sports facilities, water parks, playgrounds, or similar uses; and
- Acquisition of properties where the acquisition would negatively impact working waterfronts.

Activities that are inconsistent with the National CELCP guidelines include: active agricultural or aquaculture production; shoreline armoring or other hard erosion control structures; construction or expansion of roads, buildings or facilities, water parks, playgrounds, or similar uses.

Projects Benefiting the NERR Targeted Watersheds

The national CELCP will dedicate 15% of funding each year to projects that benefit designated National Estuarine Research Reserves. In Delaware, this includes projects that support the acquisition goals of the St. Jones Reserve and the Blackbird Creek Reserve, and that are located within the St. Jones Reserve (Figure 2) and the Blackbird Creek Reserve (Figure 3) targeted watershed boundaries. These projects must be accompanied by a letter of support from the Reserve Manager.



Figure 2. St. Jones Targeted Watershed Boundary, Kent County, Delaware. Image credit: NOAA, accessed from, http://coastalmanagement.noaa.gov/land/celcp_inyourstate.html#delaware



Figure 3. Blackbird Creek Targeted Watershed Boundary in New Castle County, DE. Image credit: NOAA, accessed from, http://coastalmanagement.noaa.gov/land/celcp_inyourstate.html#delaware

For more information on NERR Targeted Watershed Boundaries and how to view the latest maps, please visit the NOAA Coastal and Estuarine Land Conservation Program's Targeted Watershed page for Delaware at: <http://coastalmanagement.noaa.gov/land/targetedpdfs/delaware.pdf>

Selection of Projects

The DCP will review project proposals to determine that they qualify, are applicable to the DE CELCP Plan, meet the National Eligibility Criteria, are located within a Project Area, and contain one or more of the Conservation Focus Areas as described in this plan. Project applicants are strongly encouraged to submit a current property appraisal, show applicability to the DE CELCP Plan's goals, and demonstrate applicability to one or more of the listed conservation efforts outlined above.

The DCP will score and rank eligible proposals according to the Ranking Matrix (Appendix A). The Ranking Matrix is a tool to evaluate multiple proposals against a specified set of criteria.

The highest ranking project(s) will then be forwarded for consideration to the Cabinet Secretary of DNREC as well as the Open Space Council to ensure projects are consistent with the goals and objectives of DNREC. Approval of the Open Space Council for top ranking projects confirms that non-federal matching funds can be made available if a project is awarded federal funds through CELCP.

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VII. Certification

Certification that this Plan is consistent with Delaware's approved Coastal Management Program:

It is the determination of the Delaware Coastal Management Program, lead agency for the Coastal Management Program within the Department of Natural Resources and Environmental Control, that this proposed activity would be undertaken in a manner consistent to the maximum extent practicable with the mission and enforceable policies of Delaware's Coastal Management Program.



Sarah Cooksey

Administrator, Delaware Coastal Management Program

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Appendix A: Ranking Criteria

Creating ranking criteria for potential land acquisition parcels best prioritizes projects based on the most efficient use of the limited funding available. The ranking process is intended to provide a strategic way of meeting CELCP goals by evaluating a property against other similarly ranked properties in order to maximize resource benefits and leverage all relevant funding sources. Properties of interest have typically been an inholding to, expansion of or connection between lands protected or managed by these agencies. Additionally a property of interest may be a stand-alone site that contains critical resources. The property is also reviewed against resource plans or resource analyses, including the Delaware Ecological Network.

Assessing the priority of a given property for preservation, either through fee-simple acquisition, donation, or conservation easement, is a process that involves ranking and descriptive evaluation. This ranking process is supported by science, management priorities and public needs. Based on the National CELCP criteria, the ranking criteria assigns points across five broad areas: ecological value, conservation value, recreational value, historical resources and aesthetic value. Once ranked, a property is evaluated qualitatively by describing other potential benefits, challenges or factors affecting preservation of the property.

A Ranking Criteria Matrix has been developed based on Delaware's Open Space Council's Ranking Criteria in conjunction with goals of CELCP that have been outlined in this plan. This matrix has five different categories that result in a maximum of 100 points:

1) Ecological Value: Up to 30 Points

Ecological values are scored based on the presence of plants, animals, and quality of the habitat(s) that occur on the site. These species and their habitats have been identified as Species of Greatest Conservation Need (SGCN) in the Delaware Wildlife Action Plan. Additionally, the site does not need to be completely within a CELCP priority area, but the site must contain or protect at least a portion of a priority area.

2) Conservation Value: Up to 30 points

Conservation values are scored based on the ability for the site to adapt to sea level rise, how the site increases connectivity between existing preserved lands, provides resource protection, as well as the restoration and enhancement needs of the property such as through vegetative erosion control or restoration of natural water flow to an area.

3) Recreation Value: Up to 10 points

Recreational values for a site are scored on the ability of the site to maintain or enhance environmentally sound public access to the coast for such recreational purposes in Delaware as low impact hiking; hunting and fishing; access for swimming, canoeing and, and kayaking; and for research and educational activities.

4) Historical Resources: Up to 10 points

Historical resources are scored based on known historical and cultural resources on the site.

5) Threatened Resources: Up to 10 points

Threatened resources are scored based on the threat of conversion, or further conversion, to the site from anticipated, proposed, permitted, or already developed sites.

6) Aesthetic Resources: Up to 10 points

Aesthetic resources are scored based on the ability of the site to maintain the natural splendor of the area within and around the property.

Ranking Criteria Matrix

ECOLOGICAL VALUE	5 points	3 points	1 points	0 points
Plants	S1 species ¹ documented on site or adjacent lands that may benefit from habitat protection	S2 ² species documented on site or adjacent lands that may benefit from habitat protection	S3 ³ species documented on site or adjacent lands that may benefit from habitat protection	S1-S3 species not likely to benefit from habitat protection
Animals	S1 species documented on site or adjacent lands that may benefit from habitat protection	S2 species documented on site or adjacent lands that may benefit from habitat protection	At least 1 SGCN ⁴ likely to benefit from habitat protection	No listed state or federal species likely to benefit from habitat protection
Habitat of Conservation Concern (HCC) ⁵	Protects an existing HCC documented on site			No potential for protecting a HCC
Fisheries Resource Protection Areas	Protects critical nursery or spawning habitat for anadromous fish, bivalves, and shellfish			No potential for protecting important fisheries resources
Water Quality	Provides water quality improvement			No potential for protecting water quality
Habitat Connectivity	Protects or creates a corridor connecting two or more HCCs			No potential for creating or preserving habitat connectivity
Total (30)				

¹ S1 Species- 1-5 occurrences or fewer than 1,000 individuals in the state

² S2 Species- 6-20 occurrences or 1,000- 3,000 individuals in the state.

³ S3 Species- 21-100 occurrences or 3, 000 – 10,000 individuals in the state

⁴ Species of Greatest Conservation Need (SGCN). These are species that have been identified by the Delaware Wildlife Species Conservation and Research Program as species that are indicative of the overall diversity and health of Delaware's wildlife resources and includes all ranked species.

⁵ HCC, or Habitat of Conservation Concern, are habitats that are rare, have special significance in Delaware, are particularly sensitive to disturbance, and/or have a high diversity of rare plants. Because of these factors, they are known – or expected – to harbor SGCN, especially insects that are often dependent on specific host plants.

CONSERVATION VALUE	10 points	5 points	3 points	1 points	0 points
Sea Level Rise (SLR) Adaptation ⁶	Property allows for habitat migration due to SLR				No
Within NERR Priority Watershed ⁷		Yes			No
Proximity to Existing Preserved Lands		Adjacent to existing preserved lands			Is not adjacent to existing preserved lands.
Management Needs of Property		Minimal management needs ⁸	Moderate management needs ⁹	Extensive management needs ¹⁰	
Size of Property		>100 acres	10-100 acres	1-10 acres	
Total (30)					

⁶ DNREC Sea Level Rise Scenarios. Adaptations allow for landward migration of resource or loss of land due to sea level rise.

⁷ The two NERR priority watersheds in Delaware are the Blackbird and St. Jones watersheds. Please see the Delaware CELCP plan for maps depicting these areas.

⁸ Implies the property is not expected to need any land management to maintain healthy habitats on site and the site is naturally sustaining.

⁹ Include the need for one time natural or man-made disturbance methods, invasive species removal, or other land management techniques to maintain healthy habitats on the site.

¹⁰ Regular land management activities are needed to maintain the long term health of the habitats on site, including long term burn regimes and regular mowing.

RECREATION VALUE ¹¹	4 points	3 points	2 points	1 points	0 points
Recreational Uses ¹²	>3 approved uses (please indicate below)		1-3 approved uses (please indicate below)		No recreational uses will be provided
Accessibility of property	Property is accessible to public				No access to the property is currently available
Infrastructure Present			Property already has parking, docks, trails, etc		No infrastructure is present
Total (10)					

RECREATIONAL USES (Must not adversely affect ecological resources to receive points)	Check All That Apply
Hunting	
Fishing	
Wildlife viewing (unique species or habitat)	
Boating/kayak access (ramps and / or parking)	
Walking, jogging, hiking, bike, or equestrian trails	
Beach access	
Access to historic sites	
Picnic areas	
Camping areas	
Total Number of Recreational Uses	

¹¹ Must not adversely affect ecological resources to receive points

¹² These uses include: hunting; fishing; wildlife viewing (unique species or habitat); boating/kayaking (ramps and/or parking); walking, jogging, hiking, bike or equestrian trails; beach access; access to historic sites; picnic areas; and/or camping areas.

HISTORIC/ CULTURAL RESOURCES	10 points	8 points	5 points	0 points
	Unique historical or cultural resources present ¹³	More than one historical or cultural resource on site.	Historic and/or cultural resources have been documented on site.	No unique historic or cultural resources on site
Total (10)				

THREATENED RESOURCES	10 points	7 points	5 points	0 points
Approved Development of Site	Site has already received permits for development	Property has been evaluated for potential development	Property is adjacent to proposed or approved for development or is already developed	No threat to site from development
Total (10)				

AESTHETIC VALUE	4 points	3 points	0 points
Aesthetically pleasing attributes on site ¹⁴	Yes		No aesthetically pleasing attributes on site
Preserves the viewshed of the surrounding area		Yes	Has no impact on the viewshed.
Protects aesthetics of adjacent property(ies)		Yes	No
Total (10)			

¹³ Structures, improvements, sites or lands that are listed, or are eligible for listing, on the National Register of Historic Places.

¹⁴ Contains creeks, ponds, shorelines, etc.

Total Points For All Categories	Total Points
Ecological Value (/30)	
Conservation Value (/30)	
Recreational Value (/10)	
Historic Resources (/10)	
Threatened Resources (/10)	
Aesthetic Value (/10)	

DESCRIPTIVE EVALUATION / PROJECT-SPECIFIC QUESTIONS

<p>Does the acquisition support state or regional preservation and restoration priorities or management plan goals?¹⁵</p> <p>List Regional Priorities and / or Management Plan Goals here:</p>
<p>Describe why the property is considered for preservation. (e.g., critical wildlife habitat, water quality protection, recreational opportunities, cultural resource preservation, etc.)</p>
<p>Are preservation / management goals best achieved through fee title or easement, and why?</p>
<p>Is there a discount offered on the purchase price?</p>
<p>Are there opportunities to leverage non-CELCP funds? If so, identify the funding sources and percentages.</p>
<p>Describe any potential management challenges and / or costs.</p>
<p>Please describe and long or short term plans for development of the site?</p>

¹⁵ For example: Atlantic States Marine Fisheries Council’s Interstate Fisheries Management Plans, Bird Conservation Region 30, Blackbird-Millington Corridor Plan, Captain John Smith Chesapeake National Historic Trail, Chesapeake Watershed Implementation Plan, Coastal and Estuarine Land Conservation Program, Delaware Forest Action Plan, Delaware Bayshore Initiative, Delaware Wildlife Action Plan, Inland Bays Watershed Restoration Plan, Nanticoke Watershed Restoration Plan, North American Wetlands Conservation Act, Partners in Flight Priority Species, and / or National Fish and Wildlife Foundation.

For stand-alone sites, are the resources on the property significant enough to justify preservation?

Describe geological features of interest on site.

Will preserving this property protect a viewshed? If so, describe the viewshed?

Is this property on the State Registry of Natural Areas?

Is there public interest in acquiring the property?

Is the owner requesting provisions in the contract / easement that would reduce the property's primary conservation values or appropriate management?

Is the property a potential restoration site?

Does the property contain a floodway? Is it in the 100 year floodplain?

Other comments:

PROJECT SUMMARY

GENERAL PROPERTY INFORMATION

Owner Contact Information:

Tax Parcel:

Acreage:

Uplands:

Wetlands:

Watershed:

Agency Contact:

Ranking Score:

ACQUISITION DATA

Full Fair Market Purchase: _____ Bargain Sale: _____ Donation: _____

Leveraged Funds:

Endowment/Monitoring Contribution:

Contract Price:

Comments:

APPRAISAL DATA

Appraiser:

Date of Appraisal:

Appraised Value:

Per Acre Value:

Uplands:

Wetlands:

Comments:

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