

UNIT 546

KENNETH HAHN STATE RECREATION AREA

**GENERAL PLAN
AMENDMENT**

October 1985

STATE OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

Kenneth Hahn

~~BALDWIN HILLS~~ STATE RECREATION AREA

AMENDED GENERAL PLAN

APRIL, 1985

by

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

CREDITS

ACKNOWLEDGEMENTS

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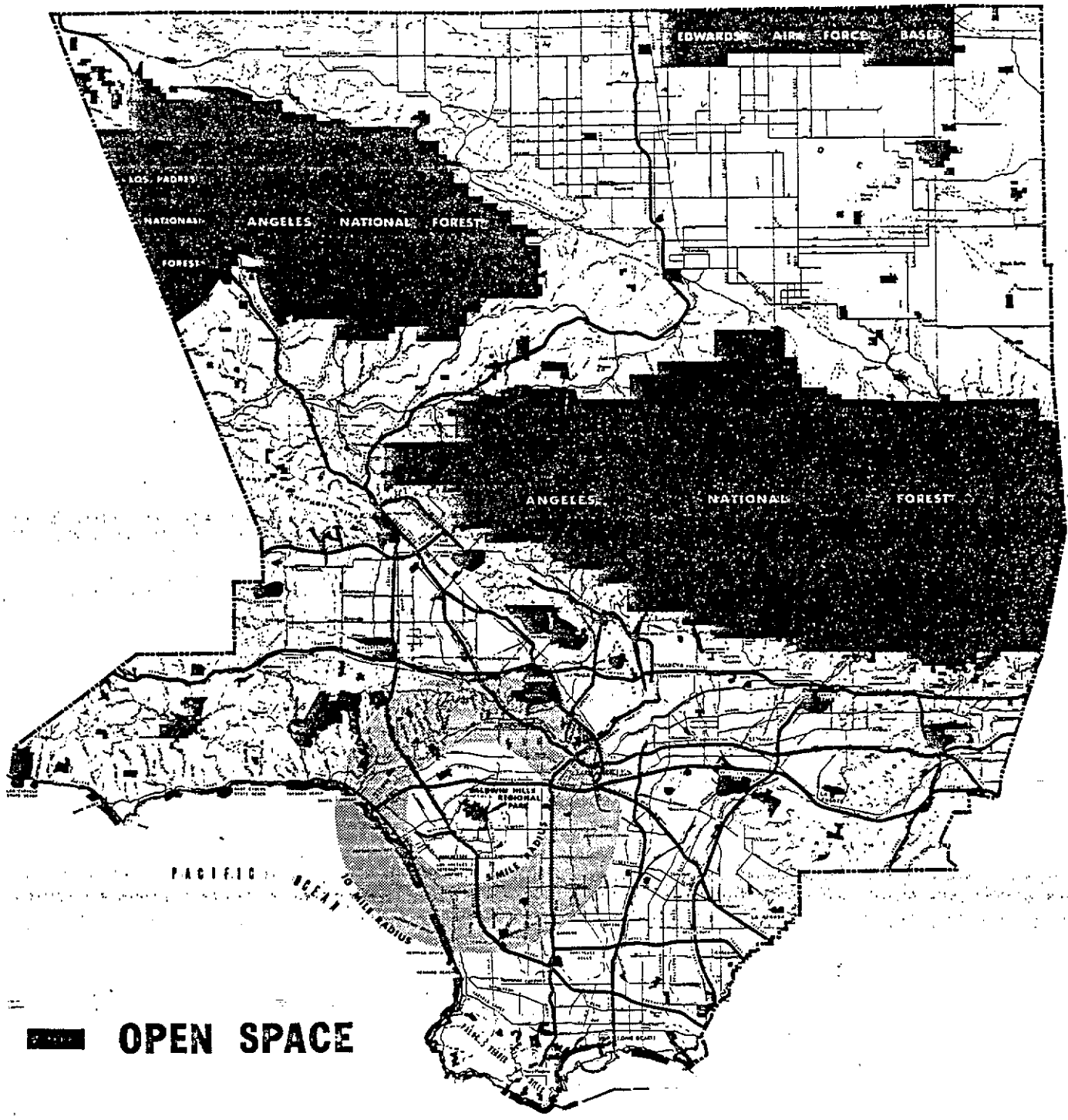
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Preface

The Baldwin Hills area contains one of the last remaining large undeveloped areas in the west central basin of Los Angeles County. Intense urban development of areas surrounding Baldwin Hills has left little land available for open space. The goal has been to preserve this open space area and to develop regional recreation opportunities.

The population density of the urban area surrounding Baldwin Hills is greater than 3,861 people per square kilometer. This figure represents a higher density than in any other area of the County. This area is currently not served by any regional scale park facility. The closest regional park is Griffith Park, which is located 24 kilometers (15 miles) from Baldwin Hills State Recreation Area (SRA) via surface traffic arteries. About 2.5 million people live within 16 kilometers (10 miles) of the SRA.

This report contains the SRA's Amended General Plan and its key elements including a resource element which established objectives and policies for use of the natural and cultural resources of the unit; a land use and facilities element which sets forth special proposals for development; an interpretive element which establishes a primary theme and setting for the SRA; and an operations element which would provide short and long term proposals in regards to resource protection and facilities maintenance.



 **OPEN SPACE**

NORTH



REGIONAL LOCATION

BALDWIN HILLS STATE RECREATION AREA

INTRODUCTION

Purpose of Plan

The Baldwin Hills State Recreation Area Amended General Plan is designed to serve as a guideline for all proposed development of recreation and interpretive facilities and for the preservation of the natural resource values. Since it is the valuable open space character of Baldwin Hills that inspired its classification as a recreation area unit, the primary emphasis of this document is placed on recreational potential that would be in harmony with this setting.

There are two fundamental qualities of this report that commonly characterize a general plan. First, it is comprehensive, since it represents a thorough investigation of all known natural and cultural resources. Second, it is flexible. If new resource information becomes available, the plan can be modified to reflect current conditions.

This plan, originally written in 1983, is being amended due to the acquisition of additional property. Community input, through an advisory committee, helped to formulate the new general plan.

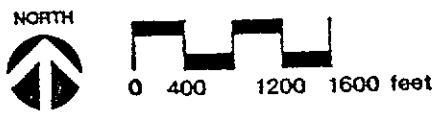
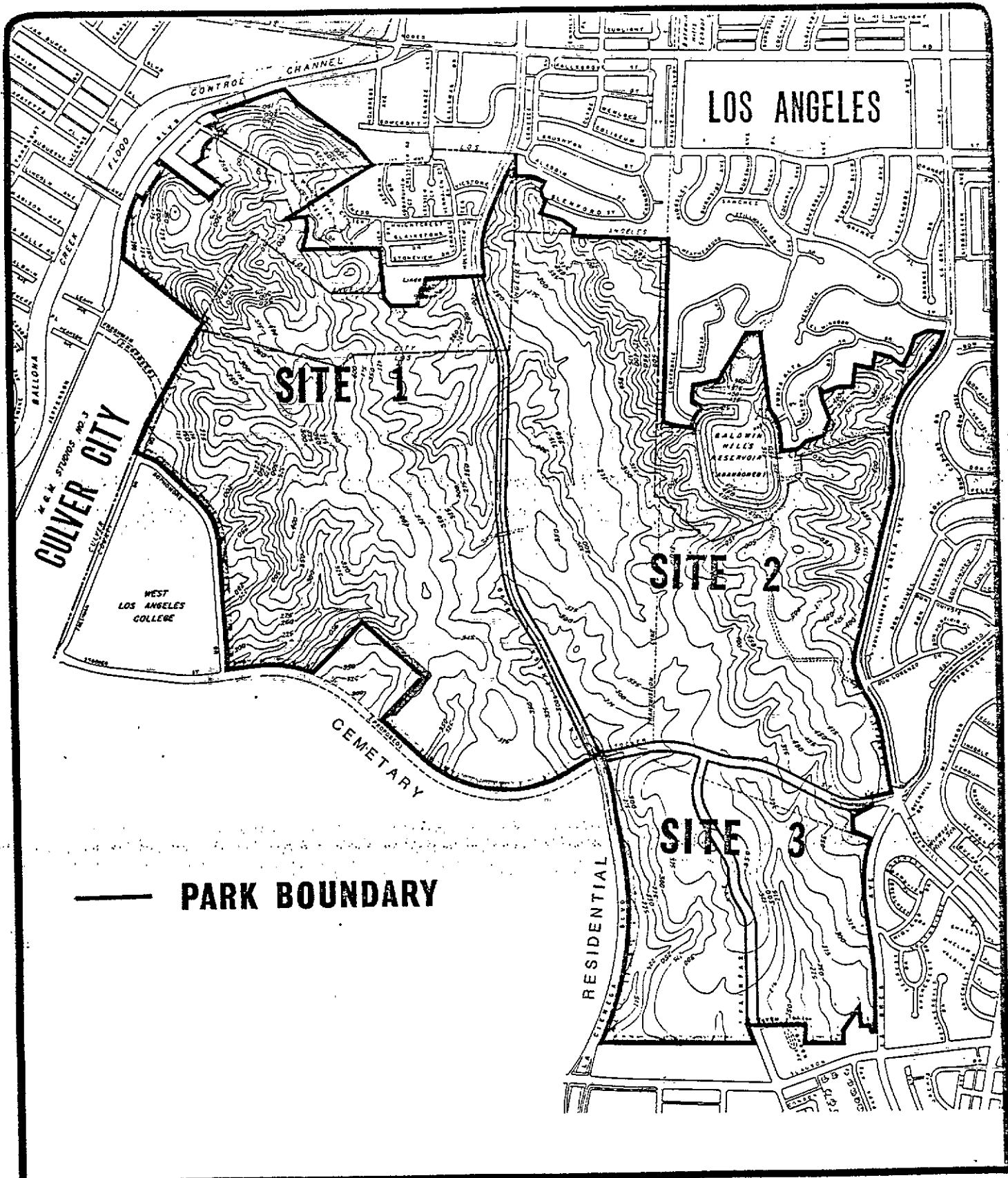
Project Description

The overall project area, 524 hectares (1,295 acres), has been divided into three sites for ease of identification. Site 1 consists of 234 hectares (578 acres) and its borders along La Cienega Boulevard for 1.7 kilometers (1.1 miles), Jefferson Boulevard for 0.8 kilometer (0.5 mile) and the proposed extension of Stocker Street for 1.6 kilometers (1 mile). Site 2 consists of 211 hectares (521 acres) and its borders are along La Cienega Boulevard for 2 kilometers (1.3 miles), La Brea Avenue for 1.7 kilometers (1.1 miles) and Stocker Street for 9.6 kilometers (6 miles). Site 3 consists of 79 hectares (196 acres) and its borders are along La Cienega Boulevard for 0.9 kilometer (0.6 mile), La Brea Avenue for 0.8 kilometer (0.5 mile), Stocker Street for 0.8 kilometer (0.5 mile).

Although surrounded by dense urban development, the Baldwin Hills State Recreation Area is easily accessible. Two major freeways, Interstate Highway 405 (San Diego) and Interstate Highway 10 (Santa Monica) are 5.6 kilometers (3.5 miles) to the west and 3.2 kilometers (2 miles) to the north, respectively and are linked to the project by La Cienega Boulevard to the west, La Brea Avenue to the east, and Stocker Street to the south.

The SRA is made up of a northwest-trending ridge with intervening canyons on the east, steep faces rising from the adjacent central valley of Site 2 on the west and gently sloping hills to the south. Coastal Sage Scrub vegetation dominates the canyons and slope areas of the unit.

The Newport-Inglewood Fault is one of the most interesting natural features of the SRA. The numerous fracture zones projecting from this main fault, on the surface are easily detected by the variations in the topography of the SRA.



PROJECT AREA

BALDWIN HILLS STATE RECREATION AREA

Historical Background

The following chronological periods are designated by the apparent differences in various subsistence strategies and associated technological developments: Millingstone Horizon or Early Period (7,000 to 4,000 B.P.), Intermediate Horizon or Middle Period (3,500 to 1,500 B.P.) and Late Horizon or Period (1,500 to 200 B.P.). European colonization occurred from A.D. 1540 to 1771 followed by three distinct periods to the present: the Mission Period (A.D. 1771 to 1834), the Mexican Period (A.D. 1822 to 1846), and the Anglo Period (A.D. 1848 to Present).

Paleoenvironmental reconstruction of the general Baldwin Hills area show it to possess an environment fairly similar to today, but with more moisture and lower humidity. The area is described as a plain or open rolling country on which grew an interior, semi-arid type of vegetation where grass-covered surfaces were interspersed with copses of trees and brush, favoring the existence of a diverse population of hoof animals. In this environment, bison, horse, mylodont ground sloth, elephant, camel, and antelope would have been plentiful. Associated with these herbivores were the typical cursorial carnivores like the lion-like cat, coyote, sabertooth cat, and dire wolf. The Baldwin Hills were similar to other parts of North America where big game hunting existed. It is reasonable to assume that even without an artifactual complex present (as we have in other areas) man was exploiting the Pleistocene megafauna in this area. During the last stage of this period, it is apparent that the technological adaptations present were diverging into a more varied resource base exploitation. This is possibly due to the climatic change of the moist Pleistocene to a dry Post-Pleistocene or "Antithermal" (Antevs 1955) and cover exploitation of the previous environment. In this period, Southern California populations are shifting from a big game hunting subsistence to a small game and plant gathering. Because of the drier climate, water was now less available in the desert which in turn lowered the grass resource production of the desert. This factor, as well as the changing resource base resulted in a population movement from inland deserts to the coastal areas (a more suitable environment). Environmental adaptation (in terms of settlement patterns and subsistence resources) permitted a general population increase. The Indians inhabiting the Baldwin Hills environs just prior to Spanish contact were a Shoshonean linguistic group called the Gabrielino or Tongva. They lived there during the Late Horizon period. It is assumed that certain aspects of that heritage were retained and diffused into Southern California. More detailed information about the Tongva Indians is contained in the Inventory of Features, 1982.

The first documented instance of European contact was the 1542 voyage of Juan Rodriguez Cabrillo, who was sailing up the California coast searching for a Northwest Passage to China. On October 8, 1542, Cabrillo, upon entering what is now San Pedro Harbor, sighted the smoke from many fires in the Palos Verdes Hills; thus, he names San Pedro Bay the "Bahia de los Fumos" or the Bay of Smokes. While communicating with some of the Tongva, who came up to his ship in a plank canoe, he was informed that there were more "white men with beards" to the east. The Indians were probably referring to Coronado's land expeditions in Arizona and New Mexico from 1539 to 1541; a testimonial to the aboriginal communication network that the Tongva's of the coast had with the interior desert tribes. In 1769, an expedition under the direction of Captain Gaspar de Portola left San Diego to reach and supply Monterey. An important member of this expedition was Fray Junipero Serra who intended to estab-

lish a mission chain through Alto California to convert the Indians to Christianity. By the summer of 1769, the expedition reached the Los Angeles area. Pedro Fages, a Lieutenant under Portola (and future Governor of Alto California), wrote the following account of La Ballona Creek:

"Crossing the river and pursuing a west-southwesterly direction, one arrives; after transversing three leagues of high-level land, at a watering place which was named the Ojo de Agua de los Alisos (Ballona Creek, west of Cienega). It was a large spring situated in a ravine in which was growing Poplar trees of great thickness of trunk, the entire ground was covered with pasture and shrubbery, and there was some watercress" (Heizer and Whipple 1971:14).

The expedition passed through this area again on the return trip to San Diego from Monterey.

On September 8, 1771, Father Angel Somera and Father Pedro Cambon founded Mission San Gabriel where the majority of the Indians of the Los Angeles Basin (including the Baldwin Hills area) were taken; hence, the name for the Indians of historic times, Gabrielino (the native name being Tongva), is derived from this Mission. In the beginning, Indians in the immediate area of the Mission were gathered into the Mission to provide a labor force for the various supporting activities of the Mission such as building, herding, farming, weaving, and cooking. In exchange for their labor, free food, gifts, education, and of course religion were provided to the Indians.

Inevitably, Indians from more distant areas (i.e., Baldwin Hills) were brought into the Mission system for religious and economic resources. The change or "culture shock" and subsequent exposure to European diseases (epidemics) decimated the aboriginal population and resulted in the reduction of vast numbers of Indians. Examination of the San Gabriel Mission Baptismal Records show over 7,700 baptisms and almost 7,000 deaths (most of which are buried at the Mission). To help induce settlement in Alta California, the Spanish Government instituted the practice of Land Grants of ranchos to individuals (i.e., retired soldiers) for services rendered. This practice continued through the Mexican Period when the ranchos became the major economic and political force in the territory.

In 1822, after a struggle of a dozen years, Mexico won its independence from Spain. Problems immediately occurred between the Missionaries and the "New Government". The Missionaries were still loyal to Spain and some refused to take an oath of allegiance to the new government which, because it was economically weak, sorely needed the revenue from these Missions (San Gabriel was one of the most prosperous). In 1832, Governor Echeandia sent a request to the Mission San Gabriel for a loan of \$20,000 which was followed by an order from the Governor to secularize all the Missions, creating an Indian town or rancho at the Missions and their possessions (Indians included) in Alta California had now passed under the control of the Civil authorities who appropriated much of the material wealth, and sold the land to others. Since the Civil Authorities showed no concern for their welfare, the Indians were forced to become workers for the new land owners, although some were able to revert back to the "old ways" by fleeing the area.

By the end of the Mexican Period, the Indians and their culture had been virtually destroyed in Southern California by Spanish Missionization (which forced new cultural adaptations, i.e., agriculture) and extremely high death rates from disease and warfare which reduced the native population to half of what it was at the beginning of the period.

In the beginning of the 1780's, the concept of the rancho was developed. The rancho was a significant factor in Southern California from the early Mexican Republic to the present, since they represented the acculturation by a European people to a specific environment. The social and economic systems revolved around the ranchos as exhibited by the stratified nature of the Spanish, Mexican, and Indian cultures. The Spanish owners or "Gente de Razon" were the elite of the area, controlling vast amounts of land which enabled them to exert a vast amount of political and economic influence. Family influence (ties) and relatives in the Mexican civilian government permitted some families and/or small landholders to dramatically increase or gain vast amounts of land. In the Baldwin Hills area, there were three main ranchos:

1. Rancho La Ballona
2. Rancho Rincon de los Bueyes
3. Rancho Cienega O'Paso de la Tijera

In 1800, the Alcalde (mayor) of the Pueblo de los Angeles was Joaquin Higuera. His son, Bernardo, was to settle the land that joined the Rancho La Ballona on the northeast and called it Rancho de los Bueyes. The Rincon Rancho was settled in December, 1821 under Governor Noriega. The origin of Rinco de los Bueyes, "corner for cattle", is very simple and descriptive. The Rincon, meaning corner, was a natural corral created by a ravine in the Baldwin Hills (which lies just south-west of the large advertising sign of "57" at the base of Baldwin Hills). This area is an attractive area for grazing cattle with it's gradual rising knolls. Shortly after Bernardo Higuera and Senor Lopez, his partner, settled the Rancho Rincon, Spanish control of California ended; henceforth, California was now under Mexican jurisdiction. The Rancho Cienega which comprised the majority of Baldwin Hills was called Rancho Cienega O'Paso de la Tijera. In 1843, Governor Manuel Micheltoena granted this Rancho to Vicente Sanchez; however, Vicente Sanchez moved back to the Pueblo de los Angeles and his son, Tomas A. Sanchez asked the Governor to partition the land of which he became the new owner.

With the advent of American ownership (1848), a population influx into California occurred by "sail, steamboat, and covered wagon". The great Spanish ranchos soon disappeared and the new owners took on a different character. With the arrival of the Americans, land ownership became a problem. The United States Land Commission was developed to review land claims from the Mexican Republic; Rancho Cienega O'Paso de la Tijera was confirmed to Tomas Sanchez. From 1860 to 1867, Sanchez served under the Americans as County Sheriff. In 1875, Sanchez sold a half interest of his Rancho for \$60,000 dollars. Later he sold a fourth and finally, unable to pay off a loan from E.J. Baldwin, the Rancho was sold at an auction. It was purchased along with considerable other acreage from other defaulters by E.J. Baldwin. Baldwin used the Rancho for sheep ranching even though it was unprofitable (something unusual for this Comstock Mining millionaire). Baldwin who was sometimes known as Lucky Baldwin, held his luck even after his death when oil was discovered on the property. The Baldwin heirs sold large parts of the Rancho and the Los Angeles Investment Company subdivided "tract after tract" within it's bounds.

RESOURCE ELEMENT

The purpose of the resource element is to establish long-range resource management objectives and policies necessary to protect and perpetuate the recreational, natural and cultural resources of the Baldwin Hills State Recreation Area (SRA). This element also identifies resources sensitivities and physical constraints, and establishes the Department's guidelines for acceptable levels of development and use with respect to these factors and the purpose for which the SRA was established.

The scope of the resource element is limited to areas with Site 2 which are free of oil production operations and available for development. Specific resource management policies and programs shall be identified for these existing SRA areas, referred to as the "La Cienega", "Reservoir", and "La Brea" sites, a connector road segment and the "Ridge" site. Although the "Ridge" site was recently acquired, the resource element of this area was reviewed in the 1983 General Plan. Establishment of specific policies for the remainder of the undeveloped areas shall be based on resource information available at the time of acquisition.

Inventory Summary

SUMMARY OF RESOURCES AND EVALUATIONS

The following is a brief summary of the resource information contained in the Inventory of Features for the Baldwin Hills Project, compiled in 1982. Additional information is on file with the Department.

NATURAL RESOURCES

Topography

The Baldwin Hills State Recreation Area is located in the western portion of the Baldwin Hills. The Baldwin Hills are situated in the west central portion of the Los Angeles Basin. They are one of a chain of northwesterly trending hills which extend 64 kilometers (40 miles) across the basin from the Cheviott Hills southeasterly to the Newport Mesa in Orange County. The entire Baldwin Hills occupy about 25.9 square kilometers (10 square miles) and are roughly equidimensional in plan. A northwest-trending pair of elongated ridges and intervening central valley dominate the physiography of the hills. To the west, north and east, the hills rise abruptly from the flat basin floor, forming steep faces, along roughly linear scarps. On the south side, however, the hills plunge gently to the south. Throughout the area, numerous canyons and valleys sharply cut the hills.

The highest elevation in the Baldwin Hills, 155.7 meters (511 feet) above sea-level, is also the highest elevation along the Newport-Inglewood Structural Zone. Relief in the area, between the summit and basin floor ranges from about 122 meters (400 feet) in the north and west to between 30 to 91 meters (100 to 300 feet) in the south and east. Grading operations related to oil field activities have resulted in considerable modification of the natural topography.

Meteorology

The Maritime Fringe Climatic Region which includes the Baldwin Hills is characterized by average temperatures rarely falling below 10 or above 21 degrees Celsius (50 and 70 degrees Fahrenheit, respectively) with annual rainfall totals between 25 and 50 centimeters (10 and 20 inches). The typical wind pattern is an 11 kilometer (7 mile) per hour breeze from the west or southwest. This wind off the Pacific Ocean brings marine air into the Los Angeles Basin producing mild year-round temperatures. This region is cloudy or partly cloudy 222 days out of the year including 44 days with heavy fog allowing visibility of 0.4 kilometer (0.25 mile) or less.

The Baldwin Hills contain a variety of slope exposures and elevations, 45.7 to 152.4 meters (150' to 500'). The Median annual precipitation is 27.9 centimeters (11 inches), although wide variations occur from year to year and within short distances as a result of the topography. Most of the precipitation falls between November and April.

Due to the proximity of the unit to the ocean, air quality is frequently superior to the more inland areas. Alternating land/sea breezes serve to flush out local sources of pollution. However, inverse conditions during the spring and summer help effect a rise in local pollutant levels. In general, sea breezes mitigate the local pollutants in the area, transporting them inland and down the coast.

Hydrology

The Baldwin Hills represent the junction of the three major ground water basins: the Santa Monica Basin, the West Coast Basin, and the Central Basin Pressure Area. Major waterbearing zones in these basins surround the Baldwin Hills on all sides, although the project area, a topographic highland, is essentially non-waterbearing because it is elevated above the surrounding water table. Some of the rainfall leaves the area as runoff via the many natural drainage courses which dissect the hills.

The majority of the surficial storm runoff is contained and stored in sumps. These sumps were constructed by Standard Oil Company to store water which eventually would be treated for injection into the subterranean oil fields. Some over-flow does occur during major storms. Small waterbeds that produce low amounts of runoff that are not practical to intercept are allowed to exit the area via existing ditches and storm drain systems. This water is transported through existing storm drains into the Pacific Ocean via Ballona Creek.

The collapse of the Baldwin Hills Dam in December of 1963 caused major flooding to the north of the SRA. The sudden release of water from the reservoir produced flow rates which greatly exceeded the capacity of the existing storm drain system. The reservoir was abandoned soon after the dam failure, and due to its location at the top of a hill, potential runoff is minor as it is produced only by rain which falls directly into the reservoir area.

Rain is the only source of surface runoff. Previous investigations indicate the subsurface water source is below standards. The required lifts and water treatment precludes the use of the subsurface water source for any use within the proposed scope of operations.

Geology

The Newport-Inglewood Structural Zone is one of the major geological structural elements in the Los Angeles Basin, stretching forty miles from the Cheviott Hills southeasterly to Newport-Mesa where it continues offshore, roughly paralleling the coastline. The zone is not a single fault, but rather a complex series of faults, and both surface and subsurface structures. However, at great depth in the basement complex, it is believed, there is a master through-going fault, the Newport-Inglewood Fault. Movement along this master fault is believed to have caused the deformation in the overlying sedimentary rocks of the Newport-Inglewood Structural Zone. On the ground surface, this deformation is expressed by a linear series of low, eroded en-echelon fault scarps and a chain of low, right-hand en-echelon anticlinal hills and mesas. As a result of this deformation, numerous oil traps such as the Wilmington, Signal Hill, and Inglewood Oil Fields, have been formed. Within the zone there are several well documented faults, including the Inglewood, Charnock, Avalon-Compton, Cherry Hill, and others.

Deformation in the Baldwin Hills is believed to have started between 10 to 26 million years ago during middle Miocene time or possibly earlier. It continued at least intermittently through Quaternary time and is still occurring. Recent deformation is evidenced by the prominent Inglewood Fault scarp, arching and offset of Pleistocene (geologically young) deposits, and by other youthful topographic features of the hills. The uplifted Baldwin Hills were formed by the warping of Tertiary and Pleistocene sedimentary deposits, as a result of movement along the Newport-Inglewood Structural Zone. The gently arched deposits were shaped into an elongated northwest trending, doubly plunging anticline or dome. Later, or during formation of this dome, it was fractured by numerous faults.

In the Baldwin Hills, the Inglewood Fault is the main structural feature. It extends for at least nine miles northwesterly from Rosecrans Hills through the Baldwin Hills to the Beverly Hills area. It is actually a zone ranging from a few meters to 183 meters (600 feet) wide of fractures with a main break. Another zone of fracturing parallels this zone to the west. Numerous small en-echelon faults dissect, offsetting slightly, loose parallel faults. The main fracture of the Inglewood Fault is located in the central portion of Site 2 along the east side of the northwest trending central valley, where it forms a prominent eight-four-meter (275 foot) high scarp.

Slope failures in the Baldwin Hills have occurred in the form of landslides and erosion, associated with unusually heavy winter rainfall. The landslides have consisted principally of surficial debris slides ("mudslides", including soil slips) and debris flows ("mudflows"). These failures are derived partly from the mantle of soil and slope wash that overlies the bedrock of natural slopes and partly from weathered bedrock and fill. Slopes underlain by the Inglewood Formation are particularly vulnerable to superficial slides and flows, because the surficial mantle developed on bedrock of this formation contains abundant clay material. Deep-seated land sliding as a cause of damage has been uncommon, although ancient landslides, previously unrecognized, were mapped.

Occurrence of artificial fill in the Baldwin Hills area is varied and extensive. Thin narrow strips of artificial fill are found along the sides of many access roads throughout the area. Larger concentrations, ranging up to major canyon fills, are also found in the area. Composition of the artificial fill varies from petroleum waste products and inorganic trash to imported material from surrounding communities in the larger fills.

Subsidence, or vertical downward movement, of the ground surface related to operation of the Inglewood Oil Field has affected the site. The primary effect of the subsidence is decrease of ground surface elevations with some associated horizontal movements. Secondary geologic effects are earth cracking and fault displacements. Other relatively minor destructive effects include cracking of pavement and retaining walls as well as possible breaking of utility pipes.

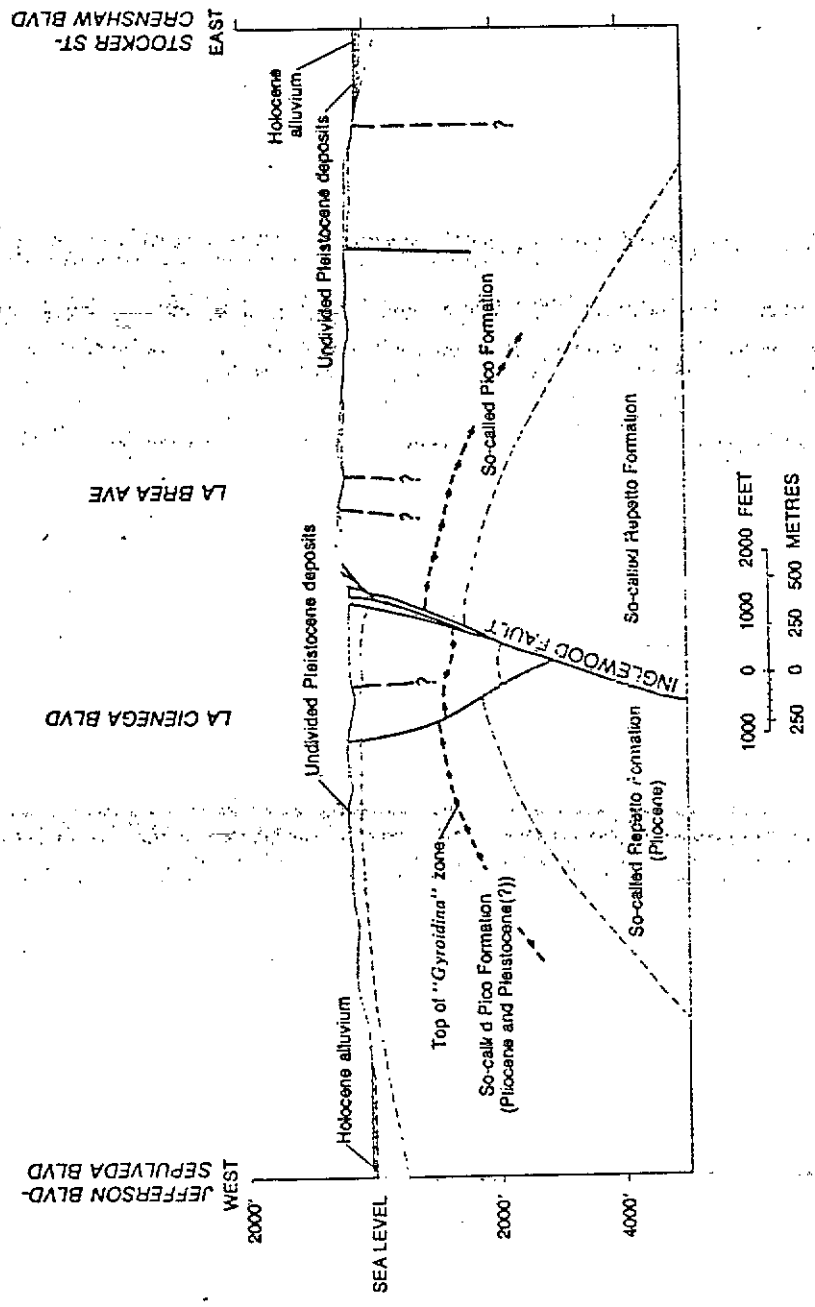
Historic damaging earthquakes have occurred along the Newport-Inglewood structural zone, but not in the SRA study area. The closest of these occurred on June 21, 1920, probably on the Inglewood fault, and surely within the Newport-Inglewood structural zone. The magnitude of the Inglewood earthquake was calculated later by Richter (1970) at 4.9. Though of small magnitude, the earthquake may have caused damage locally, because it occurred at a relatively shallow depth. Small earthquakes in the area in recent years have occurred at relatively shallow depths of 4.8 to 8 kilometers (3 to 5 miles).

Standard Oil Company of California developed the Inglewood Oil Field in September, 1924. The oil field includes 477.5 hectares (1,180 acres) in the western part of Baldwin Hills. The Inglewood Fault bisects the oil field into two separate components known as the east and west blocks. Although abandonment of individual wells has continuously occurred, the oil field will probably not reach its economic limit until sometime past the year 2000.

Soils

According to the United States Department of Agriculture (USDA), the soils series in the Baldwin Hills are generally 1.5 meters (60 inches) thick including a surface layer of about 0.45 meters (18 inches) and subsoil of about 0.75 meters (30 inches) thick. The substratum forms the rest of the soil and is underlain by bedrock or a change in sediment type. The surface layer usually contains organic matter. The amount varies according to distance from a source area. The subsoil is generally redder than the surface soil, more dense and compact, and ranges in texture from clay loam to clay. The soils area a reflection of the underlying bedrock. Where the clay loam predominates, the underlying bedrock consists of fine sand, siltstone and claystone of the Pliocene Pico Formation. Loam pre-dominates where the Pleistocene aged San Pedro and Inglewood Formations become exposed. Variations may occur as a result of topography. Soil type development may be disrupted or contaminated by the admixture of material from another source such as erosion material from upslope or by windblown deposition.





Colluvium conceals the traces of the Inglewood Fault in the vicinity of the proposed connector road. The colluvium consists of dark reddish-brown, moist, dense clayey sand and is expected to be less than 6.1 meters (20 feet) thick. Alluvial fan deposits underlie the fill in the vicinity of the western end of the proposed connector road. The alluvial fan deposits consist of yellow-brown, moist, and dense sandy silt. Portions of the deposit are moderately

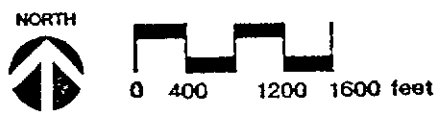


GENERALIZED GEOLOGIC SECTION OF THE
 NORTHERN BALDWIN HILLS (CASTLE & YERKES, 1976)



LEGEND

-  POTENTIAL FAULT RUPTURE ZONE
-  POTENTIAL SETTLEMENT AREA
-  LOW SEISMIC RISK AREA
-  ALQUIST-PRIOLO SPECIAL STUDY ZONE BOUNDARY



SEISMIC ZONE

BALDWIN HILLS STATE RECREATION AREA

well indurated and are poorly bedded. The secondary ridge is capped with up to 4.6 meters (15 feet) of ancient soil called the Fox Hills Relict Paleosol. The deposit resembles alluvial terrace deposits and is called a cap deposit. The paleosol consists of poorly sorted brown to red-brown, moist, dense clayey sand and gravel.

Soils investigations in the Baldwin Hills area have identified areas of contaminated soils resulting from both drilling and oil production activities. The contaminants include various types of grease and oils associated with the performance and maintenance of drilling rig, rock cuttings stained with oil which are derived from the actual drilling process, the drilling mud consisting of bentonite and added chemicals used to bring the cuttings to the surface and oil spills associated with the production phase. These contaminated soils are not a suitable media for the location of structure foundations or sites for landscaping. Preliminary estimates indicate that over 130,000 cubic yards of contaminated soil must be removed to reach uncontaminated soils in the "Ridge" and connector road areas.

Plant Life

The floral communities in the Baldwin Hills are in a condition best described as a "disclimax", that is a plant community induced artificially by man and not a component of the natural successional changes characteristic of the area. The dominant natural vegetation remaining has elements of the coastal sage scrub community, more specifically, the maritime sage scrub community. However, there are some undisturbed stands of vegetation on the slopes in the SRA with heavy cover and appearing the least disturbed, are actually dominated by one or two species, namely California sagebrush and coyote brush. The SRA consisting of canyons and ridges sloping eastward to La Brea Avenue, is dominated by low shrubs of California sagebrush, coyote brush, California encelia, and prickly-pear cactus, with scattered plants of numerous species represented as subdominants. Several clumps of elderberry occur on the shadier north-facing slopes. This section appears to have sustained the least recent disturbance by man and, though dominated by dense cover of only a few shrub species, may be the most important wildlife and plant habitat in the Baldwin Hills.

There has been little documentation of the fire history of the Baldwin Hills area perhaps due to the lack of diversity in plant species and the almost impenetrable cover of California sagebrush and coyote brush in some areas. Quite a number of old and dead shrubs were noted. These may indicate the exclusion of natural fires. The fire suppression is desirable from an oil field operations standpoint. This lack of occasional fires, a natural occurrence in the pre-European history of coastal sage scrub and chaparral plant communities, may have allowed the remaining stands of scrub in the Baldwin Hills to become over-mature. As in many other areas in Southern California, this over-growth of native chaparral increases the fire potential of an area. There is evidence of several recent spot brush fires, the latest of which occurred in September, 1982.

There are no federally listed rare or endangered plant species recorded for the Baldwin Hills. The California Native Plant Society has inventoried rare and endangered plants statewide. There are eight plants on this list which, while not found in the Baldwin Hills during the surveys, have ranges and habitat requirements which may include the Baldwin Hills.

Animal Life

The highly disturbed nature of the area has severely changed the natural animal life in the Baldwin Hills. The low diversity of native plants supports an equally low variety of wildlife.

The western harvest mouse was the most abundant rodent in the SRA area, comprising 69.1 percent of the total rodents. It was most common throughout the study areas, being absent from only oil well pads, oiled roads and other completely denuded areas.

The desert woodrat was the second most abundant species captured at Baldwin Hills during the surveys. It comprised 20.9 percent of the total rodents. This species was not numerous in the slightly and moderately disturbed coastal sage scrub communities, and was lacking in greatly disturbed areas.

The California vole was the third most abundant rodent taken during the surveys comprising 8.6 percent of the total rodents. The range of this species was generally sparse and was lacking in greatly disturbed areas.

Thirty-four species of birds are considered to be breeding within the Baldwin Hills. Red-tailed hawk, California quail, morning dove, Anna's hummingbird, cliff swallow, scrub jay, cactus wren, mockingbird, loggerhead shrike, starling, house sparrow, house finch, brown towhee, and song sparrow are confirmed breeders as evidenced by the discovery of a nest, juvenile birds incapable of flight, or of an adult feeding young. A remaining twenty species are regarded as suspected breeders because no direct evidence has been found.

The Baldwin Hills as a whole, appear to support a relatively low diversity of amphibians and reptiles at this time, with only six species (one amphibian, five reptiles) to the native plant communities in the past by oil production activities appears to be the primary factor in reducing the diversity of species.

Of the species of mammals observed during the survey or reported by other individuals to occur in the area, none are considered rare or endangered in Los Angeles County. Six birds observed or expected at the sites are on the Blue list of threatened species, sharp-shinned hawk, Cooper's hawk, American kestrel, barn owl, burrowing owl, and loggerhead shrike. One (white-tailed kite) is on the California Fish and Game Fully Protected List and ten are limited in number because of their position in the food chain. Other birds that most likely occur in the area at some time of the year are listed in the Appendix of the Inventory of Features. None of the amphibians or reptiles observed in the Baldwin Hills during the survey are considered rare or endangered on the official Federal or State lists. Two species projected as possibly occurring in the SRA vicinity, the coast horned lizard and the California legless lizard are listed as "threatened" due to habitat destruction, in the Society for the Study of Amphibians and Reptiles' Endangered and Threatened Amphibians and Reptiles in the United States. In addition, four species, the coast horned lizard, California legless lizard, rosy boa, and common kingsnake, projected as possibly occurring in the area, are protected by California Department of Fish and Game Bag Limits.

CULTURAL RESOURCES

An extensive study of the entire Baldwin Hills project (1,295 acres) was conducted by the Northridge Archeological Research Center in 1978.

While no historic structures or archeological sites are within the SRA, the cultural history of this area is widely represented by a long history of Man's adaptation to the environment and his continuous development of it's resources for energy generation. Man is represented in the history of Baldwin Hills from Pleistocene period to the present.

Native American Resources

Baldwin Hills and the surrounding area has several Early Man sites: Los Angeles Man (CA-LAn-172), La Brea Woman (CA-LAn-159) and the Angeles Mesa (CA-LAn-171) population. Due to an absence of any real associative cultural material in these sites, there are no direct indications of the cultural affinities of these early populations at this time. Evidence from North America (excluding California) reveals populations during this time span are big game hunters (artifact evidence including projectile points, bone tools, etc.) of Pleistocene megafauna (bison, mammoth, sloth, camel, and horse).

Euroamerican Resources

Baldwin Hills and the surrounding area has a long continuous history of occupation which is reflected by the number of archeological sites and historical points of interest recorded within the immediate vicinity. Within one mile of Baldwin Hills, there are sixteen recorded archaeological sites and two historic points of interest; within five miles, there are an additional twenty-five recorded sites and twenty historic points of interest. The historical points of interest within the five-mile radius center on the historical background of the area as well as items of interest like the first tall chimney in California. These points of interest consist of examples of Ranchos (four), Explorer's camps (two), Significant Buildings (ten), Famous People (two), and Significant Botanical and Geological Items (two each). In addition, oil production facilities in the project area date back to 1924 and represent the history and development of oil production in the area. There are roughly 720 operable wells in the Inglewood Oil Field. Of these, about 440 are actually producing. It is estimated that the Inglewood Oil Field will probably not reach it's economic limit until sometime past the year 2000. Another feature of the modern history of the Los Angeles Basin is the Baldwin Hills Reservoir, located in the central portion of the SRA. The reservoir dam failure in 1963 received much public attention and ultimately paved the way for this project. While no historical structures or archeological sites are known within the Baldwin Hills SRA, these features are part of the history of the Los Angeles area.

ESTHETIC RESOURCES

Esthetic resources associated with the Baldwin Hills include both visual and auditory features. Visual resources are primarily those that can be experienced, such as vista points which provide a variety of regional off-site views. The auditory resources considered to be positive features of the Baldwin Hills provide an isolated experience from the surrounding urbanized areas.



PHOTOGRAPH - AERIAL VIEW NORTH

The topography of the project area, one of rolling, hilly terrain, offers several vista point areas from which most of the Los Angeles Basin can be viewed. In addition, the large open space quality which is visible to the motorist passing the area and the local community is in direct contrast to the heavily developed character of the surrounding urban environment.

Positive scenic features of the Baldwin Hills include: the ridgeline and steep slope areas with coastal sage vegetation and vantage points offering vistas and panoramas of the Los Angeles skyline, Pacific Ocean, and local mountains and hills. Refer to the "Inventory of Features", Section XI for specific view points.

Several developments and activities in the Baldwin Hills area have significantly effected the natural scenic qualities. These include: the presence of billboards within the La Cienega Boulevard corridor; transmission towers and lines crossing the portions of the SRA; communications facilities; oil wells and related facilities; unimproved maintenance roads; and areas of unauthorized off-road vehicle use. In addition, the oil production activities have necessitated extensive grading effecting some of the natural topography and vegetation.

The principal auditory features associated with the Baldwin Hills, other than natural sounds, include noise generated by oil drilling operations and vehicular use, both on-site and along the adjacent roadways. Oil production which has dominated much of the area involves exploration, drilling, pumping and removal, and continuous related traffic. The traffic associated with La Cienega Boulevard has been determined to be the major noise source in the area. This is not a continuous situation, since the noise studies were based on peak commuter traffic hours.

There are several isolated areas within the SRA boundaries, especially in the northern and northeastern portions where the topography shields the area from ambient noises. This feature contributes to the large open space quality of the SRA as a convenient relief from the local urban development.

RECREATION RESOURCES

Historical recreational use of the SRA has included unauthorized hiking and off-road vehicle use. Until recently, the Baldwin Hills area has been owned by several different private parties with a few parcels leased to public agencies. Over the past few years, the County of Los Angeles has acquired portions of Site 2 to develop the Baldwin Hills State Recreation area. In addition, Culver City has acquired approximately seventeen hectares (42 acres) in the northwest portion of Site 1 and is developing a city park. The remaining acreage in the Baldwin Hills area is undeveloped for recreation.

The need for additional recreation opportunities in the area is stressed when comparing local statistics with a standard. Less than 0.25 hectare (0.5 acre) per one-thousand people of regional parkland serves this area. Compared to a national recommended standard of 2.4 hectares (6 acres) per 1,000 people and the County standard of 1.6 hectares (4 acres) per one-thousand people, this area is considered greatly deficient. The potential of the Baldwin Hills project to significantly reduce this deficiency is two-fold. Its physical and cultural aspects and the surrounding urban environment offer outdoor recreation and interpretive opportunities. Additionally, the large open space feature of the Baldwin Hills provides recreation potential unique to the surrounding urban area.

According to Recreation Needs in California: Report to the Legislature on the Statewide Recreation Needs Analysis (February, 1982), "The largest increases in participation are expected in non-strenuous outdoor activities. These activities will grow at a faster rate than the population, and could grow even faster if certain constraints are reduced. This finding indicates a need for nature-oriented parks in urban areas. These parks should provide a maximum feeling of open space with a minimum of support facilities required to accommodate outdoor activities (camping, boating, hiking, nature appreciation, swimming, and fishing)." The Baldwin Hills project would meet this expressed need by reducing travel time and expense; providing little or no cost recreation activities; and encouraging public awareness of local cultural and natural values.

Resource Policy Formation

CLASSIFICATION

Baldwin Hills was classified as a state recreation area (SRA) in February, 1983 by the State Park and Recreation Commission.

Although the "Ridge" site was recently acquired, the resource element of this area was reviewed in the 1983 General Plan.

In order to avoid delays in the development of Baldwin Hills as an SRA, the County gifted the fee-owned parcels of the Baldwin Hills project area to the State of California. This gifted property is adjacent to the "Ridge" site which was acquired by the State in Phase II of the Proposed Acquisition Plan.

The following definition of a state recreation area, as described in the Public Resources Code (PRC), Division 5, Chapter 1, Article 1.7, Section 5019.56a, includes references pertinent to plan formulation for resource management and recreational development.

State recreation areas, consisting of areas selected and developed to provide multiple recreational opportunities to meet other than purely local needs. Such areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large population centers, major routes of travel, or proven recreation resources such as man-made or natural bodies of water. Areas containing ecological, geological, scenic, or cultural resources or significant value shall be preserved within state wilderness, state reserves, state parks, or natural or cultural preserves.

Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, swimming, hiking, bicycling, horseback riding, boating, water-skiing, diving, water sports, fishing and hunting.

Improvements to provide for urban or indoor formalized recreational activities shall not be undertaken within state recreation areas.

DECLARATION OF PURPOSE

The primary purpose of Baldwin Hills State Recreation Area (SRA) is to preserve the last open space resource in this area of Los Angeles County capable of meeting the present and future outdoor recreation needs of the public. To preserve this open space, major portions will need to be restored and revegetated. The purpose of this restoration is to repair the damage that has occurred to the vegetation and land forms resulting from the past and present uses of the area.

The prime resources of the Baldwin Hills State Recreation Area are:

The large open space quality which is in direct contrast to the heavily developed character of the surrounding urban community;

The many scenic vista points from which most of the Los Angeles Basin, Pacific Ocean and local mountains can be viewed; and

The potential of the unit to provide regional recreation opportunities for 2.5 million people within a radius of sixteen kilometers (ten miles).

In addition there are natural and cultural values in the unit that can provide other recreational and interpretive opportunities.

ZONE OF PRIMARY INTEREST

The SRA is the last remaining, undeveloped open space area in this portion of Los Angeles County. Presently, oil production facilities cover about seventy percent of the Baldwin Hills area; however, the SRA is free of operating wells. As additional wells are abandoned, recreation development may be allowed to expand to the remaining project area. Surrounding lands are fully

developed for residential and commercial uses. Land use changes in the surrounding areas are not likely to occur in the foreseeable future or have any adverse effects on the stated purpose of the SRA and resource management objectives.

RESOURCE MANAGEMENT POLICIES

NATURAL RESOURCES

Topography

Considerable modification of the natural topography has resulted from oil field-related grading. Additionally, the majority of the existing development has taken place prior to the enactment of stringent modern grading codes, thus 1:1 slopes lacking proper drainage devices and retaining walls are common.

Policy: Only those roads and structures necessary to provide access and facilities to the natural areas of the unit shall remain. Where grading has occurred for roads, oil well pads, and associated support facilities, every effort shall be made to restore those areas. Where erosion and earth slippage has occurred in areas adjacent to proposed public use areas, grading in these areas should remove any potentially hazardous conditions to human safety. In areas that are determined unsafe for human use, reconstruction shall include construction of barriers to maintain public safety.

Hydrology

The Baldwin Hills lack any significant amount of surface water and water encountered underground is substandard. Water demands such as sprinklers, ponds, sanitation need, etc., will be placed on the unit as development takes place.

Policy: Negotiations with one of the several water companies servicing the area shall yield an adequate supply of water prior to the construction of such facilities.

Policy: Facilities shall be designed with water conservation in mind. Use of low-flow and minimal irrigation devices shall be incorporated where feasible.

Denuded watersheds have resulted in increased run-off and large amounts of debris.

Policy: Graded slopes shall be planted with deep-rooted vegetation as quickly after grading as possible. Techniques such as the placement of jute matting on slopes shall be tested in problem areas. Drainage shall be collected and directed in non-erosive drainage devices to natural water courses or approved dispersal locations.

The northern portion of the SRA has steep slopes of over fifty percent that drain directly onto the adjacent residential properties.

Policy: No development shall occur in this area that could potentially cause soil instability and increase run-off.

Geology

Baldwin Hills State Recreation Area is located in a region that has a history of seismic activity, damaging earthquakes, and land subsidence. The Inglewood Fault, whose main fracture lies in the central portion of Site 2, has been classified as an area capable of ground surface rupturing during a moderate earthquake and is included in "special studies zones" by the State of California Division of Mines and Geology, Special Publication 42 (Hart, 1980), as mandated by the Alquist-Priolo Special Studies Zone Act of 1972. Several fault rupture zones branch off this main fracture within the boundaries of the SRA.

Policy: Consultation shall take place with a qualified geologist for site-specific planning. Construction shall be reviewed by a qualified engineer/geologist for potential safety hazards in accordance with California Administration Code, Title 14, Division 6, Chapter 8, Subchapter 1, Article III and Public Resources' Code Section 2621.5.

Over fifty oil wells in the Inglewood Oil Field, adjacent to and encompassing the unit, were abandoned prior to more stringent standards. There will be a future need for proper abandonment of oil wells and related facilities.

Policy: The State of California has jurisdiction over abandonment of oil wells. All abandoned oil wells and facilities not in compliance shall be brought to current standards.

Soils

The original soils in the Baldwin Hills have been partially removed or covered by erosion and grading. Colluvium and artificial fill which have replaced or covered the original soils are generally unsuitable to support plant growth or structures.

Policy: Contaminated soils and unsuitable fill shall be removed and/or mixed with uncontaminated soils under the observation of a qualified soils engineer. Replacement fill, where required, shall be compacted to at least ninety percent of the maximum laboratory density. Testing shall be performed by a qualified soils engineer during grading to ensure the required degree of compaction and moisture content is obtained.

Policy: No structures for human occupancy shall be developed in landslide and unstable slope areas.

Biotic

Several State mandates provide for the establishment of management policies to preserve the significant biotic features of units in the State park system: Section 15011c, Title 14, California Administrative Code; Policy Number 7, Commission; and Section 5019.71, California Public Resources Code. In addition, Section 5019.56a provides for the establishment of natural preserves, as further detailed in Section 5019.71, within State recreation units to preserve significant ecological or scenic resources.

Policy: Revegetation and biotic management shall be in accordance with the Department's Resource Management Directives 1831.1 and 1831.2 of the Operations Manual.

Policy: Areas shall be designated within the SRA that will be developed as tree groves, thereby propagating the urban forest concept. Buffer areas, utilizing vegetation, shall be developed to separate active use areas from passive and residential areas.

A forestation program shall be incorporated in the development plans for the major vehicular thoroughfares and camping areas.

This program shall include a diversity of plants to encourage the wildlife rehabilitation.

Eight rare or endangered plants recognized by the California Native Plant Society have habitats similar to that of Baldwin Hills. Six birds expected to be seen in the area are on the Blue List of threatened species. Two species of amphibians/reptiles possibly occurring in the area are listed as "threatened" in the Society for the Study of Amphibians and Reptiles' Endangered and Threatened Amphibians and Reptiles in the United States. Four species of amphibians/reptiles and one bird projected as possibly occurring in the area are protected by the State Department of Fish and Game.

Policy: Monitoring shall continue to determine if any officially rare or endangered plants or animals occur on the unit. If such are found, management programs shall be established to ensure their perpetuation including the classification of a natural preserve as provided by Section 5019.71, California Public Resources Code, if necessary.

Policy: Natural water supplies supporting ecosystems shall be protected.

Policy: Chaparral and coastal sage scrub plant communities shall be managed to reduce the potential of uncontrolled fires. Locations of structures shall consider proximity to large groupings of these plant communities.

CULTURAL RESOURCES

Cultural sites in the Baldwin Hills area reflect the entire gamut of Man's utilization of the land. An archeological survey was performed encompassing the entire project areas and indicated that the proposed development will have no adverse impacts on known archeological resources. However, undetected resources may exist within the SRA boundaries.

Policy: If any artifacts or sites are encountered during development or use, a qualified archeologist shall be contacted to suggest mitigation measures. All mitigation measures must be carried out using standards set by the Resource Protection Division, State Department of Parks and Recreation.

ESTHETIC RESOURCES

The topography of the unit provides unique vistas of the entire Los Angeles Basin, the Pacific Ocean, local mountain chains and adjacent cities south of the project area. Additional resources include coastal sage vegetation on the ridgeline, steep slope and canyon areas.

Noise levels from the surrounding urban landscape are muffled by the topography of portions of the unit.

Policy: Grading shall be controlled in such a manner as to preserve the natural topography and vegetation. Siting of passive uses, such as camping, shall consider noise mitigation.

ALLOWABLE USE INTENSITY

The Public Resources Code (Division 5, Chapter 1, Section 5019.5) requires that a land carrying capacity survey be conducted on lands in the State Park System before a development plan is formulated.

"Carrying capacity" or use intensity, in the recreation context, signifies the optimum number of persons per acre that can be allowed in an area at one time without directly or indirectly causing irreparable damage to the natural resources being used and without detracting from the quality of the vistas experience.

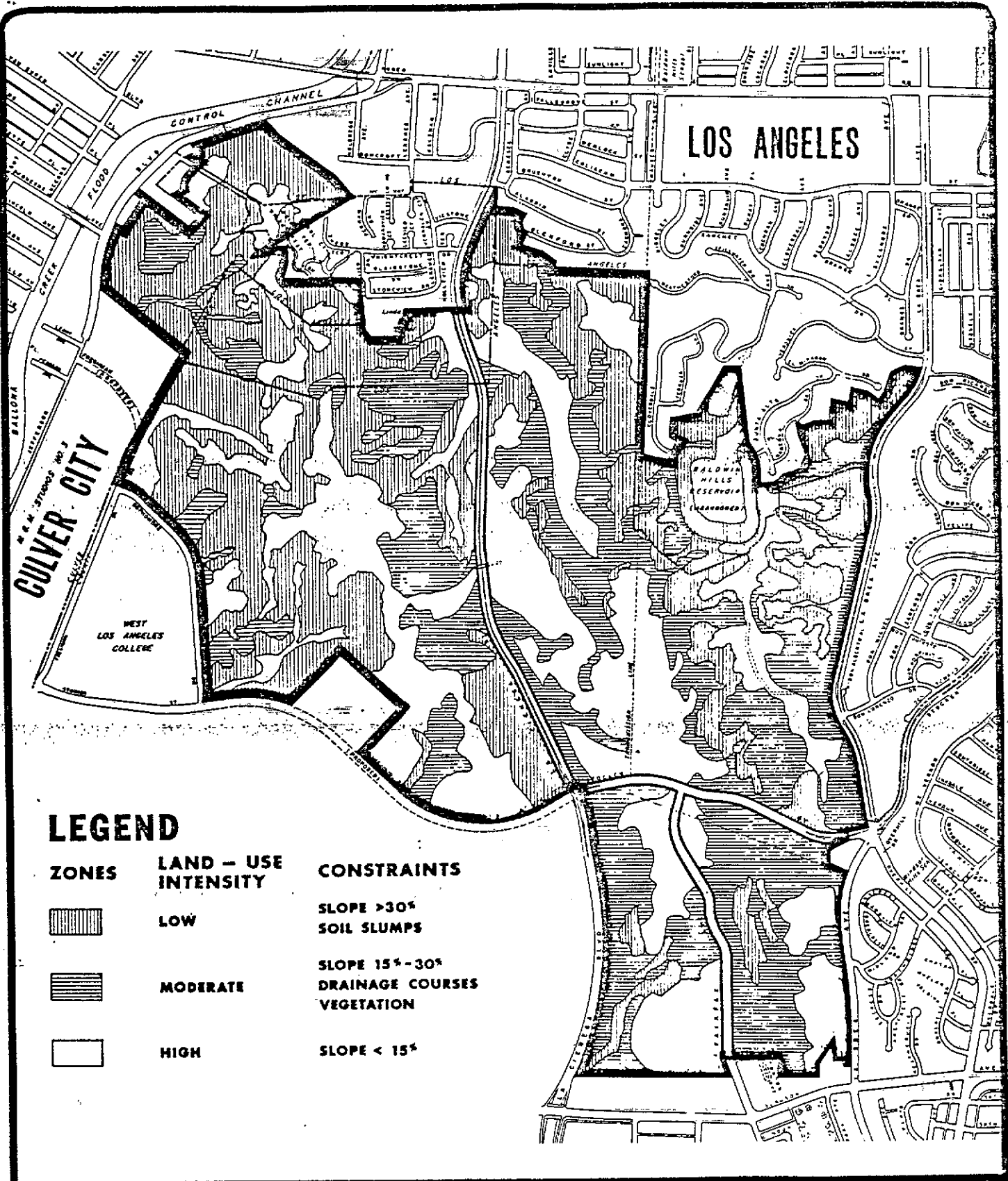
The development of the Baldwin Hills SRA has centered around the concept of an open space urban forest. The physical characteristics of the area (topography, seismicity, soils, plants) dictate that the development be non-intensive with many areas remaining in open space. The SRA concept has evolved from much public input and centers around providing a passive recreation area. The Proposed Land Use Intensity Map has been prepared for the purposes of delineating areas of varying recreational land use potential. The intensity of use for the unit is divided into three levels of usage primarily based on slope: high use areas with slopes of 15% or less; moderate use areas with slopes between 15% - 30%, drainage courses and vegetation; and low use areas with slopes over 30%, potential fault rupture and settlement zones, soil slumps and earthquake hazard. Within the SRA, over 28% of the land is categorized as high use intensity.

Other physical factors limiting recreational development primarily are contaminated soils found in the SRA and the planned philosophy of rustic, passive open space. To a lesser extent, seismic and fire hazards may be considered as constraints to recreational development of the area.

Soil investigations have identified contaminated soils in the SRA from the oil production activities, including the remnants of oil drilling: bentonite, tar and oil residues. These contaminants render the soil unsuitable for building sites and landscaping. Preliminary estimates of the "Ridge" site indicate that over 99,398 cubic meters (130,000 cubic yards) of contaminants must be removed to reach uncontaminated soils.

The second primary limiting factor on the use of the area for intensive recreation activities is the philosophy of rustic, passive open space planned for the unit. Capacity parameters will need to be established on recreation supporting facilities to preserve this rustic, open space theme.

The potential seismic activity in the SRA places constraints on the location choices of buildings for recreation facilities, but does not appear to limit the recreation capacity of the unit as a whole. The large open space character of this unit provides recreation potential independent of many built facilities.



RECREATION SUITABILITY

BALDWIN HILLS STATE RECREATION AREA

Due to the present over-maturity of the chapparal in portions of the project area, wildfire hazard is a management concern. Development should be designed with this fire factor in mind. In addition, fire management controls can be implemented once the project is managed by one agency.

LAND USE AND FACILITIES ELEMENT

Baldwin Hills State Recreation Area has a unique combination of natural and cultural features that provide it with the potential to supply a wide range of recreational and interpretive benefits. The primary thrust for acquisition and development is, of course, in preserving the large open space area for recreational needs. The purpose of the land use facilities element is to determine the areas most suitable for these activities.

The land use facilities element is a comprehensive, long-range master plan for development of recreational and interpretive facilities at Baldwin Hills State Recreation Area. This element is a narrative and graphic description of the SRA as it existed at the time of State acquisition, supplemented with plans and goals for future development within the framework set forth in the resource element.

Site requirements were developed as the result of a planning process that gathered information from several sources: (1) A series of studies, including a preliminary master plan, environmental impact reports, and resource element, provided the detailed information on the environment. This included research on topography, climate, hydrology, geology, soils, vegetation, wildlife, archeology, and visual quality. (2) A 15-member Citizen Advisory Committee (CAC) was appointed to assist the Department's planning team in developing the preliminary master plan. The CAC represented a broad range of interests and backgrounds. Eight meetings were held with the CAC to gain their input on the plan. A new CAC was organized in 1983 to continue the planning process on the acquired "Ridge" site. (3) In addition to the CAC, a Technical Advisory Committee (TAC) was formed to provide technical input on the feasibility of the proposed plan. The T.A.C. has continued working on an ongoing basis developing plans for the newly acquired portions of the park. (4) Three public hearings were also held to solicit general public comment.

As part of the planning process, a number of objectives were formulated by the CAC to guide eventual development: (a) Acquisition of as much of the 1,300 acres as possible to ensure recreational use of the open space. (b) Development is to provide varied and unique recreation opportunities, particularly those not available in the surrounding communities. (c) Surrounding land uses should be considered in development plans. (d) Promote a transportation program to and within the project area. (e) Implementation of an urban forest program. (f) Long-term operation and maintenance should be considered in selection of plant materials and design development. (g) Develop an interpretive program.

Land Use Analysis

PROPOSED ACQUISITION

The history of this project reflects a multi-agency cooperation for the purpose of preserving by lease and/or acquisition this unique open space. Between 1976 and 1983, the County of Los Angeles acquired fee title to 95 hectares (234 acres) in the northern portion of Site 2, including Parcels 2-8, 2-9, 2-5A, 2-4, 2-16 and 2-19. These parcels compose the property gifted to the State of California by the County of Los Angeles in August, 1983 and complete Phase I of the Proposed Acquisition Plan.

<u>PARCEL</u>	<u>HECTARES (ACRES)</u>	<u>DATE OF ACQUISITION</u>	<u>ACQUISITION COST</u>
2-8,2-9	14ha(36ac)	August, 1977	\$1,120,000
2-10	FAA Facilities, excluded from acquisition.		
2-5A	51ha(125ac)	October, 1978	4,900,000
2-4	6ha(14ac)	October, 1981	408,000
2-16	.02ha(.05ac)	August, 1983	3,000
2-19	24ha(59ac)	August, 1983	380,000
TOTAL	94.02ha(234.05ac)		\$6,811,000

Phase II of the Proposed Acquisition Plan involved acquiring fee title to the proposed connector road parcels and the "Ridge" site. This was realized in May, 1984 with the acquisition of a portion of parcel 2-13 from the Baldwin family. The 32 hectares (80 acres) were acquired at a cost of \$8,300,000.

The next priorities set forth in the long-range acquisition plan for the Baldwin Hills project include, the Artesian Co. property located adjacent to La Cienega Boulevard on Site 2, Cone and Standard Oil Co. properties on Site 1, and a potential donation by the Ethyl Oil Corporation of their three parcels located in the southern portions of Sites 1 and 2. The remainder of the open space will be acquired in later phases by fee easement or license agreement rights. Petroleum extraction accounts for a majority of use of these leases, with additional interests vested in water retention and distribution, and communication facilities. The present fee owners are to retain any mineral extraction and other interests in said rights upon their land until it is mutually agreed that said rights are no longer necessary.

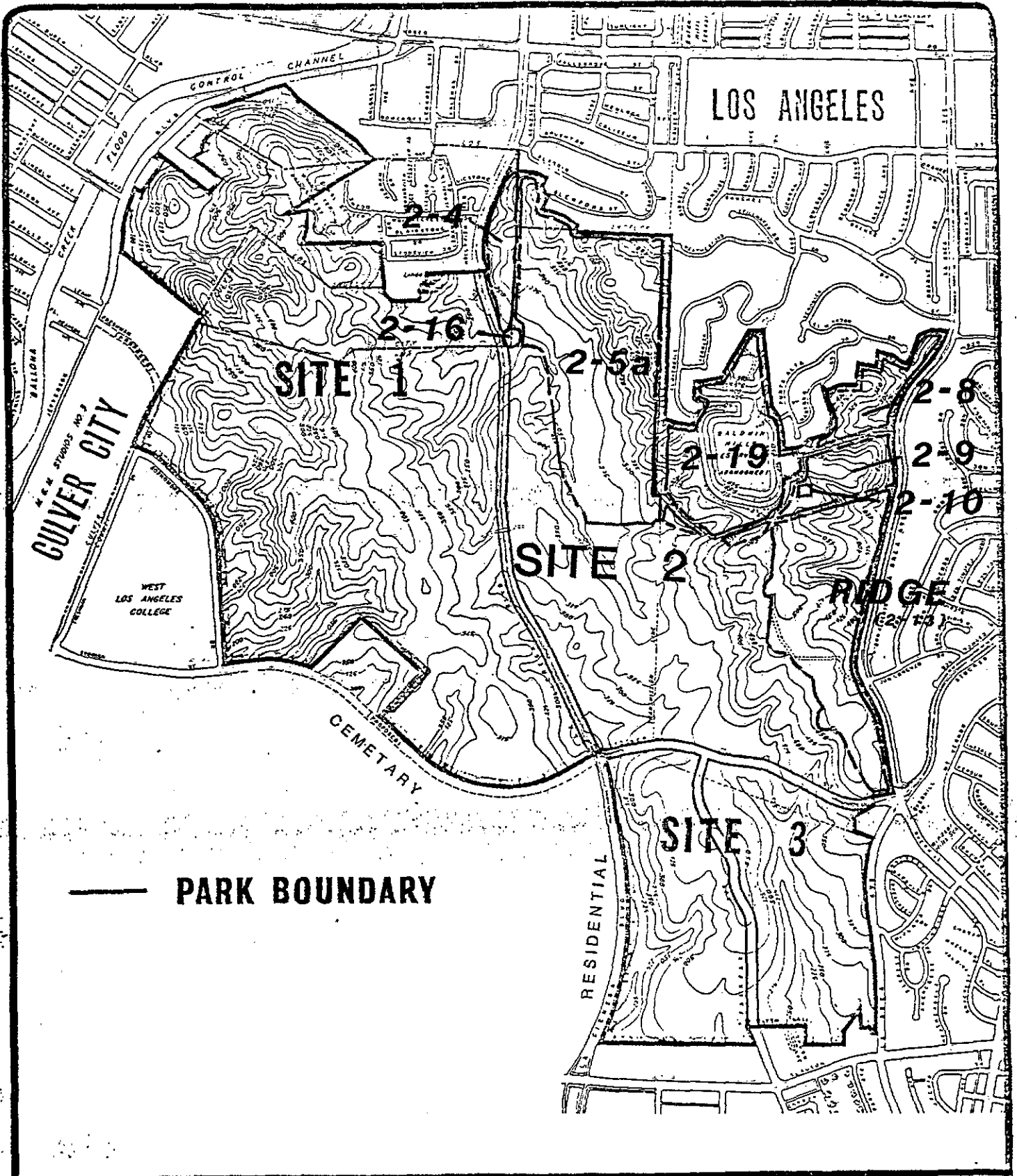
As part of the acquisition of future phases, reversionary rights for those parcels remaining in oil production may be considered.

EXISTING LAND USE

The unit represents the last large open space area in the west-central portion of Los Angeles County. Within a 16 kilometer (10 mile) radius of the unit, 2.5 million people reside (1/8th of the State's population). The surrounding community is multi-racial and multi-cultural. This area contains the largest economically disadvantaged population in the State. Additionally, the opportunity to experience the amenities offered by a large open space area of this magnitude is not presently available to many residents of the surrounding area.

Use of the area for the purpose of extracting oil and processing natural gas has necessitated the construction of many oil-related structures throughout the project area. Approximately 70% of the surrounding open space area is presently involved in the production of oil. Related structures include: oil wells, pipes, water treatment and gas plants, storage tanks, buildings and service roads.

Several areas are utilized for both overhead and underground utilities. A high voltage line (City of Los Angeles, Department of Water and Power) bisects Site 2 and travels through a portion of Site 3. With the exception of oil production facilities, the undeveloped nature of the unit has permitted several



NORTH



0 400 1200 1600 feet

PARCEL IDENTIFICATION

BALDWIN HILLS STATE RECREATION AREA

utility companies and government agencies to locate electrical, telephone and gas transmission lines throughout the project area.

The size and complexity of the Baldwin Hills SRA dictates that the development be accomplished in phases. Phase I Development coincides with Phase I of the Proposed Acquisition Plan which is the gifted County property. The development of Phase I has occurred since 1981 and to date has been concentrated on the 2-5A and 2-16 parcels ("La Cienega" site). The remainder of Phase I is proposed in the Amended General Plan as Phase 1D ("Ridge" site) and 1E including parcels 2-5A, 2-17, 2-8, 2-9 and part of 2-4 ("La Cienega" site).

Phases 1A and 1B of the "La Cienega" site are clustered in three structured picnic areas located within an approximately 10 hectare (20 acre) open area (see General Plan Map in Appendix). Each cluster provides various amenities such as, a comfort station, horseshoe pit, drinking fountains, trash receptacles, picnic tables and pads, and BBQ's. Additional facilities include: an entry kiosk located approximately 305 meters (333 yards) along the west park road from La Cienega Boulevard (see "Circulation"); a 0.9 kilometer (1/2 mile) pedestrian walkway connecting the structured picnic sites and encircling the open area; and two parking facilities adjacent to the picnic clusters.

Phase 1C, also a part of the "La Cienega" site, is designed with two ponds, a stream and a lake as the main focal features. The riparian environment provides a pleasant setting for fishing sunbathing, hiking and picnic activities. A variety of trails have been designed to connect facilities, meander along the lake and stream, and serve as an interpretive element in the park. Look-outs along the trail that communicate the unit's natural, historical, cultural and visual resources to the visitor. Other amenities that were developed in this phase include a comfort station, a children's play area, parking facilities and extensive landscaping.

CIRCULATION

The primary access to the Baldwin Hills SRA is directly from La Cienega Boulevard which is the major traffic artery servicing the surrounding area. Emergency access exists from La Brea Avenue to the "Reservoir" site. Internal circulation within the SRA currently includes the west park road approximately 1.14 kilometers (3/4 mile) from La Cienega Boulevard which terminates at the end of the existing development. A connector road is proposed to link the "La Cienega site to the "Reservoir," and "La Brea" sites and eventually the "Ridge" site.

A entry point from La Cienega Boulevard has one lane in and one lane out for northbound traffic. A two-lane bridge has been constructed to accommodate southbound traffic. A triangular island separates the deceleration lane from the acceleration lane. This forms the two-lane, two-way west park road which circulates through the SRA providing access to the parking areas and major facilities. A secondary access road may be developed on La Brea Avenue, 800 feet north of Stocker Street. Approximately 305 meters (333 yards) from La Cienega Boulevard along the west park road is the entry kiosk area which has a gate controlling access to the SRA. There is adequate stacking room and turn-around space provided.

UTILITIES

All utilities are proposed to be underground and meet the minimum requirements as prescribed by the governing ordinances, including sewer lines, water mains and electrical service lines.

Reference is made to the Baldwin Hills Acquisition EIR, page 26, for a discussion of available utilities. The heavily developed nature of the areas surrounding Baldwin Hills has caused the necessary utility systems to be extended to the areas adjacent to the unit. Where current utilities such as water and sanitary sewers are not adequate to meet the facility requirements once development occurs, some utility construction may be necessary. The low level of development proposed for the SRA is not expected to cause the construction, if required (eg. water pressure pumps to serve the upper levels of the unit), would occur within the boundaries of the SRA.

REGIONAL LAND USE

This area of Los Angeles County is currently not served by any regional park facilities. The nearest facility is Griffith Park 1,781 hectares (4,400 acres) which is 24 kilometers (15 miles) away from the SRA via surface traffic arteries. The areas surrounding the SRA to the north and east is residential. The remainder of the surrounding land to the south and west is an extension of the Baldwin Hills open space area and supports heavy oil production activities.

Proposed Facilities

DESIGN CONCEPTS

The proposed facilities for the SRA were determined by the overall design concept for the unit. This design concept envisions the SRA as an area providing passive recreation within an urban forest setting and retaining major portions of the undisturbed natural environment as much as possible. Required facilities are proposed to be constructed in a manner which maintains a "rustic" recreational experience.

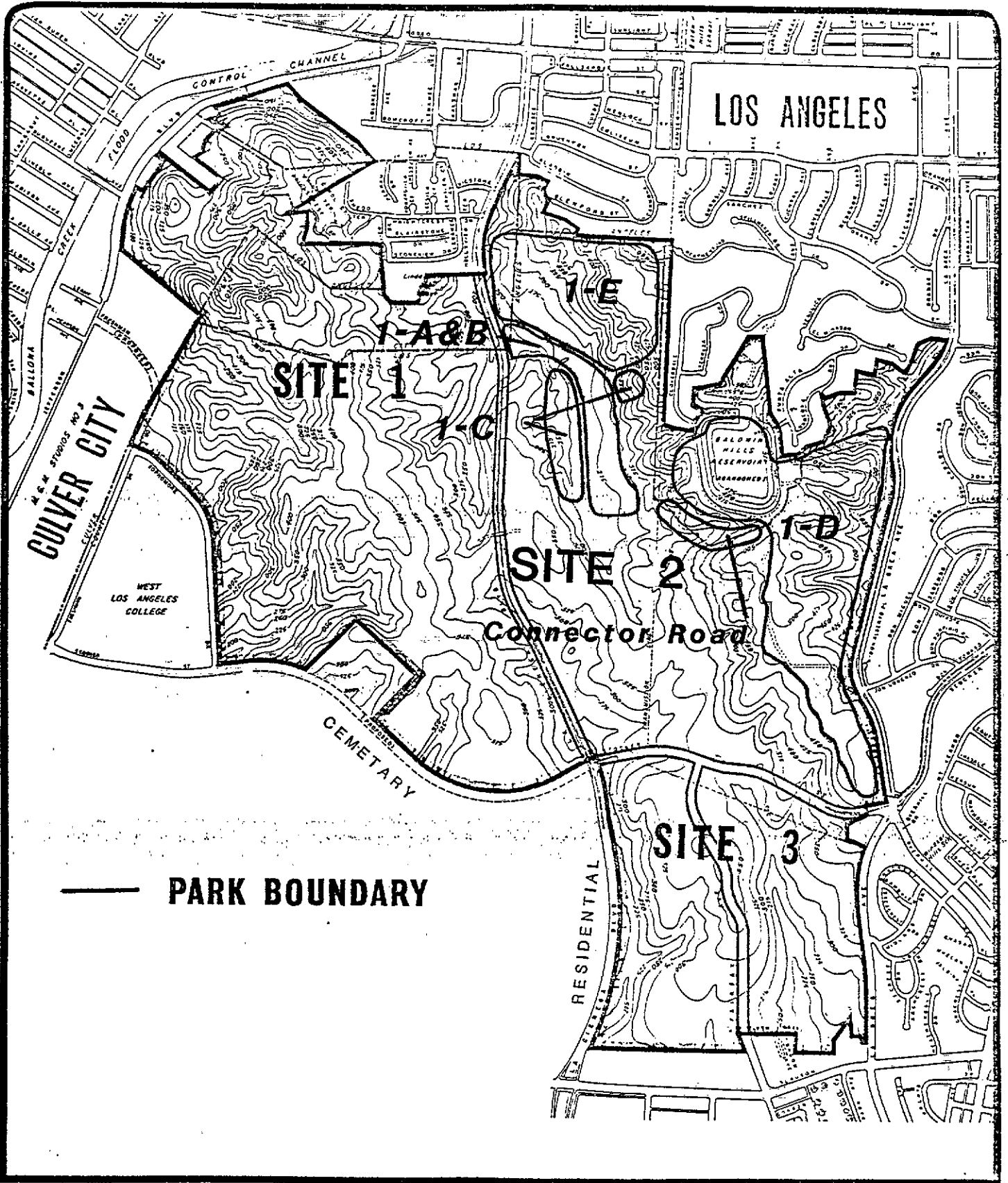
OPERATIONAL NEEDS

The facilities would be designed and developed within the guidelines and policies identified in the resource element. The facilities are depicted on the General Plan Map (see Appendix) and are described by the proposed phases in the following paragraphs:

Phases 1A, 1B and 1C are existing facilities located on the "La Cienega" site as described previously (see "Existing Land Use").

Phase 1D ("Ridge" Site) had been proposed for acquisition when the General Plan was adopted. The property was subsequently acquired in May of 1984 by the State and is therefore, now being incorporated into the Amended General Plan.

Group Camping: There will be twenty-five (25) campsites available for organized children's groups on a reserved basis. The area can accommodate one-hundred campers. The design of the campgrounds will be rustic with a natural soil and wood chip ground surface. Strict controls will be implemented



LOS ANGELES

CULVER CITY

SITE 1

1-A&B

1-E

1-C

SITE 2

1-D

Connector Road

CEMETARY

WEST LOS ANGELES COLLEGE

SITE 3

RESIDENTIAL

— PARK BOUNDARY



0 400 1200 1600 feet

PROJECT PHASES

BALDWIN HILLS STATE RECREATION AREA

to ensure the safety of the children and to maintain the serene nature of the surrounding community.

Fire Circle: Adjacent to the group campground will be a fire circle with seating for one-hundred children. Use of this area will be limited to interpretive programs. There will be no amplified sound systems allowed in this area.

Picnic Areas: There are two types of picnic areas: structured and unstructured. The structured picnic areas would have tables, barbecue facilities and water. Unstructured picnic areas are informal areas where one may spread a blanket and have a picnic.

There will be a five-structured picnic areas dispersed along the "La Cienega" site and adjacent to parking. Two of these areas are adjacent to the lake and stream development. Overhead shade structures will be constructed over several of the picnic areas to provide shade for the park user.

Additionally, there will be picnic areas that will serve each of the children's play areas. One large group picnic area, adjacent to the campgrounds, will accommodate up to fifty persons. This facility will be available by reservation only. There will be two unstructured picnic areas proposed for Phase 1D.

Parking Facilities: The parking facilities will be along the road and constructed with AC and a pebble aggregate finish. The rustic nature will further be enhanced by wood pole curbing to control circulation and parking on the site.

Comfort Stations: Six comfort stations will serve the picnic areas, reservoir area and two children's play areas. A seventh comfort station will be adjacent to the group picnic area and have showers to accommodate campers. The design of the facilities will be rustic. Low-flow sinks and toilets will be installed with separate units for men and women. Sewage lines will be constructed to facilitate this phase of the park's development.

Vista Lookouts and Interpretive Trails: The trail system will loop throughout the "Ridge" site and connect to Phase 1E. The three vista lookouts will provide shade for hikers and be designed to blend with the rustic theme of the park.

Alternative Energy Awareness Center: The center will explain the historical value of Baldwin Hills as an oil resource and that today this resource is limited. The need to research and discover alternative forms of energy for the future will be expressed in this display.

Headquarters Building/Maintenance Facility: The proposed SRA headquarters building is located at the terminus of the existing west park road. This site would be centrally located when subsequent phases of the SRA are fully developed. The building was sited to take advantage of the natural heating and ventilation opportunities of the unit. The structure is proposed to have an energy efficient building envelope with proper insulation, double-paned glass and devices such as a heat-sink for passive heating and cooling. Through selective plantings of deciduous trees the building would be shaded during the summer and receive sun in the winter.

Archery Range: This facility will provide opportunity for recreational use by archers. It is situated into an existing hillside away from residential property and public use areas. Six to twelve target areas would be developed to provide variety of experiences.

The General Plan proposes the following facilities to be included in the Phase 1E development:

Vista Lookouts and Interpretive Trails: The interpretive trail and lookout system proposed for Phase 1E would join the similar system proposed in Phase 1C and 1D to form an integral network. The trails and lookout system would communicate the unit's natural, historical, cultural and visual resources to the visitor.

Two types of interpretive trails are proposed: a continuation of the pedestrian walkway system and hiking trails. The pedestrian walkway, approximately 2.4 kilometers (1 1/2 mile), would be rustic in character using soil-cement as paving material for erosion control. Trail width varies between 1.2 to 1.8 meters (4 to 6 feet). The hiking trails, approximately 2.4 kilometers (1 1/2 miles), would be rustic, unimproved, but stabilized to prevent erosion. The trail width would vary between 1.8 to 3 meters (6 to 10 feet).

Olympic Forest: The Olympic Forest area, approximately 5.6 hectares (14 acres), covers the northwest corner of the "La Cienega" site. This site has been modified over the years and in recent times used as a fill site. It is envisioned that each nation participating in the 1984 Olympic Games would have at least one tree species representative of its's country.

The concept for this development includes organizing the plantings by various vegetation life zones to include:

- Tropical - Wet
- Tropical - Dry
- Subtropical - Wet
- Subtropical - Dry
- Temperate - Warm
- Temperate - Cool

The Olympic Forest theme would be further enhanced by developing interpretive trails and stations describing the forest and its relationship to the cultural development of each country.

Interpretive Display: The display will be located in the Olympic Forest, adjacent to parking facilities with access from the west park road. There will be two rustic structures, each with four display panels. The structures will stand on wood poles and have concrete tile roofs.

Parking Facilities: The parking facilities would be surfaced with asphalt. The edge of the parking areas will be treated with wood poles.

Comfort Stations: One comfort station is sited for Phase 1-E development. The station is located near the interpretive display at the turn-around area.

Buffer: A landscaped zone, approximately 21.6 hectares (53.5 acres) is proposed along the northern perimeter of the SRA to screen and buffer activities from nearby residential areas. The large area north of the "Reservoir" site, approximately 5 hectares (12 acres) would remain as an undeveloped buffer zone.

Circulation: Internal circulation of the SRA would include the following proposed alternatives:

Connector Road Alternative - A connector road is proposed to link the "La Brea" site on the east side of the SRA with the "La Cienega" site on the west side.

The connector road will extend the road eastward forming an east park road to access "Reservoir" site and "La Brea" site. Hence, the east and west side developments of the SRA will be connected by extending the existing park road easterly.

La Brea Avenue Access Alternatives - If the connector road described above is not constructed, a La Brea Avenue access is necessary for Phase 1-D construction. The access would permit entrance to the east side of the SRA from La Brea Avenue. The access point would use the same intersection location as the existing DWP service road. The proposed access intersection would be grade separated with acceleration and deceleration lanes going both traffic directions. The access would be extended west to form east park road servicing the "La Brea" and "Reservoir" sites. This road would be a two lane, two way road and would not link the "La Brea" site to the "La Cienega" site.

A secondary access is proposed on La Brea Avenue, eight-hundred feet (800') south of Stocker Street. This access would provide direct access to the "La Brea" site. This road would be two-lane with right lane access from La Brea Avenue.

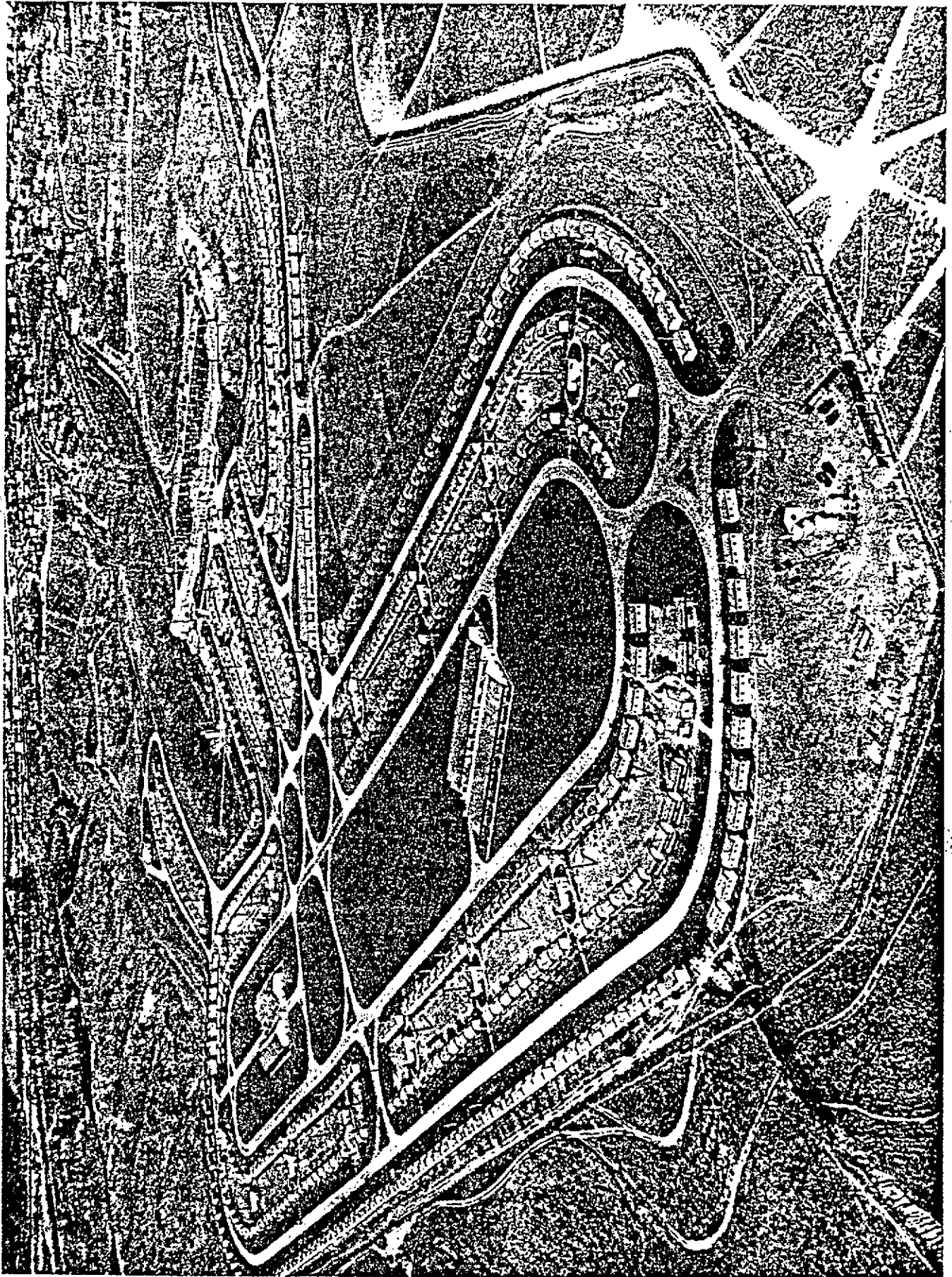
Concessions: Four areas are proposed to house food preparation and services: one located in the "La Brea" site picnic area in the east side of SRA and the second located in the Olympic Forest area of the "La Cienega" site, and the third would be located within the "Reservoir" site. The fourth would be located on the 3.5 acre site near the intersection of La Brea and Stocker Avenues. These concessions could range from a snack bar, theme area, to a small restaurant.

INTERPRETIVE ELEMENT

Two focal interpretive areas, the Olympic Forest and the Alternative Energy Awareness Center, have been incorporated into the overall design of Baldwin Hills.

Olympic Forest

The Olympic Forest will be located in the northwest portion of the "La Cienega" site. Baldwin Hills was the site of the 134 hectare (331 acre) Olympic Village for the Xth Olympiad hosted by Los Angeles in 1932. The idea of the Olympic Village was conceived from a deep sentiment that children of all nations could live peacefully, side by side, regardless of color, race or creed. As Los Angeles found itself again the host of the Olympiad in 1984, an Olympic Forest on the site of the previous Olympic Village seemed to be an appropriate gesture to commemorate the Olympic spirit of internationalism.



OLYMPIC VILLAGE IN THE BALDWIN HILLS AREA
(Xth Olympiad, Los Angeles, 1932, Official Report - 1933)

The concept of an Olympic Forest involves the planting of at least one representative tree species from each nation that participated in the Olympic Games. The forest would be designed to group trees into various vegetation life zones with pedestrian access via interpretive trails.

An Interpretive Display area, with eight panels, depict the following concepts:

Olympic Forest - Including the background of the Xth and XXIIIrd Olympiad's hosted in Los Angeles and emphasizing the Olympic Forest as a commemoration to the spirit of those games.

XXIIIrd Olympiad Los Angeles 1984-Participating Nations - The one-hundred-forty nations organized by continents and the countries listed with their respective Capital cities and official languages.

Vegetation Life Zones - A discussion of the six vegetation life zones and their affect on people throughout the world.

Baldwin Hills State Recreation Area - The need for park land in this region of Los Angeles County and the multi-agency effort to meet that need.

Southern California Native Plants - The unique characteristics of the Southern California plant communities and the reforestation and preservation effort at Baldwin Hills.

Seasonal Rotating Display - Emphasizing a particular plant and nation each month.

State Park System - The variety of recreational opportunities, as well as the concern for preservation expressed by the State Park System.

Los Angeles County Department of Parks and Recreation - The responsibility of this agency to provide neighborhood, community and regional recreational opportunities to the public.

The Interpretive Display serves as an introduction to the Olympic Forest. Paths meander through the six vegetation life zones that will be identified by appropriate signage explaining the plants that represent each nation and the affect that plants have on the life styles of people living in a particular zone. Plaques will also be placed adjacent to trees for identification purposes.

Alternative Energy Awareness Center

This theme will investigate the formation, extraction, and refining of petroleum and the manufacture of petroleum products. Special emphasis will be placed on the finite quantity of the resource, relating this to the history of extractive methods and current innovations in this field. The Baldwin Hills operation, which should be visible from the Interpretive Center, will serve as a "living" exhibit here. The dependence of our civilization on the enormous

diversity of petroleum products, from fiber to food additives, should also be a focus of the material presented relative to this theme.

Derivative Themes

Baldwin Hills Oil Field History - This theme will interpret the history of the Inglewood Oil Field, its impact on the surrounding environs (including its part in reserving open space), and its expected life span.

Seismic Fault Activity - This theme will concentrate on the Newport-Inglewood Fault as a major influence on the topography, creation of the oil field and future urban development.

Resource Management: Keeping What We Have - This theme will cover practical matters dealing with energy conservation, landscape reclamation, fire prevention, etc., using the Baldwin Hills as an example from which to generalize to the natural landscape as a whole. It will treat more nebulous areas, such as replacement sources for hydrocarbons from which many of the products we now make from oil (plastics, fabric, food additives) might be synthesized in the future.

The Baldwin Hills: Cultural History - This theme will interpret the cultural history of the Baldwin Hills including the past occupation by the Tongva Indians, the influence of the missions, the development of Rancho Cienega O'Paso de La Tijera, and ownership by E.J. Baldwin. Additionally, this theme will cover the early development of urban water systems and the Baldwin Hills dam failure, its impact on the surrounding community and later water storage facilities.

OPERATIONS ELEMENT

As has been the tradition with joint State and County projects, the operation of the Baldwin Hills SRA will be the responsibility of the County of Los Angeles under mutual agreement with the State of California. It is the goal of the operations element to maintain the unit for recreational and interpretive use of Baldwin Hills, both now and in the future.

Initial Operation

The initial operation of the unit will include the following: resource protection, fire control, visitor services, security, and facility maintenance.

RESOURCE PROTECTION

As identified in the resource element, resource monitoring will be necessary to develop programs for resource protection.

FIRE CONTROL

Baldwin Hills is accessible by a network of service roads which have been constructed to serve the oil production facilities. Vegetation, especially in the low development areas, must be continuously monitored for potential fire hazard.

SECURITY

Los Angeles County Park Patrol will be responsible for initial enforcement and will be supplied with four-wheel drive vehicles to ensure permanent, full time security for the SRA and surrounding community. Approximately 3474.7 meters (11,400 linear feet) of security fencing wall will be installed along the northern perimeter of the 22 hectare (54 acre) buffer zone for the protection and safety of the adjacent residential areas. In addition, the SRA will be closed at night with the exception of the supervised group campground area. It should be noted that the campground is available to child groups through reservations only.

VISITOR SERVICES

Additional visitor services will include camping, trails, interpretive center, headquarters building and maintenance yard. Signing for the buffer zone, interpretive activities and programs, and facilities will be identified.

FACILITY MAINTENANCE

General maintenance of facilities and landscaping will be performed on a regular basis by Los Angeles County maintenance personnel.

Future Operations

As the SRA becomes established with regular visitor numbers, alternative operation methods may be investigated, such as, private maintenance contracts, volunteer programs and full-time unit staffing.

The scope of the Interpretive Display Area's size and contents will include a vigorous program to enlist private (commercial/industrial) contributions (money, technical assistance, and/or material donations). Acknowledgements through a public relations program will be implemented prior to the construction of the display area.

ENVIRONMENTAL IMPACT ELEMENT

The Environmental Impact Report was reviewed to verify the conformity of the Amended General Plan. The developments described in the plan are anticipated to further impact the environment.

Section 5002.2 of the Public Resources Code requires that each State park unit general plan include an environmental impact element, and that this element satisfy the environmental documentation requirements of the California Environmental Quality Act of 1970 (CEQA), Public Resources Code Section 2100 et seq.

The description of the project is contained in the preceding sections of this report.

Description of the Environmental Setting

Unless otherwise referenced, information contained in this section is drawn from the Environmental Impact Report for Baldwin Hills Regional County Park prepared by the County of Los Angeles Department of Parks and Recreation in May, 1981. This document is a matter of public record, and is available for public review at 433 South Vermont Avenue, Los Angeles, California 90020. The portions of that document contained in this section are hereby incorporated by reference. Information has been reduced to avoid redundancy with other elements.

TOPOGRAPHY

The Baldwin Hills are located in the west central portion of the Los Angeles Basin. The unit is characterized by steep slopes to a flat basin floor, canyons, and northwest-trending ridge forming a plateau. Elevations vary between 27 to 155 meters (90 to 510 feet) above sea level.

METEOROLOGY

See Resource Element, page 6.

HYDROLOGY

The topography of the SRA concentrates much of the rainfall runoff to the canyon areas that drain the major watershed. The climate in the Baldwin Hills is influenced by nearby coastal influences. The mean seasonal precipitation is 28 centimeters (11 inches) with most of the rainfall occurring in the months of November through March.

The majority of the ground water basin is non-water bearing. Some areas below the canyons have reports of water being encountered as shallow as 5 meters (16.5 feet). In general, the ground water table is quite deep below most of the site. The majority of the rainfall that occurs is contained within the boundaries. During major storms, some overflow does occur and is transported through existing storm drains and exits into the Pacific Ocean via Ballona Creek.

The steep topography has been subject to much erosion activity in the past. Where unauthorized uses have occurred, such as motorcycle riding, the erosion has increased. This erosion activity has caused alluvium deposits to collect in several of the canyon areas.

GEOLOGY

See Resource Element, page 7.

SOILS

See Resource Element, page 8.

PLANT LIFE

See Resource Element, page 9.

ANIMAL LIFE

See Resource Element, page 10.

MINERAL RESOURCES

Numerous oil wells occupy the 526 hectare (1,300 acre) open space area, however, the SRA is unencumbered. The majority of the remaining portions are being utilized for oil extraction of production purposes. The oil reserves beneath the unencumbered areas have been reduced by past oil production activities. Estimates vary, based on the present and estimated future value of the oil coupled with continuing improvements in the oil industry, but extend the life of the oil reserves well into the 21st Century. No other major mineral resources are known to exist within the boundaries.

CULTURAL RESOURCES

The cultural history research of the Baldwin Hills consisted of library references and field reviews of the area. The report, prepared by the Department of County Engineer-Facilities is available for review at the County of Los Angeles Department of Parks and Recreation. While no historic structures or archeological sites are within the Baldwin Hills SRA, the cultural history of this area is widely represented by a long history of man and his adaptation to the environment. Man is represented in the history of Baldwin Hills from the Pleistocene period to the present. The discovered site of the "L.A. Man" is located less than one-half mile away, near La Ballona Creek. Two areas of particular interest are the past use of the area by the Tongva Indians and the Mexican period with the presence of several ranchos. The rancho that comprised the majority of Baldwin Hills was called Rancho Cienega O'Paso de La Tijera.

URBAN DEVELOPMENT

A variety of land uses surround the SRA. These uses include single and multiple family residential developments, shopping centers, oil related production and transfer stations, West Los Angeles College, Southern California Edison Company substation, and Holy Cross Cemetary. In addition, many public support facilities including restaurants, gas stations, and small retail stores are

located near the unit. The County of Los Angeles maintains a fire station to the south at the intersection of Fairfax and Slauson Avenues.

The setting surrounding, all of which is visible from the many vista points on the unit, includes the Pacific Ocean, 9.6 kilometers (6 miles) to the west; Century City, 8 kilometers (5 miles) to the north; Los Angeles International Airport, 8 kilometers (5 miles) to the southwest; and the Los Angeles Civic Center, 9.6 kilometers (6 miles) to the east. On most days, the Santa Monica Mountains and Palos Verdes Hills are visible. The Baldwin Hills represent a major open space area in a densely populated urban area.

Information regarding the socio-economic makeup of the heavily urbanized area surrounding Baldwin Hills is based on the 1970 Federal Census. The Baldwin Hills Acquisition E.I.R., pages 22 through 23, states two major community types surround the site. Since the 1980 Census had not been published at the time this report was prepared, a visual windshield survey was conducted within a one-half mile radius of the site to verify the demographic information contained in the Baldwin Hills Acquisition E.I.R. Based on this survey, the information contained in the original E.I.R. appears to adequately represent the ethnic composition of the area.

The community to the south and west consists of a large percentage of Anglos (87 percent), with a small percentage of Black, Spanish, and others. The community to the north and east of the park, within the Los Angeles City limits, consists of a large percentage of Black (70 percent) and a smaller percentage of Anglos, and others. The diversity of the communities adjacent to the SRA, and the 2.5 million people that live within 16 kilometers (10 miles), exemplify the most densely populated urban area within the State. The Baldwin Hills area is within the largest economically disadvantaged area of the State.

UTILITIES

Reference is made to the Baldwin Hills Acquisition E.I.R., page 26, for a discussion of available utilities. The heavily developed nature of the areas surrounding Baldwin Hills has caused the necessary utility systems to be extended to the areas adjacent to the unit.

Where current utilities such as water and sanitary sewers are not adequate to meet the requirements once development occurs, some utility construction may be necessary. The low level of development proposed is not expected to cause the construction of extensive new utilities. Most construction, if required, e.g., water pressure pumps to serve the upper levels of the unit would occur within the boundary of the unit.

ACCESS

See Project Description, page 1.

Environmental Impact

Impact on the environment caused by the proposed Amended General Plan will be minimal. The primary resources of Baldwin Hills State Recreation Area is it's large open space value and many vistas of the surrounding ocean, mountains and urban community.

LANDFORMS

The basic concept of the development of the Baldwin Hills State Recreation Area is to complete an "urban forest". The implementation of this concept will leave much of the unit in its natural state. The major landforms within the boundaries of the project will generally be preserved in their natural state.

The presence of major fill areas on this site will require soil studies to determine the bearing capacities of the uncompacted fill material and to what degree recompaction will be necessary using approved compaction methods. Grading will be required to recontour portions of the existing terrain and to minimize erosion areas by reducing slope steepness. The development will also require modifications to the landform to permit entry and access roads and parking areas to be constructed.

The cumulative effect of the grading required and its environmental effects will primarily occur during the time that actual construction occurs. Once development is complete, it is expected that any environmental effects that occurred during construction will be greatly reduced by the removal of unsafe and geologically unsound areas, such as unstable hillsides and uncompacted fill areas, and the revegetation of many areas of the site.

HYDROLOGY

The ground water quality within the project boundary will not be significantly affected by the proposed development. Construction will change the existing drainage patterns within the project area, but these changes are expected to improve the drainage in areas that are susceptible to erosion and gulying. The planting of fast-growing trees and shrubs as part of a revegetation program proposed is expected to further improve the drainage and reduce runoff. In addition, the restoration of the natural ground cover on areas of the unit will increase percolation, resulting in a further reduction of runoff. Development will not cause any drainage to be directed onto property adjacent to the SRA.

AIR QUALITY

The long-term effect on the air quality in the area should result in an improvement. This is based on the fact that the amount of vegetation of the unit will increase as the site is developed and this open space area preserved.

Development is not expected to significantly increase the consumption of energy. The proposed uses will require low levels of energy usage for the provision of security lighting, heating, and lighting of park buildings, and overall maintenance of the SRA.

The grading and construction activities required for construction are expected to increase the short-term dust levels in the area. It is anticipated that once construction is complete, dust levels will be reduced.

BIOTIC

No rare or endangered plant or animal species were observed during site surveys, nor are any known to exist on the SRA. The proposed plan should not have an adverse effect on the flora and fauna in the area. The reintroduction of native plant materials will aid in returning disturbed areas back to a more natural state.

CULTURAL

An extensive study was conducted by the Northridge Archeological Research Center in 1978, and determined that no direct or indirect adverse impact on known archeological resources is expected as a result of development.

ACCESS

The major roads serving the project area are La Cienega Boulevard, La Brea and Fairfax Avenues, Stocker Street and Jefferson Boulevard. All these streets are major traffic arteries serving the Baldwin Hills area. The Los Angeles County Road Department has previously indicated that the traffic generated from the development is expected to cause significant increase on existing or proposed streets and highways but this increase is not expected to result in a significant adverse impact.

Peak use of the SRA does not coincide with peak traffic flows on the streets in the surrounding area. Therefore, the major roads serving the unit should adequately handle the additional traffic generated. While highway capacity would not be significantly affected, the creation of new intersections at the access locations on major traffic arteries will influence traffic flow and increase the potential for rear-end accidents, as do all signalized intersections.

To mitigate the above, the County Road Department has recommended that major access to the unit be located at existing signalized intersections. The access to the SRA will be only from the above-mentioned traffic arteries and no public access will be allowed from any residential street adjacent to the property. In addition, the development of adequate acceleration and deceleration lanes was also recommended.

Adverse Environmental Effects Which Cannot Be Avoided

It is the intent of Baldwin Hills State Recreation Area to provide the general public with an opportunity to enjoy this unique open space. In addition to this primary purpose, the unit has the potential to serve as an interpretive center.

The Amended General Plan is consistent with these purposes and carefully considers the environmental conditions. Those impacts which are unavoidable are minimal and can be substantially mitigated.

1. Some modification of the existing landforms will be required in the placement of roads, buildings, support and recreational facilities proposed by the development plan.

2. An increase in traffic volumes is expected to create a minimal impact on visual quality, noise levels, and air quality.
3. The use of mineral and other resources will be required in development. While this use is not expected to be significant, the permanent commitment of resources to construct roads, buildings, landscaping and other facilities cannot be avoided.
4. Some impact to the biotic community will be created by development and increasing the concentration of people in the area. It is anticipated that any reductions that occur will be offset by landscaping and revegetation of portions of the unit.
5. Development of the SRA could increase the incidence of vandalism.

Mitigation Measures Proposed to
Minimize the Impact

The following measures are proposed to mitigate the impacts the general plan may have on the environment:

1. All proposed grading will be in accordance with existing guidelines set forth by the County of Los Angeles. Cut and fill areas should be no steeper than 2:1 (26 degrees). To further minimize erosion potential, revegetation will occur on portion of the SRA. Plant materials will be chosen for their slope stability capabilities.
2. The majority of construction will only modify natural drainage areas when necessary to improve drainage control and reduce erosion.
3. Development will mitigate any impacts on air quality in the area by preserving major green space areas within the unit boundary and reducing the vehicle miles necessary for the community to travel by providing a closer SRA. During construction, a dust abatement program using water trucks and other accepted dust abatement program using water trucks and other accepted dust control measures will be implemented to reduce dust levels.
4. Development will proceed in an orderly, planned manner to minimize the effect upon the plant and animal communities. Development will be phased to allow certain areas to be revegetated and preserved to protect the important natural areas before other areas are developed for recreation uses.
5. The actual impact of construction on the community will be limited by the provisions of the construction specifications governing the project. Traffic guidelines during construction governing times of use and routes to be followed would limit the impact on traffic in the area. During construction, the contractor would be required to maintain adequate controls on noise and dust in the construction zone.

In some areas, the development will be near residential neighborhoods. In order to lessen the impact of the proposed development on these areas, buffer landscaping and naturally vegetated zones are proposed as well as security fencing and 24-hour surveillance. In this way, use areas will be separated from the existing residential areas.

The vehicular access will occur from the major arterial streets. No access will be allowed through the residential streets.

Alternatives to the Proposed Action

NO PROJECT ALTERNATIVE

This alternative would result in a continuing deficiency of recreation and open space in the area. It would be in direct conflict with the stated purpose of the SRA.

REDUCED PROJECT ALTERNATIVE

The primary objective of the unit is to provide a significant open space area in the center of a heavily urbanized area. A major reduction of over 25% of the unit would restrict development of the multi-use regional recreation center concept which is severely deficient in this area of Los Angeles County. A small reduction of up to 10%, while it may not remove the potential to develop all the facilities proposed by the General Plan, would infringe upon the proposed use areas.

ACTIVE PARK ALTERNATIVE

The development of more extensive facilities would require additional construction to occur on portions of the unit identified as unable to sustain intensive development. The SRA's natural resources must be preserved in the General Plan to meet the goals of the classification.

Relationship of Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

The short-term effects of the construction of the Baldwin Hills State Recreation Area would be offset by the long-term benefits of preserving a large open space area providing recreation opportunities for present and future generations.

Irreversible Environmental Changes Which Would Be Involved

The development of the SRA will require the commitment of non-renewable natural resources. Because of the low level of development proposed for much of the project, it is not expected that the resources committed will be substantial.

The use of land for recreation purposes would eliminate the potential for other types of development. This primary irreversible change caused by the project is a physical change and commitment of the land.

The initial and future phased development of the unit will commit future generations in the area to the use of the area for recreation purposes. The present inaccessible areas of the unit will require road improvements on and near the unit that will directly impact the community by increasing traffic in the area.

Growth Inducing Impact

The area surrounding the SRA is a well-established, urbanized area with little possibility for further expansion or growth within the vicinity of the project. The project will have an effect on the public utility and transportation systems in the area, but it is not expected that this increase will be significant.

The Baldwin Hills Acquisition EIR stated that "The proposed park project may have an indirect growth-inducing impact by upgrading the amenities which provide incentives for people to live in the area. The proposed Baldwin Hills Regional Park will increase participation in regional and local recreation activities."

The development of the SRA will require an additional commitment of manpower and financial resources by the County and the State once the unit is developed and ready to operate. It is expected that this increased commitment to operate the SRA will be reduced by developing innovative and practical volunteer programs involving the local community.

Organizations Consulted In
Preparing Environmental
Impact Report

The following organizations and individuals were consulted during the preparation of this element:

Los Angeles County Departments Consulted

Arboretum and Botanic Gardens
Assessor
Communications
County Counsel
County Engineer-Facilities, Real Estate Branch
Flood Control District
Forester and Fire Warden
Health Services
Museum of Natural History
Parks and Recreation
Regional Planning
Road Department
Sanitation Districts
Sheriff's Department
South Coast Air Quality Management District

Other Consulted

Anaheim Parks and Recreation Department
Archeological Survey, University of California at Los Angeles
California State Parks Foundation
Chevron USA, Inc.
Conservation Department, Division of Oil and Gas, State of California
Culver City Policy Department
Flint and McKay, Attorneys at Law
Getty Oil Company
Inglewood, City of
Los Angeles Investment Company
N. Van Wigen, Consulting Petroleum Engineer
National Park Service
Northridge Archeological Research Center,
California State University, Northridge
Pacific Telephone Company
Parks and Recreation Department, State of California
Planning Department, City of Los Angeles
Recreation and Parks Department, City of Los Angeles
Slossan and Associates
Southern California Association of Governments
Southern California Rapid Transit District
Unified School District, City of Los Angeles
West Los Angeles College

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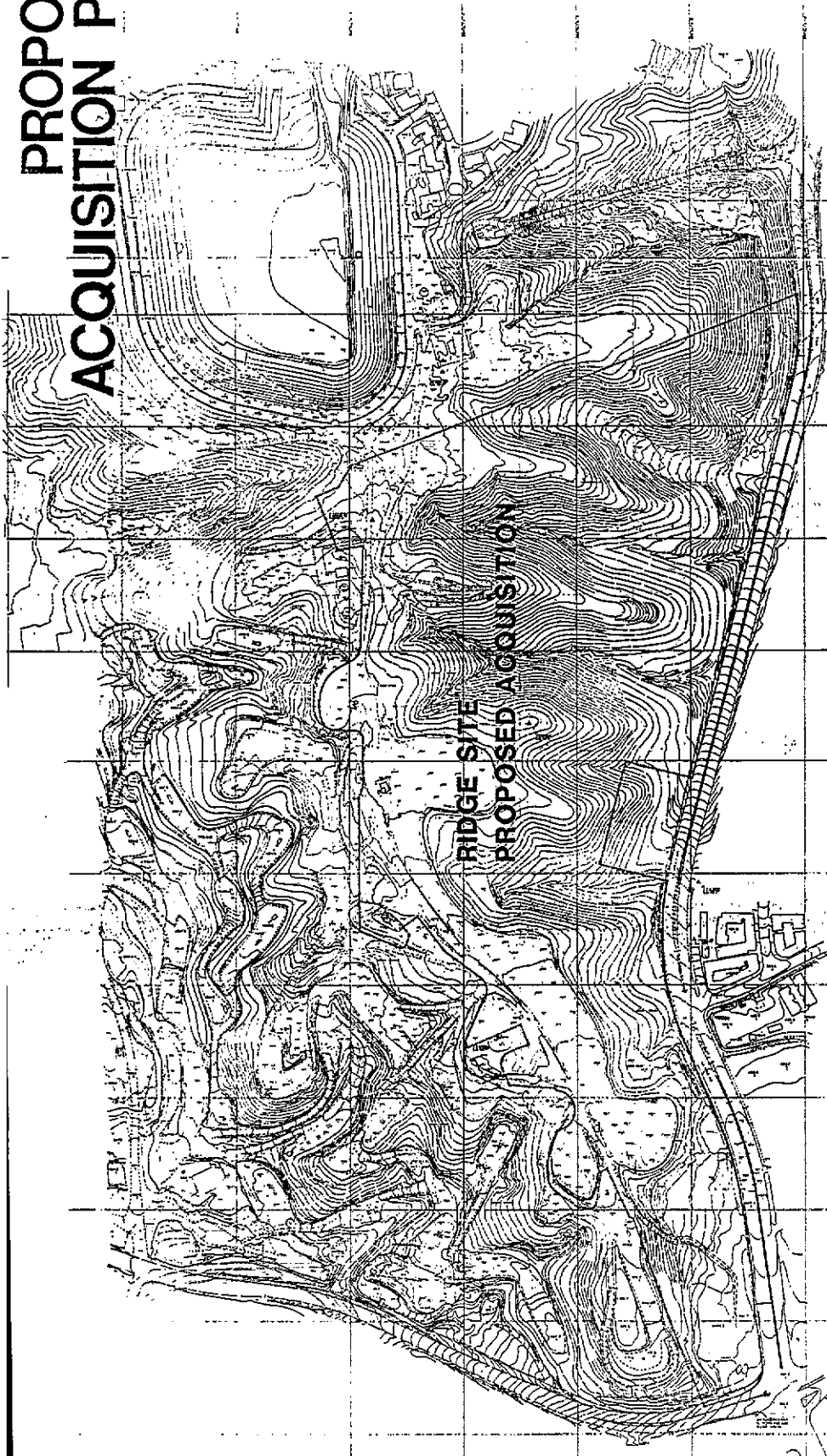
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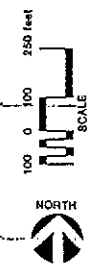
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APPENDIX

PROPOSED ACQUISITION PLAN



RIDGE SITE
PROPOSED ACQUISITION



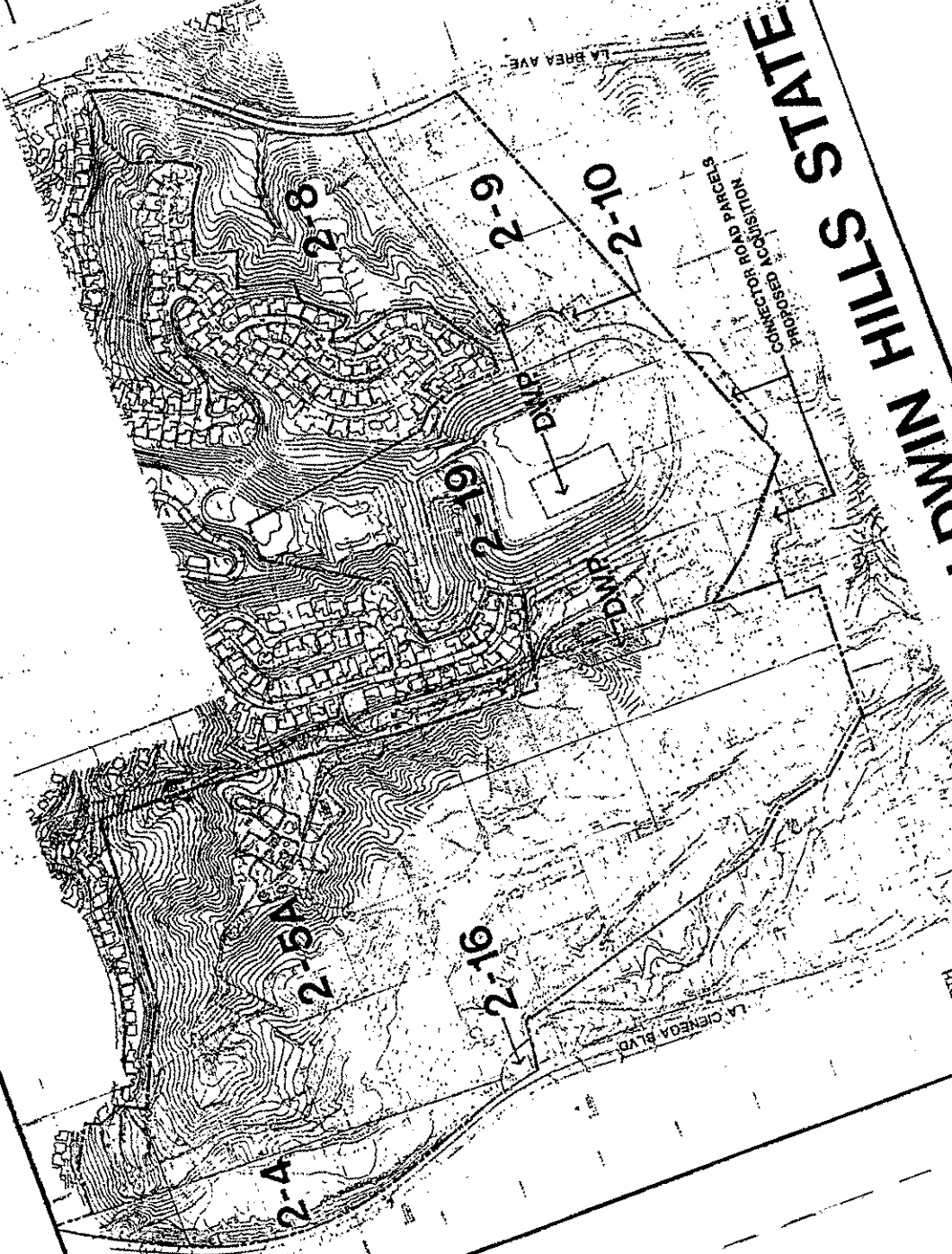
SHEET 2

BALDWIN HILLS STATE RECREATION AREA

PROPOSED ACQUISITION PLAN

LEGEND

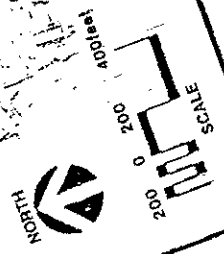
- 2-14 PARCEL NUMBER (TYPICAL)
- D.M.P. DEPARTMENT OF WATER & POWER
- PAGE LIMIT LINE
- STATE RECREATION AREA BOUNDARY



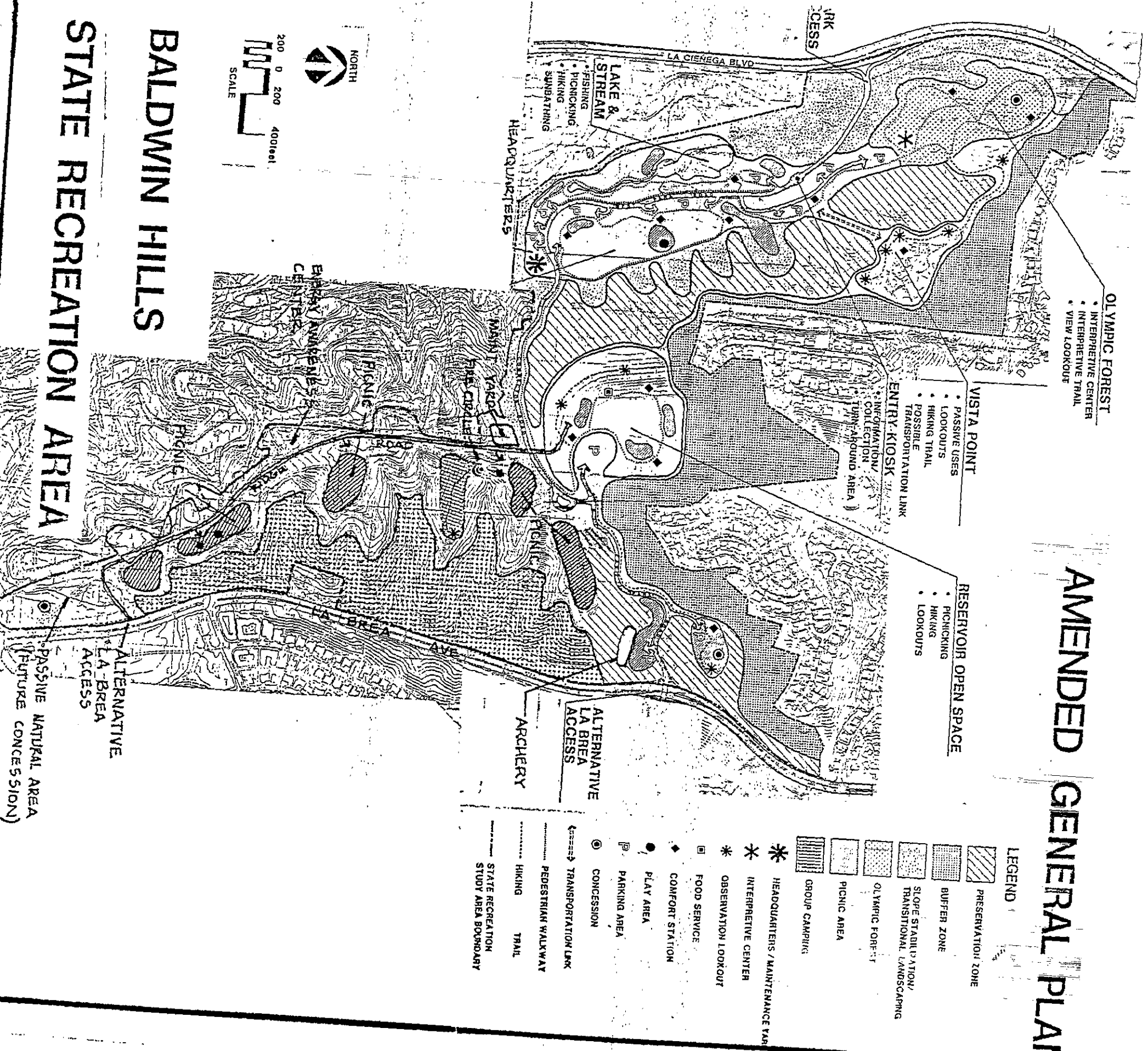
SHEET 1
RECREATION AREA

BALDWIN HILLS STATE RECREATION AREA

PROPOSED ACQUISITION
CONNECTOR TO 43 PAGES



AMENDED GENERAL PLAN



OLYMPIC FOREST
 * INTERPRETIVE CENTER
 * INTERPRETIVE TRAIL
 * VIEW LOOKOUT

VISTA POINT

- PASSIVE USES
- LOOKOUTS
- HIKING TRAIL
- POSSIBLE TRANSPORTATION LINK

ENTRY KIOSK

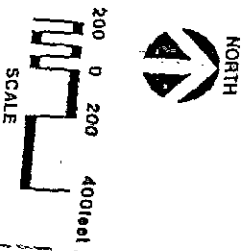
- INFORMATION/ COLLECTION TUNN-AROUND AREA

RESERVOIR OPEN SPACE

- PICNICKING
- HIKING
- LOOKOUTS

LEGEND

- PRESERVATION ZONE
- BUFFER ZONE
- SLOPE STABILIZATION/ TRANSITIONAL LANDSCAPING
- OLYMPIC FOREST
- PICNIC AREA
- GROUP CAMPING
- HEADQUARTERS / MAINTENANCE VAN
- INTERPRETIVE CENTER
- OBSERVATION LOOKOUT
- FOOD SERVICE
- COMFORT STATION
- PLAY AREA
- PARKING AREA
- CONCESSION
- TRANSPORTATION LINK
- PEDESTRIAN WALKWAY
- HIKING TRAIL
- STATE RECREATION STUDY AREA BOUNDARY



BALDWIN HILLS

STATE RECREATION AREA

6-10-85