

# THE MARTHA'S VINEYARD COMMISSION

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DECISION OF  
THE MARTHA'S VINEYARD COMMISSION  
DESIGNATING  
GAY HEAD CLIFFS  
AS A  
DISTRICT OF CRITICAL PLANNING CONCERN  
MAY 4, 1989-



# THE MARTHA'S VINEYARD COMMISSION

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## MARTHA'S VINEYARD COMMISSION DECISION

### GAY HEAD CLIFF AREA DISTRICT OF CRITICAL PLANNING CONCERN

#### Section 1.00 General

As authorized by Chapter 831 of the Acts of 1977, as amended, the Martha's Vineyard Commission ("the Commission") hereby designates as a District of Critical Planning Concern ("a District"), the specific geographical areas hereafter described, to be known as the "Gay Head Cliff Area District of Critical Planning Concern".

The Commission held a public hearing at 8:00 P.M. on April 13, 1989 at the Gay Head Town Hall, Gay Head, Massachusetts on the proposed Gay Head Cliff Area District, after due public notice to the municipalities, publications, and notice required under Massachusetts General Laws, Chapter 30A, Section 2. The public hearing was held as required under the Act to permit the Commission to receive testimony relating to whether it should designate the proposed District as a District of Critical Planning Concern.

The Commission received a nomination from the Gay Head Planning Board and the Gay Head Conservation Commission for inclusion of geographic areas into a District (Nomination 4,5,8,125). At its March 9, 1989 meeting, the Commission voted to accept for consideration the nominated area.

Copies of the nomination and documents relating thereto and the area accepted for consideration are on file at the Commission offices, Olde Stone Building, New York Avenue, Oak Bluffs, Massachusetts.

On Thursday, May 4, 1989, the Commission voted to designate the nominated area as a District of Critical Planning Concern. Section 8 through 10 of the Act provide the process for amending the boundaries, adoption of development guidelines, and regulation of the District to which development must conform.

#### Section 2.00 Area Designated

Upon consideration of information submitted to it, the Commission's familiarity with the lands and waters of the District, oral and written testimony, and pursuant to the Act and the Commission's Standards and Criteria for Districts of Critical Planning Concern ("the Qualifications") adopted under the Act and appended hereto (Appendix "A"), the Commission makes findings herein and hereby designates the Gay Head Cliff Area District with Defined Boundaries as follows:

All land in the Town of Gay Head beginning at the juncture of the south east bound of Lot 47, Map 6 and Lighthouse Road, running easterly and northerly along the eastern bound of said lot; thence northerly along the eastern bound of Lot 48, Map 6 to the

Cliff's edge; then westerly and southerly and southeasterly along the Gay Head Cliff's upper edge to the northwest bound of Lot 57, Map 10; thence easterly along said lot's northern bound to Moshope Trail and northerly along said trail crossing the middle of the intersection of South Road and Lighthouse Road and continuing along the northern bound of Lighthouse Road to the point of origin.

The Commission has prepared a descriptive map appended hereto as Appendix "B" for the general information of the public and the municipalities. The boundaries of the Gay Head Cliff Area District, however, are as set forth above in this Decision and shall control over any map.

The Gay Head Cliff Area District boundaries conform to Qualification Section 1.20. The Commission finds that the lands and waters therein reasonably belong within the Gay Head Cliff Area District. Lands and waters within the District are a critical area and the Commission finds that this area needs protection afforded by the Act. The areas designated are a logical planning area and are suitable for the adoption of coordinated regulations for the District as a whole. Finally, the Commission finds that the boundaries of the Gay Head Cliff Area District, as established, are both convenient and recognizable.

### Section 3.00 Why the Area has been Designated

When designating a District, Section 8 of the Act requires the Commission to specify 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. In designating a district, the Commission must also consider the need for designation, as required by Section 1.10 of the Qualifications. Information available to the Commission supports a finding that the Gay Head Cliff Area District is of regional importance, that there exist problems of uncontrolled or inappropriate development within the District, affecting areas outside the District, and that there are advantages to be gained by development of the area in a controlled manner. The Commission specifically finds that controlled development of lands and waters within the Gay Head Cliff Area is essential to the prevention of pollution, erosion and obstruction of scenic vistas. This area contributes substantially to the Island's scenic, natural, cultural and historical resources. As fragile resources, land and waters within the District are extremely sensitive to pollution, erosion, and the destruction of irreplaceable resources.

In considering the problems of uncontrolled or inappropriate development within the District, the Commission finds that so fragile are these lands and waters and so important are the values they create and support, that to maintain and enhance the health, safety and general welfare of Island residents and visitors, and for present and future generations, special development controls within the District must be adopted.

In considering the advantages to be gained by development in a controlled manner, the Commission finds that development which conforms to regulations to be established pursuant to the guidelines

adopted by this decision will contribute to solving the problems of inappropriate development.

The Qualifications require the Commission to address itself to the need for designation, and to that end, the Commission finds that there exists a regional need for special regulations and planning to protect the Island and its people from damage and loss resulting from inappropriate development. The Commission also finds, after its review, that present private and public regulations in the District cannot assure protection, and that damage to the Gay Head Cliff Area District lands and waters will be a substantial loss to the region or to two or more towns on the Island.

#### Section 4.00 What Kind of District

Section 8 of the Act permits the Commission to designate a district only in accordance with the standards and criteria approved under the Act. Such a district may be designated only for:

- a) an area which possess unique natural, historical, ecological scientific, or cultural resources of regional or Statewide significance;
- b) an area which possesses marginal soil or topographic conditions which render it unsuitable for intense development; or
- c) an area significantly affected by, or having significant impact on, an existing or proposed major public facility or other area of major public investment.

The Gay Head Cliff Area District qualifies under specific qualifications, Sections 2.40, 2.50, and 2.80 of the Standards and Criteria ("the Specific Qualifications"). The Commission finds that the Gay Head Cliff Area District meets specific qualifications as described herein.

Specifically, with respect to the first element of Section 8 of the Act, concerning unique natural, historical, ecological, scientific, or cultural resources of regional or Statewide significance, the Gay Head Cliff Area District meet the specific qualifications of Wildlife, Natural, Scientific or Ecological Resource District, Section 2.40; the Cultural or Historic Resource District, Section 2.50; and the Hazardous District, Section 2.80.

#### Section 4.10 Compliance with Standards and Criteria

##### Section 4.11 Wildlife, Natural, Scientific, or Ecological Resource District

Information presented at the public hearing and other resources available to the Commission, clearly indicate that the Cliff Area contains an important and identifiable natural resource. The Gay Head Cliffs were designated a National Natural Landmark in 1965 by the U.S. Department of the Interior as they represent an important example of the Nation's natural history and contain geological features of such distinctive quality to be of national significance. Periodic on-site inspection reports, conducted by the Department of the Interior,

indicate the area contains unusual geological features, increasingly being damaged by wave action and, more importantly surface runoff and human use (1).

As the area within the District provides access to the Cliffs, documentation proves that excessive climbing of the Cliffs and mining of clay are of critical concern to the Department of the Interior and the Commission. Such use is also damaging the existing vegetation in the District, hence accelerating erosion and threatening the Landmark (2).

#### Section 4.12 Cultural or Historic Resource District

The District qualifies as a Cultural or Historic Resource District under all Sections of the qualifications. The District is readily visually accessible along the length of Moshup Trail and from the popular stopping area and lookout at the Gay Head Cliffs and Lighthouse Property. In this regard, the District contains a landscape and view which is expressive of the irreplaceable character of the Island and is the object of pilgrimages by Island visitors since the mid 1800's and equally important to the Wampanoag Indians.

Recreation, through coastal fishing, swimming, boating and strolling, is an integral part of the lives of residents and visitors. The Gay Head Cliff Area offers outstanding recreational fishing, which is a traditional activity for residents, and brings a large number of visitors to the area.

The windblown stunted vegetation and hummocky topography lend a further uniqueness to the area and make it an important asset to the valued diversity of Vineyard landscapes.

#### Section 4.13 Hazardous District

Geology maps and studies of the Gay Head Cliff Area District indicate the area includes a complicated geologic history. The area is mapped as Martha's Vineyard Moraine Deposits: till and boulders over clay and fine to medium sand, boulders (3). "The composition, structure and morphology of the coastal end moraines..... were formed as advancing ice thrust sheets of drift and preglacial strata beneath and beyond the ice front" were thrust and folded within the moraine. In addition, the strata dip moderately to steeply northward (4), (5).

The soils in the District are predominately Nantucket-Plymouth complex, rolling, very stoney, and boulders cover 1-3% of the surface area. Permeability, the quality of soils that enables water to move downward through the soil profile - measured in number of inches per hour, is moderately rapid in the subsoil and moderately slow or slow in the substratum. Soils rating for septic tank absorption fields is severe and percs slowly. In some areas, soils do not adequately filter effluent or readily accept effluent, causing a hazard of seepage. Slope is a limitation of the soils unit as a building site in areas where the slope is greater than 8% (6).

The complexity of the geology and soils of the District demonstrate intense development, including well and septic system placement and installation, may necessitate careful scrutiny to avoid

contamination, erosion, pollution, salt water intrusion and construction problems.

A further study of the District documents that seepage facilitates landslides along the west-facing cliff, as the bulk of groundwater seepage travels westward. The landslides of the Cliff area have a yearly cyclic rhythm with a small displacement during summer and early fall, very rapid rate during winter and early spring, and a slowing period in late spring. A correlation exists between rates of slide movement and infiltration. The study concludes that groundwater seepage is probably a major cause for landsliding (7).

Cliff erosion averaged 2.5 feet per year from 1845-1979 (8). This erosion results from landsliding, rainwash and wave erosion, with landsliding described as the most important process contributing to the erosion. Landsliding "begins by a vertical crack forming parallel to the Cliff and back from the edge by distances as great as 100 feet but generally less than 20 feet". The strip of land bounded by the crack begins to drop vertically as much as 15 feet in a few months, eventually pushing masses of clay onto the beach and vulnerable to wave action (9).

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#### REFERENCES

- (1) U.S. Department of the Interior, National Natural Landmark Status Reports, 1971-1988.
- (2) U.S. Department of the Interior, National Park Service, Threatened National Natural Landmarks, Section 8 Report, 1988.
- (3) Geological Map of Cape Cod and the Islands, Massachusetts, Department of the Interior, U.S. Geological Survey, by Robert N. Oldale and Roger A. Barlow, 1986.
- (4) Glaciotectonic Origin of the Massachusetts Coastal End Moraines and a Fluctuating Late Wisconsinan Ice Margin, R.N. Oldale, C.J. O'Hara, U.S. Geological Survey, Woods Hole, Massachusetts, 1984.
- (5) Pleistocene Stratigraphy of Nantucket, Martha's Vineyard, the Elizabeth Islands, and Cape Cod, Massachusetts, Robert N. Oldale, U.S. Geological Survey, Reston, VA., 1982.
- (6) Soil Survey of Dukes County, Massachusetts, U.S. Department of Agriculture, Soil Conservation Service, 1986.
- (7) The Gay Head Landslides, Martha's Vineyard, Massachusetts, Causes and Remedies, Jerome P. Long III, B.S., M.S., Doctor of Philosophy Dissertation, University of Connecticut, 1971.
- (8) Massachusetts Shoreline Change Project, Executive Office of Environmental Affairs, Massachusetts Coastal Zone Management Office, Shoreline Change Map, University of Maryland Coastal Mapping Group, 1985.
- (9) Map Showing Changes in Shoreline of Martha's Vineyard, Massachusetts, During the Past 200 Years, with text, by Clifford A. Kaye, 1973, Department of the Interior, U.S. Geological Survey.

Section 5.00 Guidelines

The Commission adopts the following guidelines ("the Guidelines") for the development of the Gay Head Cliff Area District. In adopting the Guidelines, the Commission has evaluated each of the considerations enumerated by Section 8 of the Act and, in addition, has considered other relevant matters.

The Town of Gay Head shall, in the manner required by the Act, adopt Regulations which at a minimum comply with these Guidelines for Development of the Gay Head Cliff Area District. The Town may adopt such regulations under zoning, subdivision, health general by-law or any combination of such authorities it deems best suited for the purpose. The Commission draws the Town's attention to Section 10 of the Act which in part provides, "In adopting such regulations, each municipality shall have all the powers it otherwise had under the General Laws". Regulations adopted under these Guidelines are essential to evaluate and adjust the physical impact of development in the District so that irrevocable damage to the Town and the Island does not result.

Goals

To protect the fragile historic, scenic and natural character of the Cliff Area from undue visual intrusion and land use impacts that may be harmful to the District and its users.

Section I: Establishment of Guidelines:

1. As used herein the "development", "permit", "regulations" shall have the same meaning as in the Act.
2. The Town shall adopt regulations of the types described in the Act, as appropriate to conforming to these Guidelines to Control Development with the Gay Head Cliff District.
3. In appropriate cases, after notice and a public hearing, the Martha's Vineyard Commission may permit a town to adopt regulations which are less restrictive than these Guidelines if the Commission finds that such regulations will carry out the purpose of the Act and the intent of these Guidelines for the District.
4. These Guidelines may be amended by the Commission after notice to the towns and notice and a public hearing in the manner required by the Act.
5. Unless otherwise stated in these Guidelines 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 the Criteria and Standards of the Commission.

Section II: General Guidelines for Gay Head Cliff Area District

These guidelines are intended as an additional layer of protection as an "overlay" District. The provisions of this District shall not replace or preempt, but rather exceed provisions of the Coastal District, Island Road District, Moshup Trail District and other relevant controls in the Town of Gay Head. Specifically, it is suggested that the degree of use by visitors and the percent of public access which is encouraged by the attractiveness of the Cliffs and beach be reassessed through a joint management plan for the District.

1. Uses Requiring a Special Permit

A special permit shall be required from the Planning Board Plan Review Committee for any "development" as that word is defined in Chapter 831, Section 6 of the Acts of 1977 including, but not limited to:

- a. The siting of a building, structure or dwelling on its lot including primary and accessory dwellings and or buildings, and additions to any existing or pre-existing buildings, structures or dwellings.
- b. The removal of ground cover, shrubs, trees from any lot in the District. No special permit shall be required for a vegetable, herb or plant garden not exceeding 1000 square feet.
- c. The placement of driveways, vehicular paths, pedestrian paths and private parking areas.
- d. The removal, replacement or erection of fences and stone walls in the District and stairways traversing Cliffs or bluffs.
- e. The siting of wells, septic systems and subsurface, surface drainage or runoff systems prior to installation.

An Applicant seeking a special permit shall submit an application to the Planning Board Plan Review Committee.

- a. An application shall be accompanied by a proposed schedule for all phases of development activities and a site plan or plans showing pre and post construction conditions; methods of construction and installation; including topography, removal and replacement of vegetation, wetland areas, plans and elevations and materials of all structures, location of utilities, access roads or paths, septic systems and water supply facilities and any other information which will allow the Planning Board Plan Review Committee to determine the effects of the proposed development on:
  1. Coastal banks, cliffs and wetlands.
  2. Vegetative cover serving to stabilize land forms.
  3. Views within and looking at the site.
  4. Surface and groundwater resources, in particular any adverse effects, e.g. contamination, siltation, erosion and salt water intrusion.



Upon receipt of the special permit application, the Planning Board Plan Review Committee shall refer the application to the Site Review Committee pursuant to Section 10.00 of the Town's Zoning By-Laws. In addition to the considerations for granting a special permit pursuant to Section 10.00 of the By-Laws, the Planning Board Plan Review Committee shall grant a special permit only after public notice and hearing in accordance with Section 11 of the Zoning Act, M.G.L. Chapter 40A, and only if it finds that the proposed development:

- a. Will minimize the disturbance to existing vegetation except as to the footprint of the proposed structure;
- b. Has been designed to minimize obstruction of views of public waters, scenic and historic structures and natural and open landscapes from within and without the site;
- c. Will not unreasonably contribute to surface and groundwater pollution, in particular, contamination, siltation, erosion and salt water intrusion.
- d. Engineering studies prove that the placement of wells and septics will prevent septic system effluent breakout along steep slopes and vertical cracks forming parallel to the Cliffs or steep slopes.

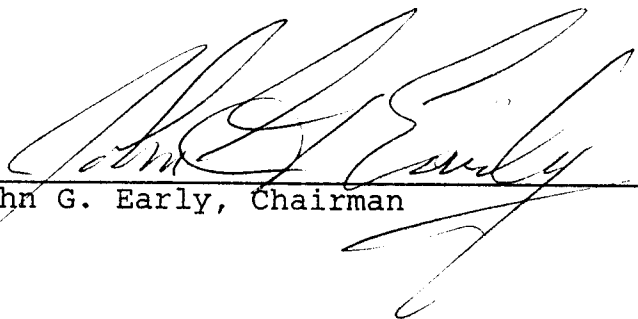
If the Planning Board Plan Review Committee determines that the proposed development does not satisfy the above stated criteria, and that the goals of these Guidelines will be undermined, it may, in furtherance of the goals of these Guidelines require modifications to the plans and attach conditions to the special permit, or may deny the special permit.

## 2. Additional Guidelines

- a. Height of structures, as measured vertically from mean natural grade within 20 feet of the structure to the highest point of the roof, shall not, except by special permit, exceed a height of 18 feet for a pitched roof and 13 feet for a flat or shed roof. The Planning Board Plan Review Committee may, with the advice of the Site Review Committee, grant a special permit exceeding the above height limitation up to a maximum of 24 feet.
- b. There shall be a no build/no clear zone within 50 feet of the crest of bluffs and cliffs within the District. The only permitted use shall be for signage, fencing or landscaping under the explicit written advice of the Site Review Committee and consistent with subsequent design guidelines and a joint management plan that may be adopted for the District.

- c. The Site Review Committee and Martha's Vineyard Commission shall review all permits issued within the District for a period preceding 6 months from February 28, 1989 and as to which construction has not been substantially completed to assure consistency with the Guidelines for the District. If necessary, the Committee and Commission may add certain conditions to the permits. If inconsistencies arise, the Committee and Commission are willing to resolve them in a satisfactory manner and in the best interests of the Town and the applicant.
  
- d. The Town of Gay Head, the U.S. Government, and the Wampanoag Tribal Council of Gay Head will prepare and implement a joint management plan for use of lands in the District as they provide access to the Cliffs and beach.
  - 1. The management plan will incorporate Tribal Council Regulations regarding mining of clay and minerals from the Cliffs, public access to and over the Cliffs and on the beach, public education regarding the unique value of the Cliffs, enforcement issues and strategies and other issues the Town, U.S. Government, and Tribal Council agree are necessary to preserve the Cliffs Area.
  
- e. The Site Review Committee shall prepare Sight View Channel Studies for lands within the District for the siting of buildings, structures and dwellings and other improvements thereto.

BY VOTE OF THE MARTHA'S VINEYARD COMMISSION  
MAY 4, 1989



John G. Early, Chairman

GAY HEAD CLIFF  
AREA  
DCPC

