

Open Space and Conservation Element



June 25, 1990

OPEN SPACE AND CONSERVATION ELEMENT

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OPEN SPACE AND CONSERVATION ELEMENT

INTRODUCTION

Rolling Hills has undergone a transition since the early part of the century from a sparsely vegetated agricultural area to a heavily landscaped residential community. Such a conversion of land use often endangers sensitive resources and open space lands. Thus, Rolling Hills and the other Palos Verdes Peninsula communities have made a concerted effort to conserve and protect the natural environment during their development. This Open Space/Conservation Element is a written description of the City's commitment to maintaining a balance of preservation and development. Its purpose is to ensure future generations the same level of enjoyment from the environment as is enjoyed by present residents.

Purpose of the Element

The Open Space/Conservation Element is designed to:

- Inventory the existing natural resources and the various functions served by open space.
- Balance planning activity with environmental considerations.
- Establish recognition of the social, economic and aesthetic benefits which develop from the preservation of open space.
- Prevent neglect or unnecessary destruction of natural resources.
- Set forth goals and policies concerning the conservation, development and use of natural resources and the preservation of open space.

Relationship to Other Elements

The Open Space/Conservation Element provides significant input into the Land Use and Circulation Elements. Land use decisions are based upon location and significance of various environmental

factors. Also, new circulation proposals will be required to consider possible environmental impacts prior to their approval.

The information provided in the Open Space/Conservation Element is significant on a project-specific basis. Through the environmental assessment process, planners and local decision-makers are required to make an initial assessment as to whether or not a proposed project will have a "significant effect" on the environment. The Open Space/ Conservation Element will serve as a tool in the environmental evaluation process.

INVENTORY OF EXISTING CONDITIONS

The purpose of this section is to provide information relative to the utilization of the City's natural resources and the preservation of open space areas. The information presented herein provides the basis for the policies and strategies discussed in the element's final section.

Open Space Inventory

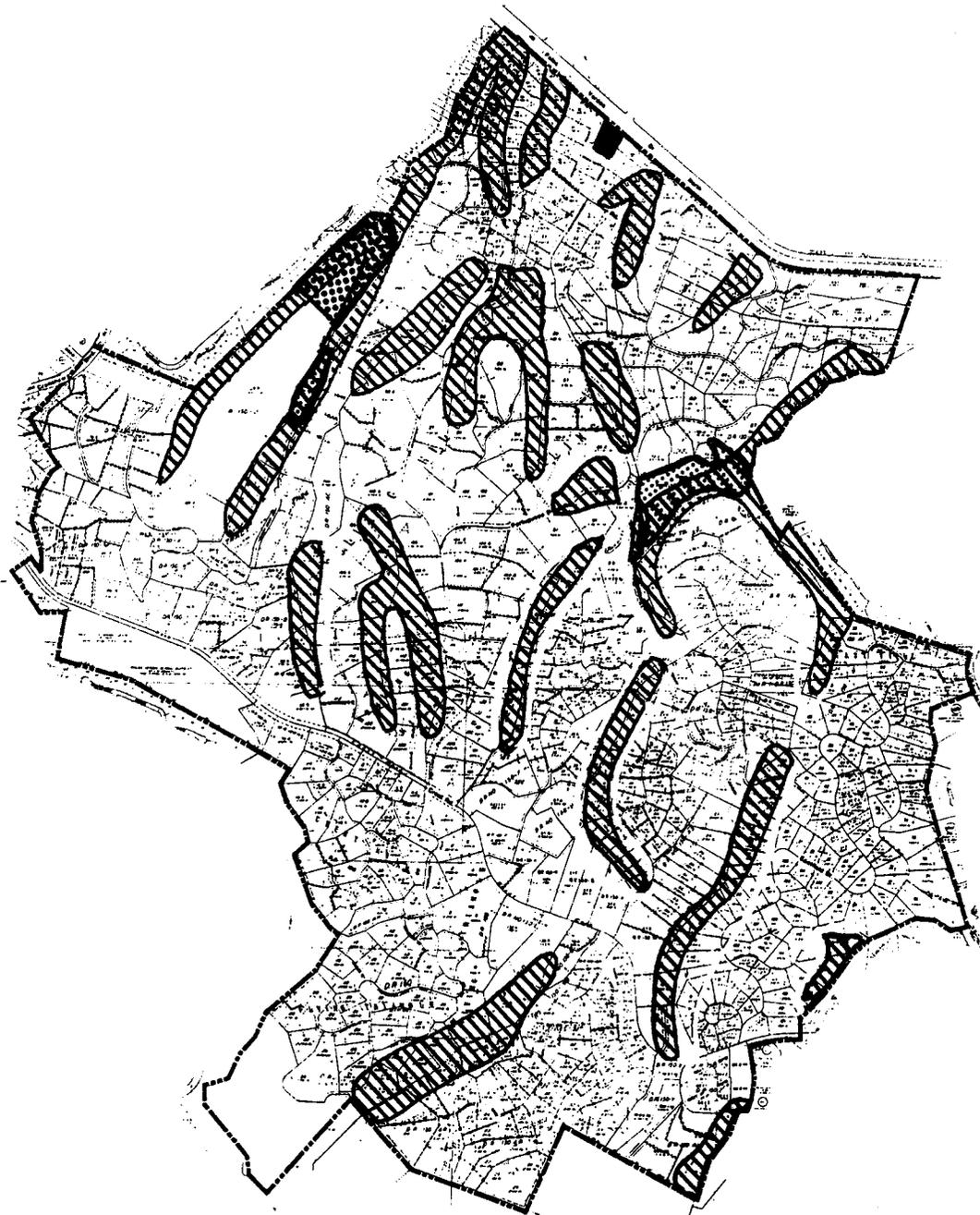
The planning area consists of the ridgetops and canyons of the San Pedro Hills. The area is primarily wooded due to abundant landscaping which has been placed as development occurs. The large size of the City's parcels and the slopes upon which many of them exist allow for the preservation of large amounts of privately-owned open space. The City actively promotes the preservation of open space by requiring easements for riding and hiking trails for all lots created within the City and substantial building setbacks on private property. The use of these areas as wildlife habitats and growth areas for natural vegetation is emphasized. Restrictions on the size and locations of buildings also promote preservation of natural vistas and canyons.

The City's open space resources have been grouped into the following four categories, and are graphically depicted in Figure OSC-1.

Tennis Courts: Three tennis courts are located opposite the City administration building. These courts are owned by the City and operated by the Rolling Hills Community Association and are open to residents and their guests from 7 a.m. to 10 p.m.

Publicly Owned Open Space: The northern portion of Storm Hill is owned by the City of Rolling Hills. The property consists of approximately eight acres. The property is open to City residents for use as an open equestrian area. The property was dedicated to the City through the provisions of the Quimby Act. The City also owns two riding rings which are described below under equestrian facilities.

Equestrian: Two riding rings are located within the City of Rolling Hills. Hesse's Gap Ring is located on the City's eastern side and Clif Hix Ring is located on the City's western side adjacent to



Tennis Courts



Publicly Owned
Open Space



Equestrian Riding Ring



Canyon Open Space

cba ↑ North 0 2000
scale in feet

SOURCE: CBA



Figure OSC-1
Open Space Resources

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Storm Hill. Laced throughout the community are approximately 25 miles of private equestrian trails maintained by the Rolling Hills Community Association. The trails are developed on property easements and are primarily located in the canyon areas. The trail system initiates at the Eastfield and main guard gates, and may be utilized by non-city residents by obtaining a City-issued permit. Joggers and walkers also enjoy the trail system.

Hillside Open Space: A substantial amount of land in Rolling Hills is constrained from development due primarily to excessively steep hillsides and canyons. The canyon areas found within Rolling Hills are presented generally in Figure OSC-1. These areas were identified through a combination of aerial photographs and the United States Geological Surveys topographic maps. Areas identified as canyons are generally areas which remain unbuilt behind and between two residential lots and which are approximately 100 feet or more below these adjacent properties. In some cases these areas do not specifically meet the above criteria; however, their position relative to adjacent properties, varied terrain, or position in relation to potential watercourses made it practical to include them. Most of these areas will not be built upon. The potential does exist, in some cases, for development to occur when careful review is exercised.

Management of Resources

In addition to open space areas, Rolling Hills contains natural resource components which warrant conservation. Local resources include biological habitat, surface and ground water, air quality, soils, and minerals. The characteristics of these resource components will be described in the following section, providing the foundation for policies which support their conservation.

Biological Habitat

Rolling Hills is a hilltop community located on the San Pedro Hills of the Palos Verdes Peninsula. The community supports a wide variety of plant and wildlife. Much of the plant life found in Rolling Hills is imported as the natural state of the area included only coastal grasses and shrubs. Since development of the community was initiated, Rolling Hills has become home to many trees and flowers. The developers planted trees and shrubs along the roadsides and to each homeowner of five or more acres, five Olive Trees were donated. Among the more common plants that

were established in the community's early stages of development were Pepper Trees, Geraniums and Matilija Poppy. Nearly three-quarters of households responding to the Community Attitude Survey indicated concern over the disturbance of native vegetation through development in Rolling Hills.

Wildlife in Rolling Hills is varied. Many animals habitate in the area due to the relative abundance of space and vegetation. Types of wildlife which may be expected in the Rolling Hills area include squirrels, gophers, skunks, mice, raccoon, opossum, foxes, lizards, snakes, frogs and a wide variety of birds including owls and peacocks. Pheasant and quail are currently being reintroduced into the area. Of the many animals inhabiting the Rolling Hills area, several are listed by California's Department of Fish and Game Natural Diversity Data Base (NDDB). The NDDB tracks animals, plants and natural communities that are endangered, candidates for protection or considered sensitive. The occurrence of these is tracked on United States Geologic Survey Maps. Circles of varying sizes show occurrences of individual species or communities. The size of the circle correlates to the size of the area in which the subject is known to habitate. As these maps are too large to include in the General Plan, they are kept on file at City Hall. No plants are currently listed by the NDDB for the Rolling Hills area. The only animal listed as endangered by the Federal Government is the Palos Verdes Blue, a butterfly which was last seen in the Rolling Hills area in May, 1986. Several other animals do occur, however, that are considered as candidates for protection by either the Federal Government or the State Government. The Tiger Beetle, while not considered to be endangered or threatened, does maintain a sensitivity to humans. Sensitivity of an animal indicates that a condition of the animal or its habitat such as rarity, fragility or sensitivity to humans, exists to an extent that may be cause for concern.

Table OSC-1 shows animals that are either listed or considered for listing in the Rolling Hills area.

**TABLE OSC-1
ENDANGERED OR SENSITIVE ANIMAL SPECIES**

Name	Priority	Fed Status	Cal Status	Sensitive
Palos Verdes Blue	A2.2	Endangered	Cal Cand	
Lyons Pentaecheta	A2.1	Fed Cand 2		
CA Brackishwater Snail	A2.2	Fed Cand 2		
Pacific Pocket Mouse	B1.2	Fed Cand 2	Cal Cand	
CA Black Tailed Gnatcatcher	B2.2	Fed Cand 2		
San Diego Horned Lizard	B2.2	Fed Cand 2		
Bank Swallow	B3.1		Cal Cand	
Long Eared Owl	B3.1			
Tiger Beetle	BU			
<p>The priority rating of the above indicate the following conditions:</p> <p>A2.1 - Very rare, endangered and unprotected species</p> <p>A2.2 - Very rare and threatened species</p> <p>B1.2 - Rare and threatened species <u>or</u> very rare, endangered or threatened subspecies.</p> <p>B2.2 - Rare and not threatened, or peripheral and endangered in California only, species <u>or</u> rare and threatened subspecies</p> <p>B3.1 - Uncommon and declining, or peripheral and threatened in California only, species <u>or</u> uncommon and threatened, or peripheral and endangered in California only, subspecies.</p> <p>BU - Possibly threatened - needs more information.</p>				

Source: California Department of Fish and Game,
Natural Diversity Data Base

Water Resources

Water sources available to the City are derived exclusively from Metropolitan Water District through West Basin Municipal Water District and California Water Service Company.

Groundwater sources are virtually nonexistent due to the City's and peninsula's position atop a tertiary deposit of mudstones, and diatomaceous shales from the metamorphic period. The City and peninsula are also effectively severed from other groundwater supply by the Palos Verdes fault.

Through the first six months of 1989, the City of Rolling Hills consumed seven million cubic feet of water. Water consumption for the third and fourth quarters of each year are somewhat higher than first and second quarter consumption rates due to warmer weather.

Due to the lack of available groundwater, Rolling Hills' water supply comes entirely from non-interruptable sources as allotted by West Basin Municipal Water District and Metropolitan Water District.

Relatively stable population figures indicate that no substantial change in water consumption will occur. However, consumers are currently being requested to reduce water consumption by ten percent and similar requests can be expected on a periodic basis in the future.

Air Quality

Air quality, like other natural resources, is limited. Within any time period, the local air basin has a restricted ability to dilute contaminants and maintain air quality at levels which do not adversely affect the population. Air quality is a major concern of residents and visitors to the Los Angeles Metropolitan area, and with increasing population and development, air quality can be expected to further deteriorate until extreme efforts are made to control emissions of known pollutants into the atmosphere.

Air quality standards are set by both the State and Federal governments. The South Coast Air Quality Management District has the responsibility to monitor and enforce air quality standards in the South Coast Air Basin, of which Rolling Hills is a part.

Air quality data specific to Rolling Hills is not available due to the lack of a monitoring station in the immediate area. However, Rolling Hills is located in Source Receptor Area 3 which includes the monitoring station in Hawthorne, thereby providing a suitable data base for estimating air quality in the City. Tables COS-2 and COS-3 describe the number of days Federal and State standards were exceeded at this monitoring station. As evidenced by these tables, air quality standards for ozone, particulates, carbon monoxide and visibility are being exceeded in Rolling Hills. The proximity of several oil refineries along with the Los Angeles International Airport to the reporting station should indicate that the air quality in Rolling Hills is actually better than reported for Hawthorne.

Air quality, as reported at the Lennox-Hawthorne reporting station, appears to have remained relatively stable over the three and one-half year period. While ozone violations ranged from 10 to 19 and carbon monoxide violations ranged from one to 12, there does not appear to be a consistent identifiable trend of either worsening or improving air quality.

The State Air Resources Board has designated the South Coast Air Basin a non-attainment area for ozone, carbon monoxide, particulates and nitrogen dioxide. Only lead and sulfur dioxide are in compliance with Federal and State standards. In February, 1979, the Southern California Association of Governments adopted the Air Quality Management Plan, which sets forth policies and programs for localities to undertake air quality improvement strategies.

While Rolling Hills does not contain any polluting industries, automobile emissions are probably higher per vehicle due to longer trip lengths. The City's resident-generated vehicle trips do contribute to air pollution. The Rolling Hills General Plan specifies policies to initiate efforts to improve local air quality, such as trip reduction techniques, and to coordinate with the South Coast Air Basin in implementing strategies set forth in the Air Quality Management Plan to improve regional air quality.

**TABLE OSC-2
 VIOLATIONS OF FEDERAL AIR QUALITY STANDARDS
 LENNOX-HAWTHORNE MONITORING STATION**

Pollutant	1985	1986	1987	1988 (Jan-June)
Ozone	4	8	3	(3)
Carbon Monox 8 hr.	46	18	18	(15)

Source: California Air Quality Data, Volumes XVII (1985), XVIII (1986), XIX (1987) and XX (1988).

FEDERAL AIR QUALITY STANDARDS

Ozone	1 hr. - 0.12 ppm
Carbon Monoxide	1 hr. - 35 ppm 8 hr. - 9 ppm
Sulfates	-
Visibility	-

**TABLE OSC-3
VIOLATIONS OF STATE AIR QUALITY STANDARDS
LENNOX-HAWTHORNE MONITORING STATION**

Pollutant	1985	1986	1987	1988 (Jan-June)
Ozone	11	19	10	(5)
Carbon Monox 1 hr.	12	1	2	(5)
8 hr.	51	23	22	(17)
Sulfates	0	1	0	(0)
Visibility	174	154	129	(72)

Source: California Air Quality Data, Volumes XVII (1985), XVIII (1986), XIX (1987) and XX (1988).

STATE AIR QUALITY STANDARDS

Ozone	1 hr. - 0.10 ppm
Carbon Monoxide	1 hr. - 20 ppm 8 hr. - 9 ppm
Sulfates	24 hr.- 25/ug/m3
Visibility	10 mi. at 70% hu.

Soils

Soils in Rolling Hills consist primarily of those which exist on gently sloping or rolling foothills and terraces throughout the Los Angeles Basin. Soil types consist predominantly of fertile clays with some loams and shales. The Soil Conservation Service has identified the following soil types in Rolling Hills.

Altamont-Diablo Association -	30-50% slopes
Ramona-Placentia Association -	5-9% slopes
Diablo-Altamont Association -	2-9% slopes

Source: USDA Soil Conservation Service,
Report and General Soil Map, Los Angeles, CA, 1969.

In addition to soil maps, the Soil Conservation Service Report contains descriptions of soil types which define a soil's limitations and its suitability for a specific use. The soils found in Rolling Hills are not prime agricultural soils. The majority of soil found in Rolling Hills will, however, support a variety of agricultural crops. The following section describes the characteristics of those soils which occur in Rolling Hills.

Altamont-Diablo association, 30 to 50 percent slopes, eroded: Soils in the Rolling Hills planning area are composed almost entirely of those found in the Altamont-Diablo association. Natural vegetation consists of annual grasses and forbs. Altamont soils of this association are moderately eroded dark brown, neutral clays with a brown calcareous clay subsoil and partially scattered calcareous soft shale or sandstone substratum. These soils are well drained with slow subsoil permeation, rapid runoff and high erosion hazard. Their inherent fertility is high. Diablo soils of this association are moderately eroded dark gray, neutral clay with dark grayish brown, strongly calcareous subsoil and very strongly calcareous shale with outcrops of hard shale in the substratum. These soils are well drained with slow subsoil permeation, rapid runoff and high erosion hazard. Inherent fertility is high.

These soils are used extensively for residential development, for watershed and wildlife.

Ramona-Placentia association, 5 to 9 percent slopes: Natural vegetation consists mainly of annual grasses and forbs. Ramona soils are brown to reddish brown heavy loam, loam, or sandy loam soil. The subsoil is dense clay loam or clay which can contain coarse fragments. The substratum or parent material is loam or light clay loam. Ramona soils of this association are well drained with slow subsoil permeation and medium runoff. The erosion hazard is moderate and the inherent fertility is moderate.

Placentia soil is brown to reddish brown loam or sandy loam. The subsoil is dark reddish brown dense clay loam which restricts roots and the substratum may contain gravelly or iron cemented hardpan. The Placentia soils of this association are moderately well drained with very slow subsoil permeation and medium runoff. The erosion hazard is moderate and inherent fertility is low. These soils are used almost exclusively for residential and industrial development.

Diablo-Altamont association, 2 to 9 percent slope: Natural vegetation consists of annual grasses and forbs. Diablo soils are well drained and have slow subsoil permeability. They have dark gray, neutral, clay surface layers with very strongly calcareous shale occurring below. Outcrops of hard shale make the surface rocky in a few places. Inherent fertility of this soil is high.

Altamont soils are well drained and have slow subsoil permeability. They have dark brown, neutral, clay surface layers underlain by a brown calcareous clay subsoil. Partially weathered calcareous soft shale or sandstone occurs as a substratum. Inherent fertility of this soil is high. These soils are used almost exclusively for residential development.

Mineral Resources

The California Division of Mines and Geology has identified mines and mineral resources within Los Angeles County. A copy of this map is located in the Los Angeles County Master Environmental Assessment. No mineral resources or mines are indicated for the Rolling Hills area.

In addition to the lack of significant mineral resources, the Basic Deed Restrictions covering all properties in Rolling Hills prohibit any mining operations and the production or extraction of any minerals or mineral substances from any property. The City's zoning ordinance further prohibits any such commercial activities.

SUMMARY OF OPEN SPACE/CONSERVATION ISSUES

In order to identify appropriate policies for the conservation of resources in Rolling Hills, the following issues have been identified as part of the General Plan Update through input from the General Plan Advisory Committee and Community Attitude Survey.

- Development siting often does not respect the aesthetic value of open space areas, and can disturb public viewsheds.**
- Many newer residences are being constructed to maximize building area on the lot, resulting in extensive grading of Rolling Hills' steeper parcels.**
- Many residences are landscaped with non-native vegetation, resulting in increased habitat loss for native species and usually in increased water consumption.**
- The rural character of the City's extensive network of hiking/equestrian trails is being compromised through use of the trail system by bicyclists and motorized vehicles.**

GOALS AND POLICIES

GOAL 1: Conserve and enhance the City's natural resources, facilitating development in a manner which reflects the characteristics, sensitivities and constraints of these resources.

Policy 1.1: Encourage the retention of natural habitat for wildlife through the preservation of existing vegetation.

Policy 1.2: Encourage the reintroduction of native wildlife onto the Peninsula.

Policy 1.3: Encourage the introduction of drought-resistant landscaping in lieu of plant materials which require extensive irrigation.

Policy 1.4: Maintain stringent grading regulations which promote soil stability and prevent erosion.

Policy 1.5: Require construction and landscaping to preserve the natural scenic vistas available to properties.

Policy 1.6: Permit the use of solar panels to maximize energy efficiency, and require the panels to be screened from public view.

Policy 1.7: Encourage the preservation of watershed areas in their natural state.

Policy 1.8: Promote public understanding of the fragile nature of the City's hillsides.

Policy 1.9: Encourage use of alternative modes of transportation and support street and traffic control systems to minimize air quality impacts.

Policy 1.10: Cooperate with the Air Quality Management District and incorporate provisions of the Air Quality Management Plan into project review procedures.

GOAL 2: Enhance opportunities for outdoor recreation activities within the City.

Policy 2.1: Encourage the maintenance and improvement of the system of hiking and equestrian trails in Rolling Hills through the Community Association.

Policy 2.2: Continue the City's program of acquisition and development of strategically located recreation centers.

Policy 2.3: Encourage the continued upkeep of all City-owned recreation facilities within Rolling Hills.

Policy 2.4: Provide expanded recreational opportunities for children.

Policy 2.5: Establish guidelines to limit usage of hiking/equestrian trails to those on foot or horseback.