

# BARNSTABLE COUNTY

In the Year Two Thousand and Two

Ordinance 02-04

To establish a District of Critical Planning Concern pursuant to the Cape Cod Commission Act in the Quivet Neck/Crowe's Pasture area, Dennis, Massachusetts.

*Barnstable County hereby ordains;*

## SECTION 1.0 SOURCE OF AUTHORITY AND GENERAL PURPOSES

As authorized by Sections 10 and 11 of the Cape Cod Commission Act ("Act"), the Barnstable County Assembly of Delegates hereby designates the Quivet Neck/Crowe's Pasture area, as hereinafter described, a District of Critical Planning Concern ("District" or "DCPC"). The purposes of this District shall be protection of natural resource interests including unfragmented forest habitat, rare plant and wildlife habitat, vernal pools, freshwater and saltwater wetlands, coastal plain pondshores, aquaculture, shellfish beds and wildlife corridors; protection of historic and archaeological resources including Native American settlement areas and the character of the rural landscape; protection of groundwater quality and water quality in Cape Cod Bay, Quivett Creek, and freshwater ponds; to maintain scenic views from Cape Cod Bay and beaches, Route 6A and Brewster; to maintain scenic views of pondshores; to encourage the continued and future use of land within the District for open space and passive recreational purposes; and to manage growth in a manner that is compatible with the resource protection goals of the District.

## 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 District encompasses approximately 250 acres of land within the area known as Quivet Neck and Crowe's Pasture in East Dennis. The area is generally bounded on the southeast by Quivett Creek and on the north by Cape Cod Bay. The westerly boundary is defined by previously permitted and developed subdivisions that have been excluded from the DCPC area. The official boundary is shown on the attached map (Attachment A) prepared by the Cape Cod Commission and dated 1/03/02. Included within the District are nine existing single-family homes, approximately 105.7 to 120.8 acres owned by the town of Dennis, and approximately 35 additional acres are subject to a conservation restriction.

The District contains two freshwater ponds (one classified as a coastal plain pond) and Quivett Creek (an anadromous fish run). Stretches of coastal bank, coastal beach, barrier beach, and an extensive saltmarsh are found within the District, as well as rare species habitat, freshwater wetlands, documented and reported rare and endangered plant and animal species, and town of Dennis open space lands. The District is located within the Old Kings Highway Regional Historic District and contains significant viewsheds and one of the region's last remaining open landscapes. The District may contain significant historic or archaeological resources.

## SECTION 4.0 TYPE OF DISTRICT/REASONS FOR DESIGNATION

The Quivet Neck/Crowe's Pasture District 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 natural, coastal, scientific, cultural, archaeological, historic, economic and recreational resource areas as described below; and
- b) the presence substantial areas of sensitive ecological conditions which render the area unsuitable for development, as described below.

As the Town of Dennis proposed, this area is designated as the following:

- a) Water Resource District
- b) Aquaculture Resource District
- c) Wildlife, Natural, Scientific, or Ecological Resource District
- d) Cultural, Historic, Architectural, or Archaeological Resource District
- e) Hazardous District
- f) Waterfront Management/Watersheet Zoning District

#### SECTION 4.1 REASONS FOR THE DISTRICT'S DESIGNATION

The Quivet Neck/Crowe's Pasture DCPC is of regional importance because of the presence of possible archaeological resources, rare and threatened species, sensitive freshwater resources and pristine coastal resources that affect land and water beyond Dennis town lines. The Town of Brewster, the Brewster Conservation Commission and the Brewster Conservation Trust have protected approximately 257 acres or more of contiguous conservation land along Quivett Creek, the southeastern boundary of the proposed District. Further, the DCPC will protect against deterioration of fresh, coastal and ground water quality, loss of unfragmented forest and rare plant and animal habitat, loss of shellfish and aquaculture resources, loss of existing rural character and scenic views from Cape Cod Bay, Brewster and Route 6A, and loss of potential cultural, historic or archaeological resources. Controlled development of land and water within Quivet Neck/Crowe's Pasture District is important to the protection of drinking water quality; protection of surface and coastal water quality; protection of aquaculture and shellfish resources; preservation of the area's unique scenery, cultural and archaeological resources and community character; protection of rare plant and wildlife habitat and significant natural resources; and the provision of open space and well-managed recreational opportunities. Planning and regulatory tools, such as revising existing zoning and subdivision by-laws, revising other local regulations, establishing overlay districts, establishing criteria for open space acquisition and conservation restrictions, establishing a public education program, and establishing guidelines for public access to public lands, ponds and coastal areas, are available which are likely to be effective in protecting or otherwise meeting the objectives of the District. Current regulatory mechanisms are not in place to control growth and development in a manner that would protect the resources within the proposed District. 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 the development of the area in a controlled manner.

##### SECTION 4.1.1 WATER RESOURCES

There are multiple significant water resource areas within the DCPC, including coastal and freshwater resources.

Quivett Creek is located along the southeasterly border of the DCPC. The creek system includes a large marsh area, and a herring run to its headwaters at Bound Brook Pond. A portion of the nominated area contributes groundwater to Quivett Creek, a nitrogen sensitive marine embayment. Quivett Creek is considered an outstanding resource. Development in the vicinity of Quivett Creek would contribute significantly to the degradation of water quality including nitrogen loading from septic systems, road runoff and lawn fertilizer, sedimentation from erosion and bacterial contamination.

Fresh water resources include Coles Pond and Little Coles Pond. Together these areas are in excess of ten areas and have been identified as rare plant habitat. Coles Pond and Little Coles Pond are classified as kettlehole ponds as they have no inlets or outlets and are dependent solely on groundwater or precipitation as a source of supply. The ponds are poorly flushed and as such are very sensitive to additions of nutrients and sediment. Impacts from development that would negatively impact the ponds include nitrogen loading from septic systems, phosphorous loading from wastewater, road runoff and lawn fertilizer, sedimentation from erosion and bacterial contamination.

The soil conditions in this area have many development limitations. Many of the areas have high groundwater levels and are poor for septic system installation due to the minimal separation distance between leach fields and the groundwater table. Highly permeable soils found in this area indicate minimal filtration of wastewater and have high erosion potential.

There is significant development potential on the upland areas of the DCPC. While additional homes could be built in the area under current town zoning and may be able to meet the 5.00 parts per million nitrate nitrogen loading general water resources classification minimum performance standard (MPS), this MPS may be insufficient for water quality protection.

The Quivet Neck/ Crowe's Pasture District contains regional water resources that are susceptible to degradation from future development, and designation as a DCPC would allow the Town to develop strategies to address protection of the area's ground and surface water quality.

#### SECTION 4.1.2 COASTAL RESOURCES

The Quivet Neck/Crowe's Pasture District includes approximately 250 acres and has several important coastal features that are described in the nomination. The boundaries will embrace stretches of coastal bank, coastal beach and barrier beach on Cape Cod Bay subject to coastal erosion. The 134 areas of beach and dune that comprise the barrier beach system shelters approximately 205 acres of salt marsh, and also serves as habitat for Piping Plover. The area is open to the public and limited operation of off-road vehicles is permitted. Uplands adjacent to coastal resources include important natural features like coastal plain ponds, habitat that supports endangered plant species, cedar wetlands, and other manifestations of the Cape's historical landscape.

A portion of the DCPC has been identified as a marine recharge area, and the nomination materials describe the town's concern about nitrogen inputs from individual septic systems that could potentially be placed in unsuitable soils. Existing water quality along the coast and in Quivett Creek is believed to be good, and the value of adjacent salt marsh and intertidal areas to serve as habitat for shellfish is a priority for residents and the town's natural resource professionals. The Quivett Creek estuary is also an anadromous fish run. Strict management of stormwater, wastewater treatment, turf and buffer zone management, and other strategies to limit land-based pollution and maintain water quality characteristics would help to preserve these public trust resources. Coastal habitat can also be adversely impacted by other human activity such as buffer zone alteration, construction of coastal structures such as docks and piers and erosion control devices, and by the simple pursuit of some recreational activities in dynamic coastal environments.

The DCPC submittal contains compelling information regarding coastal resources within and dependent upon the Crowe's Pasture and Quivet Neck area. DCPC designation could be used as a vehicle to engage natural resource management issues that are described in the submittal. These actions may include assessing the long-term implications of continued coastal erosion and its potential to affect private properties and infrastructure, evaluation of areas that could be sensitive to the installation of private docks and piers, and review of the area's capacity to support shellfish aquaculture, shellfishing and other activities. These management issues should be addressed in order to safeguard the character of this area and to address potential secondary and cumulative impacts from existing development and from development that may occur in the future.

#### SECTION 4.1.3 NATURAL RESOURCES AND OPEN SPACE

The District is a sensitive resource area due to the presence of a variety of natural features. The area has been mapped a Significant Natural Resource Area by the *Cape Cod Regional Policy Plan* due to the presence of rare species habitat, wetlands, pond shore and potential public water supply areas. According to the *Natural Heritage Atlas, 2000 - 2001 Edition*, portions of the Quivet Neck area are mapped as Priority Habitat for Rare Species, and other areas are mapped as Estimated Habitat of Rare Wildlife. According to the *Cape Cod Critical Habitats Atlas*, Coles Pond is mapped as a coastal plain pond; the southern portion of the DCPC is bordered by extensive saltmarshes associated with Quivett Creek; and sections of the northern boundary on Cape Cod Bay include barrier beaches.

According to the *Barnstable County Soil Survey*, the soils in this area are primarily Plymouth loamy coarse sands (various slopes), excessively drained, stony soils suitable for native pasture and woodland. These soils are limited in their capacity for septic absorption because of the rapid to very rapid permeability. The USDA/Natural Resources Conservation Service has mapped the area as containing soil types which are limited by permeability and/or high groundwater. Consequently, the limited filtering capacities of many of the soils within the District could lead to groundwater contamination.

Materials submitted by the town of Dennis as part of the Quivet Neck DCPC nomination include additional information about sensitive resources in this area. According to the nomination papers, the bayside beaches provide habitat for the state-listed Piping Plover. The nomination papers also note that Plymouth Gentian and New England Blazing Star, both state listed species of special concern, have been documented in the Quivet Neck area. Plymouth Gentian is a globally rare plant that thrives under the specialized environments found in coastal plain pond shores, such as Coles Pond. The naturally fluctuating water levels, water quality, and specialized environment of coastal plain ponds can be threatened by septic systems, water withdrawals, and other impacts associated with development.

Material submitted by the Dennis Conservation Commission noted that other rare and endangered plant and animal species may be found within the District, including Coastal Heathland Cutworm, Eastern Box Turtle, Straight-lined Mallow Moth and Salt Reedgrass.

The Town Planner provided information indicating the presence of Cooper's Hawk and Spotted Turtle (a recently de-listed species and a species of special concern, respectively) and the possible presence of Ladies Tresses orchid, a special concern species. More information should be collected on these resources and the extent of their habitats prior to any development in the Quivet Neck/Crowe's Pasture area.

The DCPC area also contains town of Dennis open space lands. Crowe's Pasture, located in the northeastern corner of the DCPC area, is the site of an on-going habitat restoration project funded in part by the Department of Environmental Management. One of the goals of the project is to restore Crowe's Pasture to an open field/meadow environment, the results of which could possibly provide additional valuable habitat for the Northern Harrier, a state listed threatened species also sighted in this area. Development in the vicinity of this habitat restoration site could potentially have impacts on this restoration/rare species habitat area.

The DCPC area is bounded to the south by saltmarsh and Quivett Creek, which is a herring run. Freshwater wetlands appear to be present throughout the District, including land adjacent to the cemetery containing a small bog, land adjacent to Coles Pond containing what appears to be an isolated wetland, and bordering vegetated wetlands located around Coles Pond. In addition, the National Heritage Program's *Aerial Photo Survey of Potential Vernal Pools*, Spring 2001 indicates the possibility of several vernal pools within the boundaries of the District.

The DCPC area is presently densely vegetated with a combination of pitch pine/oak woodlands and other hardwoods, and dense shrub vegetation. This dense and varied habitat together with pond, salt and freshwater wetlands likely make this area significant for a variety of wildlife.

#### SECTION 4.1.4 HERITAGE RESOURCES/COMMUNITY CHARACTER

The DCPC is located within the Old Kings Highway Regional Historic District and is distinctive as one of the region's large remaining open landscapes. Much of the character of the District is defined by its low density pattern of development, with many homes originally built as summer cabins. There are currently nine existing homes within the 250 acre District. Under existing subdivision regulations, a higher density of development would suburbanize the area by distributing residencies over the remaining upland. Even under the Town's optional cluster development bylaw, the greater number of homes allowed would largely eliminate the present rural character of the area. Given the fragility of the character defining aspects of the District, including large areas of unfragmented forest, the largely unspoiled pondshore of Coles Pond, the largely unspoiled views of the shoreline from Cape Cod Bay and the bayside beaches, and the unspoiled views of the District from Route 6A and Brewster, development in the District needs to be planned in a comprehensive manner if the unique character of Quivet Neck/Crowe's Pasture is to be preserved.

As noted in the DCPC nomination, the Town has not formally inventoried the DCPC area for historic and archaeological resources. However, the area is likely to contain archaeological resources, based on both local knowledge and on the area's proximity to a wide variety of environmental resources. As part of the DCPC process, the State Archaeologist at Massachusetts Historical Commission (MHC) can be consulted regarding the area's archaeological sensitivity. Probable areas of archaeological resources can be identified through an archaeological sensitivity assessment based on the presence and/or absence of combinations of environmental variables, documentary data and ground conditions. Archaeological survey work may also be conducted to establish the boundaries of archaeological sites. Either method will provide information to allow the Town to guide future development away from sensitive archaeological resources.

DCPC designation will help to protect these resources by granting time for the establishment of regulations that would better protect the area's archaeological, historic and scenic features. Development and subdivision regulations could be revised to guide development away from open landscapes, historic and archaeological resources, and regional view of the District.

DCPC designation will provide time for the exploration of non-regulatory initiatives to identify and protect these resources. In addition, designation as a DCPC will allow time for further study of the area's archaeological sensitivity and identification of significant sites that need protection.

#### SECTION 4.1.5 DEVELOPMENT POTENTIAL

As supported above, the amount of development possible within the approximately 250 acre District could have significant impacts on the resources within the District. New development would increase the number of septic systems within the groundwater recharge area of Quivet Creek, Coles Pond and Cape Cod Bay, potentially degrading water quality. Unprotected historic or archaeological resources could be disturbed or lost. The rural character and unspoiled open views of the area from regional locations could be degraded or lost due to inappropriate siting of buildings. Forest habitat in the area would be significantly reduced, limiting wildlife corridors and placing more pressure on rare species habitat. Residential development on 60,000 square foot lots would affect the character of the area, although this could be mitigated to an extent through the use of cluster development if such a development was well designed.

Current zoning regulations have little relationship to the significant resources that the Town hopes to preserve. Development density needs to be evaluated to determine how much development can occur in conjunction with resource protection goals.

## SECTION 5.0 SUGGESTED GUIDELINES FOR DEVELOPMENT

The following guidelines shall serve as the basis for the future establishment of implementing regulations to be adopted by the Town pursuant to Section 11 of the Cape Cod Commission Act to control development within Quivet Neck/Crowe's Pasture District.

### SECTION 5.1 INTRODUCTION AND GENERAL GUIDELINES

The Dennis Board of Selectmen and the Dennis DCPC Steering Committee shall oversee the development and adoption of Implementing Regulations consistent with the Guidelines described herein. Implementing Regulations for the District may take the form of zoning bylaws, regulations, management initiatives, or other means identified in the Town of Dennis which help to achieve the goals and interests of the District. To the extent that some of the resources identified in the goals and interest are currently being evaluated or need to be evaluated, the level of protection required will be determined by the analysis developed as part of the DCPC Steering Committee study process. Commission staff will assist the town of Dennis in performing development and resource analyses within the District and in drafting appropriate regulations.

The town of Dennis shall propose Implementing Regulations for the District to the Cape Cod Commission. In order to be approved, Implementing Regulations adopted by the town of Dennis must be found by the Commission to be consistent with these Guidelines, pursuant to Section 11 (d) of the Act. The Cape Cod Commission shall determine whether the Implementing Regulations proposed by the Town are sufficient to protect the goals and interests of the District and may then issue a Certificate of Consistency.

The town of Dennis shall adopt and incorporate Implementing Regulations within twelve (12) months of the District's designation by ordinance. If the town of Dennis fails to adopt and incorporate implementing regulations which are consistent with these Guidelines within twelve (12) months, the Commission may grant an additional ninety (90) days. After the additional ninety (90) days, the Commission may propose and the Assembly and the County Commissioners may adopt by ordinance Implementing Regulations for the District.

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

### SECTION 5.2 GOALS AND INTERESTS

The objective of these Guidelines is to ensure full protection of the following goals and interests of the District through the establishment of Implementing Regulations by the town of Dennis. The goals and interests of this District shall be:

- to enhance protection of groundwater quality within the recharge areas to Cape Cod Bay, Quivett Creek, Coles Pond, and Little Coles Pond;
- to enhance protection of water quality within Cape Cod Bay, Quivett Creek, Coles Pond, and Little Coles Pond;
- to maintain the scenic character of views from neighboring towns, regional roadways and Cape Cod Bay;

- to maintain public scenic views of pondshores and woodlands;
- to preserve cultural landscapes, archaeological sites and historic structures;
- to protect the District's key natural resources including rare plant and wildlife habitat, wetlands and coastal plain pondshores, vernal pools, unfragmented forested areas, shell fisheries, fisheries, and wildlife corridors;
- to evaluate, enhance and protect, as deemed necessary, existing vegetative cover in order to maintain water quality and wildlife habitat;
- to encourage the use of publicly owned land within the District for open space, passive recreational purposes, aquaculture, habitat management and related studies;
- to encourage appropriate management of future recreational opportunities within the District in a manner that is compatible with resource enhancement and protection;
- to manage growth in a manner that will not result in adverse impacts on archaeological, cultural, historic, visual or natural resources;
- to encourage the development of an overall management plan to address non-regulatory issues and foster education about the sensitive resources within the District;
- to undertake coastal resources management planning in order to preserve critical characteristics of coastal habitat;
- to safeguard soil and slope stability in order to preserve resource protection;
- to encourage cluster zoning in order to manage growth in a manner that will maximize natural resource, archaeological, cultural, historic and scenic vista protection; and
- to delineate hazard areas so as to maximize storm damage prevention and prevention of pollution.

### SECTION 5.3 DEFINITIONS

Definitions shall be the same as those included in the Cape Cod Commission Act, the Regional Policy Plan, and the Town of Dennis bylaws and Regulations.

### SECTION 5.4. REVIEW OF DEVELOPMENTS OF REGIONAL IMPACT (DRIs) WITHIN THE DCPC

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

### SECTION 5.5. WATER RESOURCES

The Town shall establish adequate protections for ground and surface water quality and quantity within the District. Development within the Quivet Neck/Crowe's Pasture DCPC area has the potential to impact all of the water resources of concern identified in the Regional Policy Plan; drinking water, drinking water wells, ponds, rivers and coastal embayments. Based on preliminary analyses, the functions of these resources do not appear to have been unduly impacted by existing levels of development. Additional analyses are necessary to evaluate the impacts of future

development on these resources.

5.5.1 A 5 ppm-N nitrogen loading standard should apply throughout the District to protect existing water supplies and potential future supplies.

5.5.2 Standards should be established based on groundwater flow and surface runoff characteristics to protect the quality of future private wells (drinking and irrigation), including setback requirements from roads, existing development, and septic systems.

5.5.3 Water table information should be refined in the DCPC area through groundwater mapping and monitoring to delineate sub-watershed recharge zones. This information should be used in turn to refine pond and marine recharge boundaries and private well protection areas within the DCPC.

5.5.4 An assessment of lots subject to high groundwater elevations should be conducted using Certified Soil Evaluation procedures, the USGS high groundwater methodology (Cape Cod Commission Technical Bulletin 92-001) and soils information or FEMA floodplain data. Areas subject to flooding should be identified and development guidelines developed for these areas.

5.5.5 The Town should require that all new septic system design plans be adjusted to account for maximum high groundwater conditions, as referenced in 5.5.4.

5.5.6 A phosphorous loading analysis for Coles Pond and Little Coles Pond should be conducted to determine the trophic status of the Pond and assess its assimilative capacity for additional phosphorous, as County and Town resources allow.

5.5.7 The Town should require minimum setbacks from all pond shorelines (300 foot setbacks are recommended unless the results of the Town assessment indicate alternative setback standards to be more appropriate) for soil adsorption systems (SAS) for all new construction including single-family homes. Further, all onsite sewage disposal upgrades shall be located to maximize shoreline setback and incorporate enhanced pollutant removal, including but not limited to phosphorous, bacteria and nitrogen.

5.5.8 Town stormwater regulations should strive to incorporate vegetative swales and ensure that stormwater from roads and other land uses within the District is discharged outside the recharge area to ponds. Where this is not feasible, stormwater should be adequately treated for phosphorous and other pollutants. Consideration should also be given to enhanced treatment in areas with steeper slopes. If an adequate water-quality study of the pond has been completed and the results indicate that acceptable water quality will be maintained now and at buildout, the regulations should waive this requirement.

5.5.9 The Town should require that all lots located in contributing areas to Quivett Creek maximize wastewater treatment and include Massachusetts DEP approved I/A technology for nitrogen removal.

5.5.10 Regulations should be established to protect fresh waters from development impacts, including erosion and sedimentation control, limits on the amount of impervious surface, site disturbance, and, if possible, management of the extent and intensity of irrigation and limits on chemical fertilization and road treatments.

5.5.11 The Town should consider methods for remediation of existing problematic stormwater discharges within the District.

5.5.12 The Town should encourage the development of a pond monitoring network. This network could be staffed through the use of citizen volunteers, town staff, or a combination thereof. Data to be collected could include water quality parameters and water levels. Data collected could be used to



assist in the preparation of a pond management plan.

## SECTION 5.6 ECOLOGICAL AND RECREATIONAL RESOURCES

The Town shall evaluate existing local statutes and regulations and establish, as deemed necessary, additional regulations to protect wetland resources, rare or significant wildlife species habitats, and mechanisms for protecting the rural character of Quivet Neck. The Town will take steps to educate the public regarding impacts to sensitive resources within the District and provide public access to public lands.

5.6.1 The Town should, to the extent feasible, complete a natural resources wildlife and plant habitat inventory of the lands within the District, and revise zoning and land use regulations based on land suitability and carrying capacity, and maximizing habitat protection. In conjunction with this, the Town should inventory and map wetland resources within the District.

5.6.2 Regulatory protections and buffers to wetlands, waterbodies, and vernal pools should be increased as necessary, consistent with the recommendations of the natural resources inventory and should strive to meet the standards established in the Regional Policy Plan, to better protect these resources.

5.6.3 The Town should consider overlay districts to protect significant or sensitive resources within the Quivet Neck area. Other mechanisms for habitat conservation planning and protection within the District should be considered, including establishment of incentive based development criteria.

5.6.4 The Town should develop criteria for open space acquisition and conservation restrictions based on natural resource values, development potential, historic/architectural values and scenic vistas that would be appropriate within the District.

5.6.5 The Town should investigate alternatives to reduce and manage clearing and grading on development sites within the District, directed toward maintaining unfragmented forest and wildlife corridors, and including establishment of incentive based development criteria.

5.6.6 The Town should consider revisions to existing zoning regulations that allow permitted uses that are land consumptive and/or have the potential for negative impacts on important resources in the District.

5.6.7 The Town should develop and encourage implementation of a public education program for property owners, visitors and others that will provide suggestions for reducing or eliminating impacts to the resources within the District.

5.6.8 The Town should develop guidelines for public access to and passive recreational uses of public lands, ponds and coastal areas with the District, excluding activities previously permitted, and explore possible Cape Cod Pathways linkages.

## SECTION 5.7 COASTAL RESOURCES

The Town shall evaluate and revise, where necessary, existing wetland protection statutes, ordinances and by-laws for coastal wetlands, coastal habitats and lands subject to coastal storm flowage within the District.

5.7.1 The Town should prepare a scope for the development, maintenance and implementation of a Coastal Resources Management Plan for the District.

5.7.2 Regulations should be established to protect coastal waters from development impacts, including erosion and sedimentation control, limits on the amount of impervious surface, management of the extent and intensity of irrigation, and limits on chemical fertilization and road treatments, as supported by scientific and natural resources inventories being developed by the Town.

5.7.3 The Town should identify areas (if any) that are suitable for the construction of shoreline structures such as elevated walkways and stairways that provide access to coastal resources, and structures that extend below mean high water, and areas where such structures will be prohibited.

5.7.4 Regulations should be established to ensure appropriate siting of utilities to minimize susceptibility to flood hazards. Regulations should also include any additional building standards and requirements for private and public development that would apply in hazard areas within the District boundaries, and should provide constraints on private development and redevelopment within and immediately adjacent to FEMA flood zones.

5.7.5 The Town should identify and analyze the issues related to long-term nonstructural management of erosion and shoreline retreat, protected species habitat, invasive plant species, foreseeable use conflicts in the coastal, estuarine and marine environments and habitats.

5.7.6 The Town should identify and analyze existing and potential areas suitable for the development of aquaculture facilities, strategies to balance recreational, municipal and commercial shellfish interests, and strategies to protect and enhance fish habitat and migratory routes.

## SECTION 5.8 HERITAGE AND SCENIC RESOURCES

The Town shall establish means for protecting and enhancing habitat management, the rural and scenic character of the District and for increasing protection of documented historic and archaeological resources.

5.8.1 Regulations should be established to promote habitat management and to protect the rural character of the District, including enhancement of vegetated buffers (including encouraging things such as hedgerows) along the shoreline, roadways and internal walking trails, incentives for shared curb cuts/common driveways, and other means of reducing the need for structural improvements which would be inconsistent with the character of the District.

5.8.2 Local regulations and by-laws (either zoning or subdivision) should be established and/or revised to address historic and archaeological resources within DCPC development sites. Included among these would be requirements for historic and archaeological inventories as part of the development approval process to protect historic resources and archaeological sensitive areas. In conjunction with this, the Town should pursue further identification of archaeologically sensitive areas within the District to guide development review through an archaeological sensitivity assessment or archaeological survey work.

5.8.3 The Town should identify visually sensitive areas, including views of pondshores and coastal shores, and views from regional roadways (Route 6A) and neighboring towns (Brewster), and establish zoning and subdivision regulations to limit development potential and guide project review within these identified cultural landscapes and scenic vistas. The Town should consider developing a scenic overlay district and special permit process to protect cultural landscapes and scenic vistas. Mechanisms to reduce visual impact could include buffers from significant resources, limits on the height and bulk of structures, development within a specified range of elevations, limits on clearing and grading, and incentives for relocating development to more appropriate locations.

SECTION 5.9 GROWTH MANAGEMENT

The Town shall review the zoning bylaw and subdivision regulations for inconsistencies with the goals of the District and propose zoning amendments, as necessary, to achieve all of the goals set forth in Section 5.2 of this ordinance.


5.9.1 The Town should consider a new cluster development bylaw for the study area to either provide for mandatory clustering within the District or increased incentives for the use of this provision.

5.9.2 The Town should identify means to reduce or redistribute density within the District in accordance with the findings of a groundwater recharge study, soils inventory, natural resources inventory, vernal pools and wetlands inventory, archaeological and historic resources survey, and visual sensitivity analysis. Mechanisms to reduce or redistribute density which should be explored include open space protection (fee and less than fee interests), downzoning and transfer of development rights.

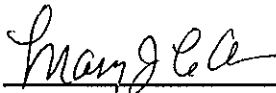
5.9.3 A development approval process should be developed for residential subdivisions which includes requirements for resources inventories to provide opportunities to protect significant visual, environmental, archaeological and cultural resources.

5.9.4 The Town should consider regulations to ensure that changes in use or changes in intensity of use of pre-existing structures within the District are consistent with the goals.

Adopted on March 20, 2002 by the Assembly of Delegates.

  
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Thomas Bernardo, Speaker

Approved by the Board of County Commissioners, March 27, 2002, at, 10:35 a.m.  
Date Time

  
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