BARNSTABLE COUNTY

In the Year Two Thousand and Ten

Ordinance No. 10-03

To establish a District of Critical Planning Concern pursuant to the Cape Cod Commission Act (the "Act") in the ocean waters off Barnstable County, Massachusetts.

BARNSTABLE COUNTY hereby ordains:

SECTION 1.0 Source of Authority and General Purposes

As authorized by Section 10 of the Cape Cod Commission Act, the Barnstable County Assembly of Delegates hereby proposes the Ocean Management Planning District as hereinafter described, for designation as a District of Critical Planning Concern ("District" or "DCPC"). designation of this district was proposed by the Barnstable County Commissioners. The purpose of the district is to evaluate and establish criteria for determining appropriate scale for renewable energy projects within Barnstable County, and for establishing procedures and regulations for the review of wind turbines and other uses and activities allowed under the Oceans Act of 2008 within the district, including: 1) the installation or development of activities and facilities associated with the generation, transmission and distribution of electric power, 2) the laying of cables, 3) channel and shore protection projects, 4) sand and gravel extraction for shore protection or beach restoration, 5) projects authorized under Chapter 91 and deemed to be of Public Necessity and Convenience, and 6) other related activities not specifically prohibited by the Oceans Sanctuaries Act. The five DCPC types designated and outlined in Section 4 of this ordinance pertain to the charges of determining appropriate scale and regulating wind, and relate to the broader charges of the Commission under the Act, namely to protect unique natural, cultural and other values and to ensure balanced economic development.

SECTION 2.0 Effective Date

The Ordinance shall take effect upon the effective date of this ordinance or upon recording of this Ordinance at the Barnstable County Registry of Deeds, whichever occurs later.

SECTION 3.0 Written Description of the Area

The area nominated for District designation is as follows:

The proposed district is comprised of all the ocean waters and land below and air above within Barnstable County, starting from a line drawn 0.3 nautical miles seaward from Mean High Water (MHW) around Barnstable County and extending to 3 nautical miles from MHW, or the state jurisdictional boundary, whichever is farther from the shore, not to include the waters of Plymouth County, as shown on the attached map. This area is coincident with the planning area as defined in the Massachusetts Ocean Management Plan and excludes the Cape Cod Canal and many of the bays, harbors and embayments as shown on the attached map. Where the bounds of Falmouth, Mashpee, and Bourne's municipal corporations intersect with the bounds of Wareham, Marion, Mattapoisett, Fairhaven, Gosnold, West Tisbury, Tisbury, or Oak Bluffs' municipal corporations, the district boundary ends with the municipal corporation boundary.

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The boundaries are shown on the map attached herein as <u>Exhibit A</u> and incorporated by reference.

The proposed district encompasses 521,552.3 acres of open water.

The land and water within the proposed Ocean Management Planning District reasonably belong within the District because, among other things: 1) they comprise ecological communities which are both distinct and intersect, comprising a whole, 2) the district contains resources of value for their intrinsic qualities as natural living systems, 3) the district contains resources which support or have the potential to support human endeavors, specifically the Cape Cod regional economy, 4) the district comprises a continuous scenic landscape that provides a setting and backdrop for historic villages, and recreational and other day to day activities, providing scenic views both to and from the water, 5) a portion of the area is part of contiguous area mapped as habitat according to the Natural Heritage and Endangered Species Program, 6) the district has the potential to support major public, or commercial investments of utility infrastructure that may benefit the Cape Cod community, and 7) the district contains resources or features that may pose conflicts between uses, or create hazards. The Commission also found that the waters within the District form a critical coherent whole and this area needs further protection afforded by the Act.

SECTION 4.0 Type of District/Reasons for Designation

The proposed Ocean Management Planning District as described above qualifies under Section 10(a) of the Cape Cod Commission Act for designation as a District due to the following factors:

a) The presence of significant wildlife, natural, ecological, archaeological, economic and recreational resources, as well as values of regional, statewide and national significance as described below.

As the Barnstable County Commissioners identified, this area is designated as the following:

- 1. Wildlife, Natural, Scientific, or Ecological Resource District
- 2. Cultural, Historic, or Archaeological Resource District
- 3. Economic and Development District
- 4. Hazard District
- 5. Major Public Investment District

SECTION 5.0 Reasons and Purposes for the District's Designation

The ocean waters comprising the district are of critical concern to the region for several reasons, including: the inherent natural resource and scenic qualities the ocean provides; the role of the ocean as a scenic and economic backdrop to the development of Cape Cod as a place where people have wanted to live, work, and play for centuries; the sensitive natural resources, resources of economic value, and cultural and archaeological resources.

There is the potential for development within the district which may adversely impact significant resources and interests protected by the Cape Cod Commission Act. The state's Ocean Management Plan allows for the development of certain structures or uses, including wind

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turbines, other renewable energy facilities, cables, pipelines, sand and gravel mining, and other activities that could impact natural or economic resources within the district. The potential exists for up to 24 wind turbines to be sited within the planning area. Opportunities exist to identify appropriate locations for renewable energy facilities, to determine the appropriate scale of these facilities, and to streamline permitting. The resources of the district will be better protected if development proceeds in a more controlled manner.

The intent of the proposed district is to preserve and maintain values and resources intended to be protected by the Act. Planning for development within the proposed Ocean Management Planning District is important for balancing the protection of natural, coastal, scientific, cultural, historic, and archaeological resources with other economic resource values. Planning and regulatory tools are available which could be effective in protecting or otherwise meeting the objectives of the District. Current regulatory mechanisms are not adequate to control growth and development in a manner that would protect the resources within the proposed District. Specifically, criteria for determining appropriate scale of renewable energy projects need to be developed for the Cape community to adequately review and regulate energy projects that may be proposed. Identifying areas that may be appropriate for major public investment, like community scaled wind energy projects, could help streamline permitting for those projects.

Set forth below are the reasons why the area is of critical concern to the region, the problems associated with uncontrolled or inappropriate development, and the advantages to be gained by additional planning and regulatory controls.

SECTION 5.1 Natural Resources

The Ocean Planning District contains extensive and diverse natural resources of high ecological, wildlife and scientific value of local, regional, statewide, and in some cases national significance. Marine plants, finfish, shellfish, marine mammals, and seabirds occupy different areas in varying concentrations within the district. The district includes critical habitat in Cape Cod Bay for federally endangered whales (Northern Right Whale, Fin Whale, Humpback Whale) and sea turtles. Habitats within the district also support endangered seabirds such as the Roseate Tern, large, seasonal concentrations of sea ducks, and important finfish and shellfish populations (lobster, sea scallop, horseshoe crab, etc.). Extensive beds of eelgrass, an important subtidal habitat for a variety of marine organisms, occur within the district. The district's diverse natural resources provide scientific research opportunities that will provide a better understanding not only of the Cape's marine ecology but also how the ocean's resources can be sustainably used into the future. The designation of this area as a Wildlife, Natural, Scientific and Ecological Resource District will allow the Cape Cod Commission and the Cape towns to plan for development and develop regulations to address impacts to the natural resources and ecosystems in the district.

The Ocean Management Plan has established management areas within the district including the Prohibited Area (coincident with the Cape Cod Ocean Sanctuary), Renewable Energy Areas (two locations off Martha's Vineyard and the Elizabeth Islands), and the Multi-Use Area which encompasses the vast majority of the district. The Multi-Use Area is provisionally open to all uses, activities and facilities allowed under the Ocean Sanctuaries Act, including cables and pipelines, sand and gravel extraction for beach nourishment, and community scale wind energy

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facilities and wave and tidal energy facilities of appropriate scale. The OMP identifies siting and performance standards for each of these activities to avoid or minimize impacts to Special, Sensitive, or Unique Marine and Estuarine Life and Habitat (SSU), Commercial Fishing and Recreational Fishing, and Areas of Concentrated Recreational Activity. The siting and performance standards for the allowed activities are designed to protect or mitigate impacts to specific SSU and to minimize use conflicts with commercial and recreational uses identified in the OMP. However, the OMP does not address local concerns associated with the allowed activities.

The Cape Cod Commission Act specifies among the purposes of the Cape Cod Commission, "the preservation of coastal resources including aquaculture; the protection of ... ocean water quality." However, the Commission's Regional Policy Plan does not contain sufficient performance standards for regulating activities in ocean waters around the Cape, such as of renewable energy facilities. The OMP specifically leaves the regional planning agency to define the "appropriate scale" of renewable energy facilities in the district. Community scale wind projects are allowed in the Multi-Use Area with up to 24 turbines allocated for the Cape Cod region.

Activities allowed by the OMP may pose potential risks to the Cape's wildlife and marine ecology. The installation of turbines may result in noise, vibrations, and induced magnetic and electric fields around submarine cables that directly or indirectly affect marine life. Bottommounted turbines may impact sensitive sea-bottom habitat (e.g., feeding, spawning, etc.) of marine species by directly impacting the sea-bottom or by shifting sediment transport patterns that change existing benthic ecology. The impacts of new structures in, on and over the ocean on the behavior, communication, physiology of animals (e.g., whales, seals, lobsters, groundfish, birds, bats, etc.) are still being studied. For example, construction and operational noise from energy generation facilities could affect the behavior of whales, including the critically endangered Northern Right Whale, possibly complicating mating, migration, feeding, and mother-calf interactions, as well as communication. The magnitude of impacts will likely depend on the size, number, and design of structures. In addition, the exclusion of some types of fishing around structures may change the composition of fish populations with potential effects on local marine ecology. Conversely, offshore structures will create hard-surface habitat (similar to pilings under a pier), attracting fish and other marine life and locally enhancing marine diversity. Other activities allowed by the OMP, such as sand and gravel extraction, will also directly and indirectly affect benthic marine organisms and their habitat.

The activities allowed by the OMP, especially energy facilities and sand and gravel mining, may create hazards and use conflicts. Sand and gravel extraction in nearshore areas could create hazards by changing wave and current dynamics and shoaling patterns, endanger recreational boaters and other users. For example, shifting nearshore dynamics could also potentially impact coastal properties (e.g., shore erosion). Improperly sited seafloor structures (e.g., bottom-mounted turbines) could shift currents and sediment transport patterns, causing shoaling or other hazards. Energy generation installations will likely have commercial and recreational fishing and boating exclusion zones to protect the structures and limit liability. Use conflicts may also arise between energy facilities and use of the ocean environment for scientific research.

SECTION 5.2 Community Character/Historic/Archaeological Resources

The proposed ocean DCPC encompasses areas that form the setting of numerous land-based historic districts, historic structures, and cultural landscapes. The historic buildings, neighborhoods, working waterfronts, and cultural landscapes that tell the Cape's story are both historically significant and critical to maintaining the unique character that draws so many people to the region. In many cases, the ocean is a distinctive component of the setting of these resources and of scenic areas, and significant changes to the setting may affect the historic integrity of the region's resources. On Jan. 4, 2010, the National Park Service/US Dept of the Interior determined that Nantucket Sound is eligible for listing on the National Register of Historic Places for its associations with Wampanoag settlement, stories, and folklife, and also for the cultural, historical and scientific information it may yield about land use prior to and after 6,000 years ago as a result of the inundation of the Sound.

Underwater archaeological resources exist on and beneath the ocean floor in the district. These resources comprise both historic shipwreck sites and also paleosols or intact land masses that have been submerged and are believed to hold information about Native American land use prior to their submersion. Nantucket Sound has been determined eligible for listing on the National Historic Register due in part to the significance of these archaeological resources. These resources have not been fully inventoried. While the Ocean Management Plan acknowledges the presence of these archaeological resources, it does not clearly limit sand mining and other developments that would disturb the ocean bottom. The designation of this area as a cultural, historic and archaeological resource district will allow the Cape Cod Commission and the Cape Towns to plan for development and develop regulations to address impacts to the historic, tribal, and community character resources in this area.

SECTION 5.3 Economic Development Resources and Potential

The proposed district contains many resources of vital economic interest to the Cape, the Commonwealth, and beyond. The district contains extensive fish and shellfish resources, areas of significant commercial fisheries activity, and resources which contribute to the tourist economy on Cape Cod, including areas of significance for recreational fishing and boating. The scenic ocean backdrop also draws visitors to the Cape, providing a seasonal boost to the local and regional economy. The health of the marine environment benefits the marine industry and the rest of the Cape economy.

At the same time, the ocean waters surrounding Cape Cod are rich with potential for ocean energy development. As offshore wind, tidal and wave energy technologies advance, Cape Cod has an opportunity to be in the vanguard of this emerging clean energy sector. This fact, together with a renewed global focus on energy independence and sustainable, environmentally friendly energy sources, has made areas with strong wind resources such as Cape Cod a prime consideration for the expansion of wind energy production.

The opportunity for ocean energy development in Cape Cod's ocean waters is rich with economic development and workforce development opportunities that could establish Cape Cod as a leader in offshore energy development. Before this can happen a regulatory framework is needed to balance economic opportunity with other concerns such as the protection of natural

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living systems; preservation of historic villages and scenic landscapes; and protection of fishing and recreational boating resources to name a few, as these resources already underpin Cape Cod's economy. The goal is to establish a planning and regulatory framework that leads to appropriate scale renewable energy development in the waters around the Cape.

SECTION 6.0 Regulatory Framework

The principal existing regulatory framework within the district consists of the Massachusetts Ocean Management Plan and the Massachusetts Environmental Policy Act and regulations. There are no local regulations that apply within the district, and few minimum performance standards under the Regional Policy Plan that apply.

SECTION 6.1 Suggested Guidelines for Development

The following guidelines shall serve as the basis for future establishment of implementing regulations to be adopted by the county and towns pursuant to Section 11 of the Cape Cod Commission Act to manage development within the Ocean Management Planning District.

SECTION 6.2 Introduction to General Guidelines

Towns and other stakeholders shall develop Implementing Regulations in conjunction with the Cape Cod Commission consistent with the Guidelines described herein. Implementing Regulations for the District may take the form of zoning bylaws or ordinances, regulations, management initiatives, planning tools, or other means identified, which help to achieve the goals and interests of the District. Commission staff will assist the Cape towns in drafting appropriate regulations.

The towns shall propose Implementing Regulations for the District to the Cape Cod Commission. In order to be approved, Implementing Regulations adopted by the towns must be found by the Commission to be consistent with these Guidelines, pursuant to Section 11(d) of the Act.

Upon the adoption of certified Implementing Regulations, the local permitting previously stayed by the DCPC nomination may proceed consistent with the newly adopted Implementing Regulations.

SECTION 6.3 Goals and Interests

Based on concerns articulated in the nomination, the objective of the district is to ensure protection of the following goals and interests through the establishment of implementing regulations by the towns through the Cape Cod Commission:

 Evaluate and establish criteria for determining appropriate scale for renewable energy projects within Barnstable County, and establish procedures and regulations for the review of wind turbines and other uses and activities allowed under the Oceans Act of 2008; April 21, 2010

- Protection of unique natural, cultural and other values and balanced economic development;
- Plan for development to consider impacts to the natural resources and ecosystems in the district;
- Plan for development to consider impacts to the historic, tribal and community character resources in this area;
- Plan for development to consider impacts to the ocean resources that currently, or may in the future, support the regional economy;
- Identify means for supporting appropriate use of ocean resources that drive the regional economy;
- Involve the community in identifying appropriate locations and scale for such an investment, while defining the regulatory review process for renewable energy or other public investment projects;
- Explore and clarify possible hazards, and to develop regulations to address use conflicts.

SECTION 6.4 Guidelines

Based on the concerns and opportunities articulated in the resource sections above, and consistent with the goals and interests, the Commission adopts the following guidelines to serve as the basis for implementing regulations to be forwarded on behalf of the towns and County to the Assembly of Delegates to manage development within the Ocean Management Planning District

- **6.4.1** Implementing regulations should allow for the continuing use of ocean resources for renewable energy generation and other activities which support the regional economy, so long as those uses are consistent with the other goals and purposes of this DCPC.
- **6.4.2** Development of thresholds should be considered and established as appropriate for the regional regulatory review of renewable energy projects. Factors to consider should include but are not limited to height, energy generation, or number of individual turbine supports within a project.
- **6.4.3** Implementing regulations should be developed which determine appropriate scale for renewable energy projects. Factors to consider in defining appropriate scale include, but are not limited to the factors identified in the Ocean Management Plan; 1) protection of the public trust, 2) public safety, 3) compatibility with existing uses, 4) proximity to the shoreline, 5) environmental protection, 6) community benefit, and 7) appropriateness of technology and scale.
- **6.4.4** Prior to submission of implementing regulations to the Commission the following issues should be considered:
 - a. the protection of SSU's (special, sensitive, unique resources), commercially and recreationally important fishery resources, and general ecosystem health over the long term;
 - b. the impacts of seafloor disturbances from development resulting in storm, wave or tidal impacts to the shore, or which result in changes in sediment transport, or which impact significant benthic habitat;
 - c. water quality protection from wastewater discharges from allowed uses in the district;
 - d. offshore dumping, or use of the seafloor for burial of waste;

- e. the protection of habitat provided above the water surface, specifically for waterfowl, shorebirds, bats, and other avian wildlife that utilize the air for fishing/hunting, mating, and migration, from potential development within the district;
- f. the protection of historic districts and historic resources whose setting and historic integrity would be impacted by above-water structures within the Ocean DCPC;
- g. viewsheds from significant cultural landscapes, wild or natural areas, including federal and state owned parks and wildlife refuges, and traditional cultural properties that would be impacted by above-water structures within the Ocean DCPC;
- h. the protection of underwater archaeological resources from ground-disturbing activities;
- i. possible use conflicts between allowed uses that may pose hazards;
- j. potential cumulative impacts of renewable energy on resources;
- k. co-location of technologies or multiple uses of sites; and
- l. decommissioning of renewable energy structures.

Adopted by the Assembly of Delegates on April 21, 2010.

Sheila Lyons

SECTION 7.0 Review of Developments of Regional Impact (DRI) within the DCPC

The regulations adopted pursuant to these Guidelines in no way alter the process for the referral and review of the Developments of Regional Impact according to the Act and Regulations of the Cape Cod Commission.

Approved by the Board of Regional Commissioners _	Thomas Keyes, Deputy Speaker Assembly of Delegates	
	Date	_at Time
Mary Pat Flynn		
William Doherty		

Exhibit



