

# CAPE COD REGIONAL GOVERNMENT

In the Year Two Thousand and Six

Ordinance 06-01

To establish a District of Critical Planning Concern pursuant to the Cape Cod Commission Act in the Pond Village area, Barnstable, 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 Pond Village 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 rare plant and wildlife habitat, freshwater and saltwater wetlands, a freshwater pond, groundwater quality in Hinkley's Pond and Barnstable Bay, aquaculture, and shellfish beds in Barnstable Harbor; protection of historic resources, rural and scenic landscapes; to maintain scenic views to and from Cape Cod Bay; protection of historic and scenic roadways, stone walls and architecture; 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 Pond Village DCPC boundaries encompass lands surrounding Scudder Lane and Hinkley's Pond in Barnstable Village, MA. The proposed district includes parcels fronting on the east side of Scudder Lane, south of Barnstable Harbor, properties east of and including the Audubon properties and salt marsh, and abutting the north side of Route 6A. Further, all properties on the south side of Route 6A within a 300' radius of Hinkley's Pond are included. These properties are shown on the shaded areas on the attached map, which also includes the Town of Barnstable assessors identification numbers, and which is incorporated herein by reference.

The area of the proposed District contains two historic districts: Old King's Highway Historic District and the National Register of Historic Districts. A majority of the land area is also mapped as potential rare species habitat by the National Heritage and Endangered Species Program (NEHSP).

## **SECTION 4.0 Type of District/Reasons for Designation**

The Pond Village 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, architectural, historic, and recreational resources, as well as values of regional, statewide and national significance as described below; and

b) the presence of substantial areas of sensitive ecological conditions which may render some areas unsuitable for development and which deserve special planning for protection.

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

1. Water Resource District
2. Wildlife, Natural, Scientific, or Ecological Resource District
3. Cultural, Historic, or Architectural Resource District

#### **SECTION 4.1        Reasons for the District's Designation**

The area is of critical concern to the region because of its historic and scenic value, and its visible location in a distinctive coastal habitat that includes sensitive freshwater resources, rare species habitat, pristine coastal resources, location on Barnstable Harbor, and historic and architectural resources along Route 6A.

Controlled development of land and water within the proposed Pond Village District is important for the protection of surface and coastal water quality; protection of shellfish resources; preservation of the area's unique scenery, cultural, historic, architectural resources and community character; protection of rare plant and wildlife habitat; and for protection of scenic and historic landscapes and views. Further, the DCPC will protect against potential problems of uncontrolled or inappropriate development such as increases in the numbers of dwellings and inappropriate siting and ground clearing which could degrade surface, coastal and groundwater resources, further impair water quality in Hinkley's Pond, and impact shellfishing and aquaculture grants in Barnstable Harbor (which are very sensitive to nutrient loading and bacteriological impacts from stormwater), and to reduce impacts to rare species and rare species habitat in the area. In addition, building siting and massing could affect the historic character of the area, and viewsheds may be lost. Planning and regulatory tools, such as revising existing zoning and subdivision bylaws, revising other local regulations, establishing overlay districts, establishing criteria for stormwater management, establishing guidelines for public access to Barnstable Harbor, are available which are likely to be effective in protecting or otherwise meeting the objectives of the 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**

Hinckley's Pond is a freshwater pond in the southern portion of the designated DCPC area. No surface water tributaries to the pond are mapped, nor were any tributaries observed from Route 6A. The pond appears to be recharged entirely by groundwater, direct precipitation, and some stormwater runoff from properties around the pond shoreline, and Route 6A.

A preliminary phosphorous-loading analysis suggests that existing development within the District may already be unduly impacting water quality in Hinckley's Pond. Impacts from development that would negatively impact the ponds include nitrogen loading from septic systems, phosphorous loading from wastewater, road runoff and lawn fertilizer, and sedimentation from erosion. There is significant development potential in the proposed DCPC for both new subdivisions and homes, and expansions of existing homes, which could impact Hinckley's Pond.

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

#### **SECTION 4.1.2 Coastal Resources**

The proposed DCPC area drains to Barnstable Harbor, and includes the lower reach of Brickyard Creek. Barnstable Harbor is an Area of Critical Environmental Concern (ACEC) administered by the Massachusetts Department of Conservation and Recreation and enjoys the designation of Outstanding Resource Waters (ORW) by virtue of its socio-economic, recreational, ecological and aesthetic values. As such, the Massachusetts law that regulates surface-water quality requires that Barnstable Harbor's excellent water quality be maintained and not degraded.

The harbor and the marsh together comprise a system that provides important fish and shellfish habitat and supports commercial and recreational shellfisheries. These resources also provide excellent habitat for resident and transient waterfowl and other species of wildlife. The harbor and marsh have cultural significance, for their role in the initial settlement of the Town of Barnstable and Cape Cod, and they currently afford recreational boating, fishing and wildlife viewing opportunities.

Materials submitted in the application indicate that land within the DCPC area are characterized by low-permeability soils, which generate high volumes of stormwater runoff, a diverse threat to water quality, including the previously mentioned shellfish beds. Portions of Barnstable Harbor are periodically closed to shell fishing due to bacterial contamination of its shellfish beds. Possible sources of bacteria in addition to wildlife could include failed septic systems and the flow of untreated stormwater runoff into the harbor. Significant development could introduce additional nutrients into the coastal system through surface runoff, land clearing or drainage systems. 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.

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 regional coastal resources. Regulations such as managing future expansions of maintained lawn, increases in impervious surface coverage and the construction of additional roof-area should be evaluated as strategies to avoid additional runoff.

#### **SECTION 4.1.3 Natural Resources and Open Space**

Portions of the district are located within Significant Natural Resource Areas due to the presence of estimated rare species habitat, unfragmented forest, and saltwater marsh and freshwater wetlands. The wetland/upland boundary between the District and the Barnstable Harbor marshes also delineates the Sandy Neck/Barnstable Harbor Area of Critical Environmental Concern (ACEC), so designated due to the high diversity of plants and birds, productive shellfish beds, and habitat for state listed endangered species such as the diamond back terrapin.

While portions of the District are developed, there are many properties that could be further subdivided, thus the DCPC provides opportunities to ensure that critical habitats are not disturbed or threatened through additional development or intensification of development.

#### **SECTION 4.1.4 Heritage Resources/ Community Character**

The nominated area is within the Old Kings Highway Regional Historic District, and those properties abutting Route 6A are also listed on the National Register of Historic Places. Much of the character of the District is defined by its low density pattern of development, and where historic properties are interspersed with more recent structures. There are a variety of architectural styles, with buildings characterized by a colonial design scaled to the landscape, and screened with buffers of mature trees, or set well back from the roadway with large open spaces in front of them. However, a number of the existing large lots are subdividable, and zoning would allow additional

development on many of the existing lots. Lots in the District that are not subdividable still have potential for teardown/rebuilds or expansions on a large scale that could impact the character of the area.

Views of, and from, the Pond Village area are also an important attribute of the District. These views include lands within the proposed DCPC, and also views of the barrier beach and salt marsh in the ACEC. Just as the character of the Pond Village properties would be affected by inappropriate development on harbor and barrier beach, the aesthetics of the ACEC could be affected by out-of-scale development, or development with inadequate buffers to the coastline, that could occur within Pond Village. The prominence and scale of structures within Pond Village is a matter of regional importance, and the DCPC could produce regulations addressing the mass, exposure, and screening of structures, and the maintenance of vegetative buffers to preserve the character of the area.

The lanes and roadways also have a distinctive character including an interesting combination of features that accentuate the narrowness of the historic road (stone walls and overhanging vegetation), and glimpses of the expansive salt marsh in the distance. By including properties on both sides of Scudder Lane in the district, the Town can craft means to protect this distinctive historic character.

DCPC designation will help protect these resources by identifying significant scenic view sheds within the district, and establishing potential restrictions to protect them such as building height limits, maximum ratios of floor area to lot size, or other tools would be useful in preserving the District's distinctive character.

#### **SECTION 4.1.5      Developmental Potential**

As supported above, the amount of development possible within the approximately 125 acre District could have significant impacts on the resources within the District. New development would increase the number of septic systems within the ground water recharge area of Hinckley's Pond and Barnstable Harbor. The community character created by historic homes and roadways could be lost. The rural character and unspoiled open views of the area from regional locations, and scenic landscapes and viewsheds, could be degraded or lost due to inappropriate siting and scale of buildings.

Current zoning regulations and Old Kings Highway designation 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 the Pond Village District.

#### **SECTION 5.1      Introduction and General Guidelines**

The Barnstable Planning Board and the Pond Village 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 Barnstable, which help to achieve the goals and interests of the District. To the extent that some of the resources identified in the goals and interests 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 Barnstable in performing development and resource analyses within the District and in drafting appropriate regulations.

The Town of Barnstable shall propose Implementing Regulations for the District to the Cape Cod Commission. In order to be approved, Implementing Regulations adopted by the town of Barnstable 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 Barnstable shall adopt and incorporate Implementing Regulations within twelve (12) months of the District's designation by ordinance. If the town of Barnstable 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 Barnstable. The goals and interests of this District shall be:

- to enhance protection of groundwater quality within the recharge areas to Hinkley's Pond and Barnstable Harbor;
- to enhance protection of water quality within Hinkley's Pond and Barnstable Harbor;
- to maintain the scenic public views of woodlands and historic fields from local roadways, regional roadways, Hinkley's Pond and Barnstable Harbor;
- 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 pond shores, wildlife corridors, and shell fisheries;
- 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 encourage coastal resources management planning in order to preserve the coastal habitat and shellfishery;
- to safeguard soil and slope stability in order to protect sensitive resources;
- to delineate hazard areas so as to maximize storm damage prevention and prevention of pollution;

- to reduce growth potential by increasing lot sizes consistent with the Town of Barnstable LCP; and,
- to encourage scenic viewsheds, architectural, and historic overlay zoning to preserve the historic, scenic, architectural and community character resources in the area.

### **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 Barnstable ordinances and regulations.

### **SECTION 5.4 Review of Developments of Regional Impact (DRIs) Within the District of Critical Planning Concern**

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**

Development within the District has the potential to impact water resources protected by the RPP. Water resources include groundwater flowing beneath the District; Hinckley Pond, a freshwater pond; the stream draining the pond; and marine waters of Barnstable Harbor. Evidence suggests that existing development within the District may be unduly impacting water resources. Further analyses will be necessary to more rigorously and scientifically assess existing water quality within the District and to track improvements afforded by regulations and programs to be established for the District.

The Town should establish regulations and programs that adequately protect groundwater and surface-water quality within the Pond Village District consistent with protections afforded by the RPP.

5.5.1. District regulation should be put in place establishing a 5-ppm-N standard for a groundwater nitrogen concentration. The 1-acre zoning bylaw that currently applies to Pond Village May not be sufficient to achieve this standard for homes with more than two bedrooms. The town should consider both increasing lot size to at least two acres and requiring the use of innovative/alternative septic system technology capable of removing nitrogen from wastewater.

5.5.2. A phosphorous-loading analysis for Hinckley Pond should be conducted to determine the trophic status of the Pond and to assess the Pond's assimilative capacity for additional phosphorous as County and Town resources allow.

5.5.3 The Town should encourage the establishment of a network of citizen volunteers to monitor water quality in Hinckley Pond and track improvements afforded by regulations and programs implemented in the Pond Village DCPC toward improvement of water quality.

5.5.4. The Town should include a regulation requiring a minimum setback from Hinckley Pond for lawns and subsurface stormwater- and wastewater-disposal facilities for all new construction. A minimum setback of 300 feet is recommended unless the phosphorous-loading analysis referenced in 5.5.2 indicates that alternative setbacks are appropriate.

5.5.5 The Town should put a regulation in place to protect fresh surface waters from development impacts including site disturbance, erosion and sedimentation. These protections

may include limits on the amount of impervious surface; erosion controls; and management of the extent and intensity of irrigation, including limits on chemical fertilization, pesticide, and road-treatment applications.

5.5.6 The Town should encourage the establishment of a community-supported education program for the District to disseminate information that encourages the use of best lawn- and landscape-management practices protective of water quality.

5.5.7. The Town regulations should require use of stormwater best-management strategies such as use of vegetated swales and constructed wetlands to ensure that stormwater runoff from roads and other land uses within the District is adequately treated and discharged outside the setback area recommended in 5.5.4.

5.5.8. The Town should consider approaches for addressing existing problematic stormwater discharges within the District. Such approaches may include providing treatment of stormwater runoff at the Scudder Lane landing and working directly with Massachusetts Highway Department during the proposed Route 6A resurfacing project to eliminate overflow of stormwater from the roadway.

5.5.9. A program to track failing septic systems should result in their replacement with wastewater systems consistent with 5.5.1 and 5.5.4. Where systems cannot be relocated to areas outside of the minimum setback area, wastewater systems capable of removing nutrients should be required.

5.5.10. An assessment of lots subject to high groundwater elevations should be conducted using Soil Evaluation Procedures, the USGS high groundwater methodology (CCC Technical Bulletin 92-001) and soils information or FEMA floodplain data. Areas subject to flooding should be identified and construction guidelines should be developed for these areas.

## **SECTION 5.6      Natural Resources**

The Town should evaluate existing local statutes and regulations and establish, as deemed necessary, additional regulations to protect wetland resources, rare or significant plant or wildlife habitat, and mechanisms for protecting the rural character of the Pond Village area.

5.6.1 The Town should, to the extent practicable, complete a natural resources inventory of the open lands within the District, including an inventory and map of wetland resources. The Town should work with the Natural Heritage and Endangered Species Program to identify state listed rare or endangered species within the district that could benefit from additional protections from development and human impacts.

5.6.2 Changes to zoning and wetland regulations should be considered in order to protect buffers to wetlands, waterbodies, vernal pools, and rare species habitat. To the extent practicable, the Town should strive to adopt regulations within the district that are consistent with the standards for natural resource protection in the Regional Policy Plan. Zoning changes could include overlay districts or incentive-based development criteria in order to direct development away from sensitive resources.

5.6.3 The Town should examine existing zoning and consider revisions to provisions allowing land-consumptive development and/or provisions that may have negative impacts on natural resources in the district.

5.6.4 The Town should develop criteria for open space acquisition and conservation restrictions based on natural resource values, development potential, historic or cultural values, and scenic

vistas.

5.6.5 The Town should investigate alternatives to reduce and manage clearing and grading on development sites within the district, directed toward maintaining woodland habitat and wildlife corridors.

5.6.6 The Town should develop and encourage implementation of a public education program for property owners that will provide suggestions for reducing or eliminating impacts to the resources within the district. Such public education should include measures to address the management and spread of invasive species.

## **SECTION 5.7 Coastal Resources**

The Town should initiate the work necessary to establish an appropriate record of baseline conditions including extent of clearing on parcels within the DCPC, existing views and vistas, public access, monitoring and control of invasive species, management of development within the flood zone, buffer zones, additive impacts from future redevelopment/intensification of use and other issues. Once an adequate baseline is established, the effects of development in Pond Village on the coastal environment can be better assessed and appropriate protection measures tailored to the Pond Village area can be developed.

5.7.1 The Town should provide clear guidance for plant species that are suitable and those that are not suitable for use in gardens and as ornamentals. The District should address public education, monitoring and stewardship actions to protect coastal resources from incursions by exotic or invasive species. The regulations should include a strategic approach to monitoring for the spread of phragmites, which is affecting some areas of the Great Marsh system and a protocol for addressing new infestations.

5.7.2 The Town should include regulations that provide prohibitions on, or appropriate controls of any shoreline structures including docks, floats, walkways and other structures. In addition, the implementing regulations should provide a framework for evaluating appropriate responses to shoreline change, sea level rise and the likelihood of landward retreat of coastal resources such as salt marsh.

5.7.3 The Town should include regulations that provide a framework for managing the potentially intensive use of the launch at Scudder Lane for recreational uses such as recreational boating and shellfishing, and commercial uses such as shellfishing and the maintenance of aquaculture grants.

5.7.4 The Town should include regulations to provide for adequate standards of erosion and sedimentation control for sites within the district (including the Scudder Lane landing) and for development and redevelopment that may occur in the future. The regulations should include protocols developed through a diagnostic report of existing Stormwater runoff into coastal waters, including allowable extent or ratio of impervious surfaces, appropriate lot coverage by developed vegetation, structures and other features, management of the extent and intensity of irrigation and placement of chemical fertilizers road treatments and maintenance of adequate buffers to coastal water bodies and estuarine resources.

5.7.5 The Town should include implementing regulations which provide for appropriate siting of new utilities to minimize susceptibility to flood hazards and wind damage and should provide appropriate constraints on development and redevelopment within FEMA flood zones.



5.7.6 The Town should include implementing regulations with provisions that “maintain the traditional maritime character” (RPP p.32) of applicable areas within the District. In addition, the regulations should address views of the shore and coastal bank from adjacent waterways, the intertidal region, and other publicly accessible viewpoints such as Sandy Neck. These provisions may include limitations on the vertical extent and massing of structural elements and removal of vegetation associated with development and redevelopment and the establishment and maintenance of visual buffers and screening.

5.7.7 The Town should describe the relationship of the properties and interests incorporated into the district, to the adjacent coastal environment, including the ACEC.

## **SECTION 5.8 Heritage Protection/ Community Character**

The Town shall establish means for protecting historic structures and historic settings from over-development, and shall identify and protect important scenic roadways, and vistas in the District.

5.8.1 The Town should adopt regulations to guide the scale and design of new development within the district. The Town should consider adopting a maximum floor area ratio (FAR) to limit the scale of buildings in relation to the size of the building lot, in keeping with the existing scale of the historic Pond Village neighborhood. The Town should also review existing regulations to ensure that they promote preservation and reuse of historic structures within the District.

5.8.2 The Town should identify distinctive scenic vistas and other visually sensitive areas that are important to the character of the District, including views of waterbodies and the Great Marsh, historic road corridors, and significant open spaces. The Town should consider developing a scenic overlay district or other regulation to guide new development away from these scenic resources and into less visually sensitive areas of the District. Potential mechanisms to protect scenic areas include designated buffer areas, building height and bulk limitations, and incentives for locating development outside identified scenic corridors.

5.8.3 The Town should adopt specific regulations for scenic roadways in the District, regarding road widening, to preserve the character of the scenic roads and historic stonewalls.


## **SECTION 5.9 Growth Management**

5.9.1 The Town should consider revisions to local ordinances to increase lot size in order to reduce development potential within the district.

5.9.2 The Town should consider a cluster development bylaw for the area.

5.9.3 The Town should include implementing regulations which address proposed changes of use or changes in intensity of use of existing structures that may be proposed for renovation, reconstruction or enhancement in the future, in a manner that ensures full protection of the Goals and Interests of the District.

Adopted on January 18, 2006 by the Assembly of Delegates.

  
Thomas P. Bernardo Speaker

Approved by the Board of County Commissioners, 1/26/05 at 9:15 a.m.  
Date Time

