

UNIT 508

CHINO HILLS STATE PARK

GENERAL PLAN

May 1986



CHINO HILLS STATE PARK GENERAL PLAN

August 1986



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

George Deukmejian, Governor

Gordon Van Vleck, Secretary for Resources

Wm. S. Briner, Director, Department of Parks and Recreation

DEPARTMENT OF PARKS AND RECREATION

STATE PARK AND RECREATION COMMISSION

P. O. BOX 2390, SACRAMENTO 95811



Resolution 20-86
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Brea on
May 9, 1986

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed General Plan and Addenda for Chino Hills State Park; and

WHEREAS, this reflects long-range development plans to provide for optimum use and enjoyment of the unit as well as the protection of its quality;

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's General Plan and Addenda for Chino Hills State Park Preliminary, dated January 1986, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement the provisions and objectives of said plan.

BE IT FURTHER RESOLVED that consideration be given to include group camping for horses in the northern area; that a statement regarding the California Recreational Trails Committee be added; and that consideration be given at a later date to naming a facility or trail after Dave Myers and Claire Schlotterbeck.

Re. CHINO HILLS STATE PARK GENERAL PLAN
Approved May 1986, Final printed Aug 1986

Note: This General Plan report was made obsolete when the Park and Recreation Commission approved a new Preliminary General Plan in Feb 1999. The Comments and Response are dated Jan 1999.

DEPARTMENT OF PARKS AND RECREATION

STATE PARK AND RECREATION COMMISSION

P. O. BOX 2390, SACRAMENTO 95811



Resolution 25-86
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in Brea on
May 9, 1986

WHEREAS, Chino Hills State Park, a 9,700-acre park within an hour's drive of nearly ten million people, has been established in Orange, San Bernardino, and Riverside Counties; and

WHEREAS, throughout the creation process for this State Park System Unit, the local conservation group, Hills for Everyone, has worked closely with the California Department of Parks and Recreation and the State Legislature to ensure the establishment of Chino Hills State Park; and

WHEREAS, in 1982 Hills for Everyone entered into a lease agreement with the State to manage the land involved in the early acquisitions until the Department was able to assume operational responsibility and opened the area to the public in the spring of 1983; and

WHEREAS, Hills for Everyone has actively opposed proposals for nonpark development projects that threatened park resources; and

WHEREAS, Hills for Everyone has been actively involved in the preparation of the General Plan for this park; and

WHEREAS, Hills for Everyone actively worked for the successful passage of the 1984 Park and Recreation Facilities Bond Act, which provided \$10 million for acquisition and development at Chino Hills State Park;

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission recognizes and commends Hills for Everyone for their tireless efforts in support of Chino Hills State Park and the California State Park System.

CHINO HILLS STATE PARK
General Plan
August 1986

George Deukmejian
Governor of California

Gordon Van Vleck
Secretary for Resources

Wm. S. Briner
Director

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
P.O. Box 2390
Sacramento, CA 95811



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SUMMARY



SUMMARY OF GENERAL PLAN PROPOSALS

Long-range goals for Chino Hills State Park, located in Orange, Riverside, and San Bernardino Counties, are presented in this General Plan, prepared by the California Department of Parks and Recreation.

This summary provides a quick reference to all proposals. The reader should refer to the separate sections of the plan for details of individual proposals. Discussions about land not now owned by the department have been included. These lands represent potential acquisition opportunities based on available data. However, the discussions are intended for long-range planning purposes only, and do not represent a desire, intention, or commitment for acquisition.

The General Plan establishes the department's management objectives for the unit's natural and cultural resources, visitor use, facility development, interpretation, general operation, and coordination with other public and private entities.

When fully implemented, the plan's proposals will improve visitor services, further protect resources, and help offset additional expenses.

To equip readers with an easy reference to the plan, this summary is organized as follows: resource management policies, interpretive proposals, and proposed facilities (TABLE 1).

Resource Management Policies

The resource management policies are intended to protect natural and cultural resources, and to provide direction for future development efforts.

- Establish major resource management programs.
- Develop and implement a plan for restoration of Aliso Creek.
- Retain the McDermont Spring, Windmill, and Panorama ponds.
- Design road and facility development in the vicinity of riparian zones to minimize negative impacts.
- Work with appropriate agencies to seek solutions to the water quality problems in the Santa Ana River.
- Minimize human-caused erosion in the park.
- Develop a plan for maintenance, relocation, removal, and/or rehabilitation of the existing dirt roads in the park.
- Monitor existing and new landslides, and use this data to guide development.

- Survey development sites for paleontological remains.
- Prohibit commercial livestock grazing in the park.
- Develop a prescribed fire management program.
- Develop a wildlife management plan for the park.
- Control milk thistle and other exotic species.
- Restore native fish habitat.
- Conduct cultural resource surveys before development of facilities.
- Remove non-historic equipment and structures from the park.
- Work to reduce the negative impacts of utility easements within the park.

Interpretive Proposals

These proposals will improve the educational and informational opportunities available at the unit, so the public's recreational experiences can be enhanced.

- Provide outdoor displays at campgrounds, day-use areas, trailheads, and places of special natural and cultural resource interest.
- Develop self-guided interpretive trails in each of the park's ecological zones.
- Develop a Native American resources trail.
- Develop informational brochures on birding, park orientation, trails, plants, and wildlife.
- Develop audio-visual programs for use at campfire programs and in the visitor center.

Proposed Facilities

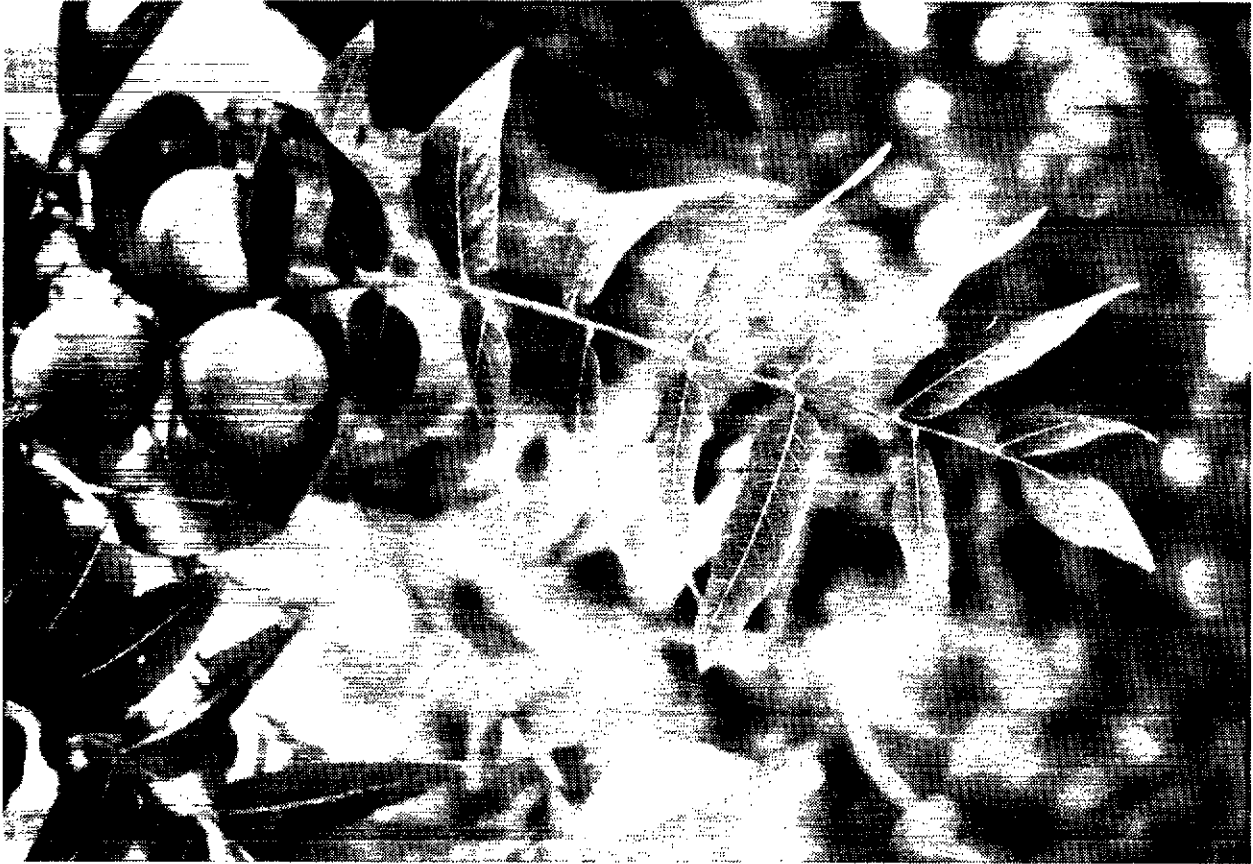
TABLE 1

<u>Facility</u>	<u>Quantity</u>
Entry Roads	3
Pedestrian Access	9
Contact Stations	2
Ranger Station	1
Service Area	1
Employee Housing Area (trailer pads)	2-5
Mounted Assistance Patrol Area	1
Visitor Center	1

Proposed Facilities (Continued)

TABLE 1

<u>Facility</u>	<u>Quantity</u>
Campfire Center	1
Family Picnic Areas (units)	54-81
Group Picnic Areas (units)	2
Family Campgrounds (units)	280-500
Hike-in/Bike-in Campground (units)	3-6
Equestrian Campground (units)	30-50
Walk-in Campground (units)	2-5
Trail Camps (units)	7
Scenic Overlooks	12
Trailheads	6
Equestrian Trailheads	3
Hiking Trails (miles)	34.5
Equestrian Trails (miles)	62.3
Bicycle Trail (miles)	2.4
Regional Trail (miles)	1.4
Park Roads (miles)	8



INTRODUCTION



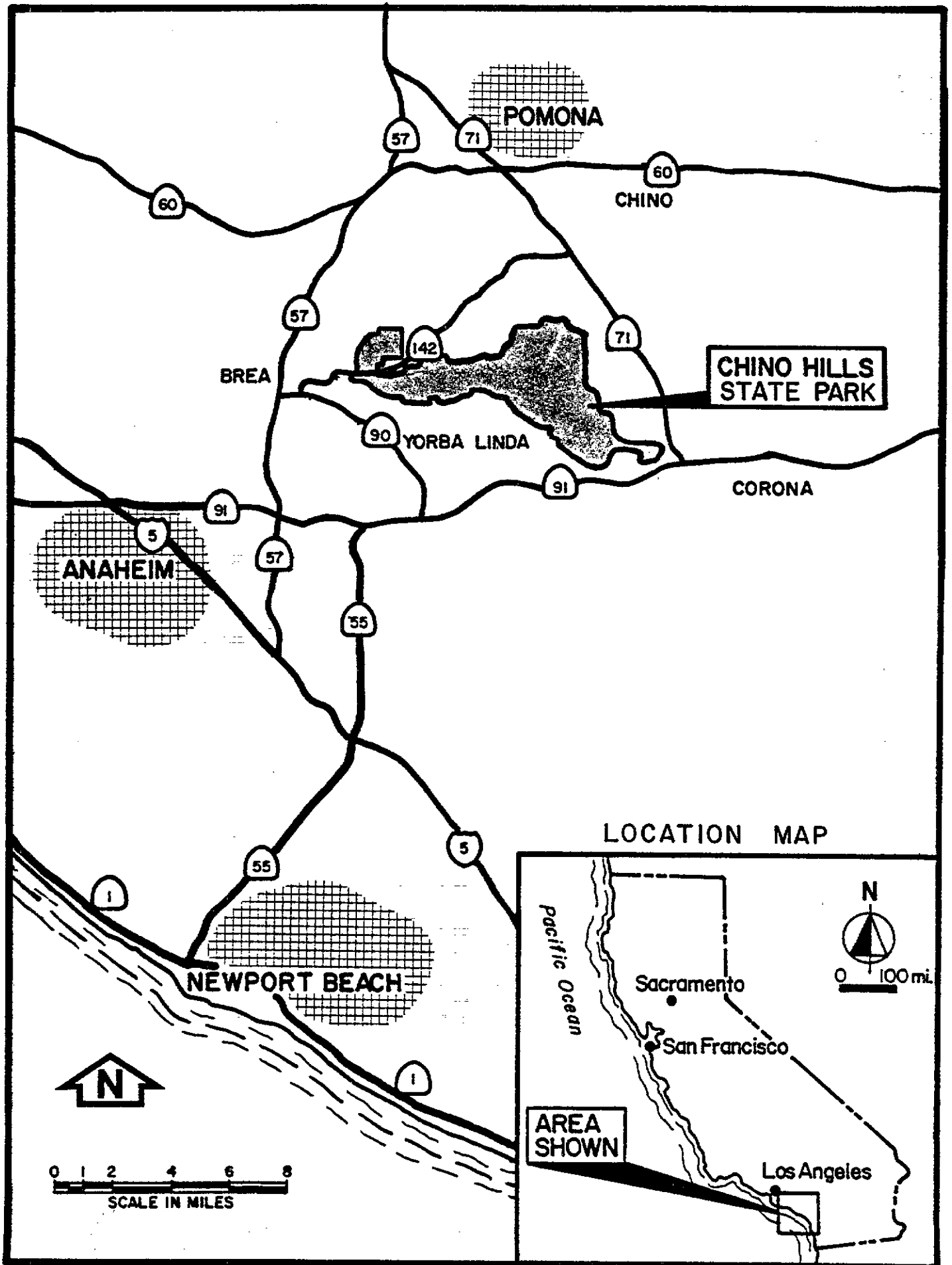


FIGURE 1
8

INTRODUCTION

Purpose of Plan

Chino Hills State Park is a new addition to the State Park System. This General Plan is the legally required first step in defining the special needs and constraints of the unit, and the degree of development and use that will be allowed over the 20-year life of the plan. Individual facility design will be further refined when specific projects are funded for development.

Project Description

Chino Hills State Park is located in Orange, San Bernardino, and Riverside counties (see FIGURE 1), in the Southwest Mountain and Valley Landscape Province. The nearest State Park System units are Bolsa Chica and Huntington State Beaches and Crystal Cove State Park, all approximately 24 miles southwest, Lake Perris State Recreation Area, 29 miles east, Lake Elsinore State Recreation Area, 24 miles southeast, and Seccombe Lake State Urban Recreation Area, 28 miles northeast.

The nearest communities are Brea, 3 miles west, Yorba Linda, 1 mile south, Olinda and Sleepy Hollow, 1/2 mile north, Chino, 3 miles northeast, and Norco and Corona, 4 miles east.

The park is generally bounded by State Highway 142 (Carbon Canyon Road) to the northwest, State Highway 71 to the east, and State Highway 91 (Riverside Freeway) to the south. Current access to the center of the park is via State Highway 71 and Rincon-Pomona Road to Bane Canyon Road on the northern boundary, in San Bernardino County.

The Cleveland National Forest is within two miles of the park to the south (across State Highway 91). Nearby regional parks include Carbon Canyon Regional Park to the west, Prado Regional Park to the east, Featherly Regional Park to the south, and Yorba Regional Park to the southwest.

The Chino Hills are surrounded by the Southern California metropolitan complex. About 9.2 million people live within a 40-mile radius. Nearly three million people live within direct visual contact of the Chino Hills, and about twice that many people in the nearby metropolitan areas have a daily opportunity to see the hills from a distance.

The unit consists of 9,418 acres of state-owned land. Additional lands have been identified as having potential for inclusion in Chino Hills State Park, and would bring the potential size of the state park to more than 13,500 acres. (See Sheet 1).

The park encompasses two major watershed areas, the east-west oriented Telegraph Canyon and the northwest-southeast trending Aliso Canyon.

Planning Process

Study Area

The study area for this report includes lands not now owned by the state Department of Parks and Recreation. These lands represent potential acquisition opportunities (either by fee or donation) for protection of the most viable ecological units in this area, based on available data. Discussions of these lands are intended for planning purposes, and do not represent a commitment for acquisition.

The lands north of Carbon Canyon Road were not accessible to department staff during development of this General Plan. Additional field investigations will be required before construction of facilities in this area.

General Plan Study - Public Involvement

The process of creating a plan involves the consideration of many public and governmental concerns, the unit's resources, adjacent land uses and circulation, and public recreation needs.

Before the inception of the study, a Resource Inventory was prepared and used as a basis for classification of the unit as a state park by the State Park and Recreation Commission in April 1984.

Following classification in April 1984, the General Plan was begun with preparation of the Resource Element, which includes the unit's Declaration of Purpose, and identifies resource sensitivities and constraints which will guide preparation of the remaining elements.

The general plan study was initiated in August 1984, with a staff organizing meeting which established roles for each member of the planning team, and a projected time schedule for completion of the work program.

The first task involved dissemination of information in the Resource Element to the planning team, to be used as the basis for gathering further data pertinent to each of the specialty areas to be incorporated into the plan.

The information gathering phase included establishment of a Citizens Advisory Committee to assist in public awareness of the study, and to provide direct input to the study. The committee consisted of representatives chosen by local legislators, each of the three counties, and adjacent communities.

The first public meetings (one with the advisory committee and one with the general public) were held in November 1984, to acquaint the public with the study process and the data gathered to date, as well as to invite their assistance in identifying issues which should be considered during the study. Key portions of the Resource Element were presented to the public at this meeting. In addition, a questionnaire was developed to ascertain the types of activities, facilities, and interpretive themes which might be desired for inclusion in the General Plan (see TABLE 2 - Results).

FINAL
QUESTIONNAIRE
RESULTS
GENERAL PLAN STUDY
CHINO HILLS STATE PARK

77 QUESTIONNAIRES RETURNED

BACKGROUND

1. Your Name (optional) _____
Address _____

Phone _____
2. Your primary interest(s) in Chino Hills State Park?

<u>68</u> natural resource preservation and interpretation	<u>9</u> personal involvement (as a volunteer)
<u>18</u> cultural resource preservation and interpretation	<u>7</u> concerned adjacent property owner
<u>39</u> recreation activities	<u>5</u> government representative, Agency:
<u>2</u> economic benefits to the community	_____ other
3. How did you hear about this public meeting?

<u>40</u> newsletter	<u> </u> radio or television
<u>7</u> advisory committee	<u>16</u> word of mouth
<u>2</u> newspaper	<u>12</u> other
4. What is your profession, occupation, or field of interest?

5. Do you have any knowledge, expertise, or contacts which you would like to offer to the planning team?
____ yes ____ no If yes, please describe briefly and let us know how you can be reached.

ACTIVITIES

1. Please check activities which you feel are appropriate for this park.

<u>72</u> walking	<u>56</u> horseback riding
<u>74</u> hiking	<u>47</u> jogging
<u>36</u> bicycling	<u>52</u> backpacking
<u>20</u> mountain bicycling	<u>27</u> orienteering
<u>23</u> kite flying	<u>6</u> hang gliding
_____ radio-controlled	<u>25</u> frisbee
<u>8</u> glider flying	<u>21</u> fishing
<u>66</u> family picnicking	<u>42</u> group picnicking
<u>48</u> day camping	<u>43</u> Living History Program
<u>46</u> Junior Ranger Program	<u>22</u> RV camping
<u>44</u> tent camping	<u>9</u> enroute camping
<u>40</u> group camping	<u>48</u> hike-in camping
<u>25</u> bike-in camping	<u>56</u> historical study
<u>69</u> nature study	<u>9</u> other
2. Of the items you have checked above, please list, in order, the five activities you feel should be emphasized within Chino Hills State Park:

The following activities received the strongest support based on number of times selected in top 5:

Rank	Score	Activity
1	61	Hiking
2	54	Nature Study
3	41	Family Picnicking
4	34	Walking
5	29	Horseback Riding

The weighted ranking (based on selected priorities) of the top 5 activities is as follows:

Rank	Score	Activity
1	2.10	Horseback Riding
2	2.26	Walking
3	2.31	Hiking
4	2.83	Nature Study
5	3.34	Family Picnicking

(over)

FACILITIES

1. Please check facilities which you feel are appropriate for this park.

- | | |
|-----------------------------------|--|
| <u>67</u> walking trail | <u>46</u> natural history museum |
| <u>71</u> hiking trail | <u>54</u> horse trail |
| <u>36</u> bicycle trail | <u>39</u> jogging trail |
| <u>18</u> mountain bicycle trail | <u>22</u> orienteering course |
| <u>18</u> kite flying area | <u>59</u> self-guided interpretive trail |
| <u>49</u> interpretive trail | <u>35</u> group picnic area |
| <u>57</u> family picnic sites | <u>42</u> viewpoints |
| <u>38</u> equestrian staging area | <u>45</u> interpretive center |
| <u>41</u> tent campground | <u>16</u> RV campground |
| <u>33</u> group campground | <u>9</u> en-route campground |
| <u>24</u> bike-in camp | <u>38</u> hike-in camp |
| <u>34</u> campfire center | <u>37</u> sanitation station |
| <u>13</u> camp store | <u>8</u> food facility |
| <u>19</u> horse rental facility | <u>12</u> bicycle rental facility |
| <u>11</u> hostel | <u>10</u> shuttle system |
| <u>44</u> visitor center | <u>49</u> environmental education center |
| | <u>3</u> others |

2. Of the items you have checked above, please list, in order, the five facilities you feel are most important to include in the park.

The following facilities received the strongest support based on number of times selected in top 5:

The weighted ranking (based on selected priorities) of the top 5 facilities is as follows:

Rank	Score	Facility
1	55	Hiking Trail
2	37	Family Picnic Area
3	36	Walking Trail
4	34	Horse Trail
5	31	Environ. Educ. Center

Rank	Score	Facility
1	1.94	Horse Trail
2	2.06	Walking Trail
3	2.29	Hiking Trail
4	2.81	Environ. Educ. Center
5	3.30	Family Picnic Area

INTERPRETIVE THEMES

1. Please check interpretive theme subjects which you feel are appropriate for this park.

Natural Features

- | | |
|--|------------------------|
| <u>48</u> Plant Communities | <u>57</u> Mammals |
| <u>36</u> Southern Oak Woodland | <u>61</u> Birds |
| <u>40</u> Grassland | <u>49</u> Reptiles |
| <u>30</u> Coastal Sage Scrub | <u>30</u> Amphibians |
| <u>31</u> Cottonwood Riparian Woodland | <u>33</u> Insects |
| <u>34</u> California Walnut | <u>22</u> Fish |
| <u>36</u> Coast Live Oak | <u>45</u> Geology |
| <u>50</u> Native Grasses | <u>32</u> Paleontology |
| <u>59</u> Native Wildflowers | <u>26</u> Climate |
| <u>35</u> Rare Plants | <u>34</u> Geography |

Cultural History

- | | |
|---|---|
| <u>39</u> Native American Resources | <u>46</u> Cattle Ranching (Mission and Ranchos) |
| <u>42</u> Native American History | <u>17</u> Petroleum Activities |
| <u>29</u> Native American Activities | <u>6</u> Southern California Edison |
| <u>9</u> Euroamerican Resources | <u>23</u> The State Park System Story |
| <u>16</u> Euroamerican History | <u>52</u> Chino Hills State Park History |
| <u>33</u> Mexican-California Activities | <u>6</u> Southern California Gas Company |
| <u>19</u> Mission Activities | <u>7</u> Metropolitan Water District |
| | <u>Others</u> |

2. Of the items you have checked above, please list, in order, the five interpretive theme subjects you feel are most important to include in the park.

The following interpretive themes received the strongest support based on number of times selected in top 5:

The weighted ranking (based on selected priorities) of the top 5 interpretive themes is as follows:

Rank	Score	Theme
1	33	Birds
2	31	Mammals
3	29	Plant Communities
4	23	Native Wildflowers
5	20	Native Amer. Resources

Rank	Score	Theme
1	1.45	Plant Communities
2	2.70	Native Wildflowers
3	2.95	Native Amer. Resources
4	2.97	Birds
5	3.16	Mammals

SUMMARY

In a few words, tell us:

1. What kind of place do you think Chino Hills SP should be?

2. What should be the major concern in this long-range planning effort?

Personal Contacts: Informal contact between park personnel and visitors may provide important opportunities for interpretation. Such contacts are especially valuable because visitor activities at the park are largely unstructured. Campground contacts may be used to discuss fire hazards, seasonal park features, and park rules. Crews involved in prescribed burnings and exotic plant removal may discuss these activities with onlooking visitors.

Interpretive Development Recommendations

Priorities

Post orientation maps and park rules at entrances, comfort stations, trailheads, and campgrounds.

Organize a cooperating association, and train volunteers and docents. A corps of interested and knowledgeable area residents, familiar with the park and its resources, already exists, and should form the basis for such an organization.

Cultivate contacts with surrounding school districts to encourage and channel use of the park as an enrichment source for established curricula.

Develop nature trails for self-guided use, including access for disabled and visually impaired visitors.

Develop the Native American Resources Trail, aimed at school group use.

Produce natural history brochures covering birding and park plants and animals.

Produce Native American Resources Trail brochure for self-guided tour use.

Develop campfire slide programs treating primary themes.

Produce and install interpretive panels at scenic overlooks, picnic facilities, campgrounds, trailheads, and for temporary installation at sites where environmental management programs are actively pursued.

Construct visitor center, and install exhibits.

Collections

Chino Hills State Park has two potential collections needs: natural and Native American. Some half-dozen pieces of old farm equipment, donated to Hills for Everyone in 1982, are housed at the Rolling M Ranch headquarters. They are not encompassed by the interpretive themes, and should be removed from the park.

Natural: Specimens of park plants and animals should be collected in anticipation of visitor center exhibit needs, and in conjunction with the Native American Resources Trail program. Fossils found in future investigations may also be useful in the visitor center.

The Resource Element contains a summary of the natural and cultural resources of the area, and sets management policies for protection and use of these resources.

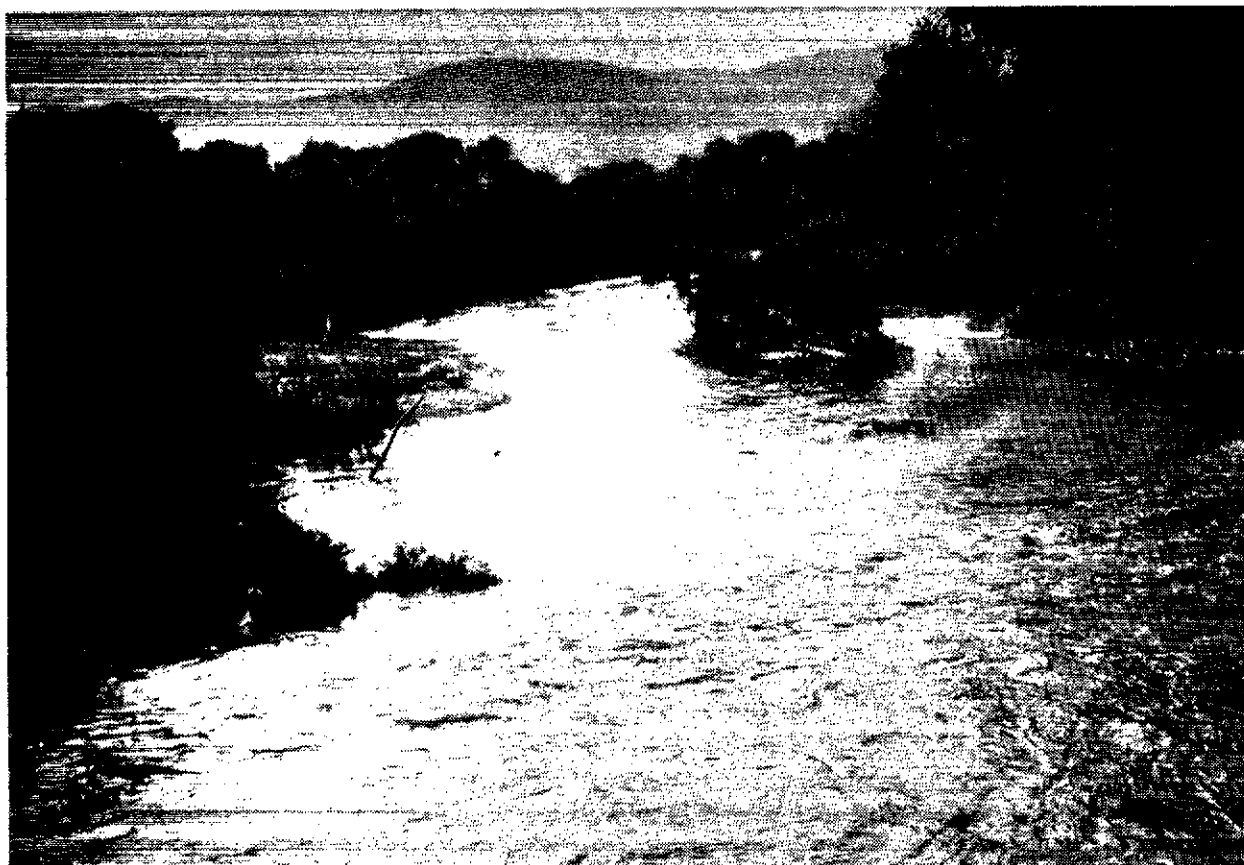
The Land Use and Facilities Element describes current and proposed ownership and land uses, describes the proposed facilities and their design parameters, and discusses relevant planning issues.

The Interpretive Element identifies interpretive themes, and a variety of facilities and programs appropriate for presentation in the unit.

The Concessions Element describes the potential opportunities for developing visitor-serving and/or revenue-generating concession operations in the unit.

The Operations Element defines the operational goals for the unit, and objectives for implementing the general plan.

The Environmental Impact Element, combined with the rest of this report, serves as the Draft Environmental Impact Report. Detailed environmental documents will be filed when specific construction funding is proposed.



RESOURCE ELEMENT



CHINO HILLS STATE PARK

RESOURCE ELEMENT

This Resource Element sets forth long-range management objectives for the natural and cultural resources of Chino Hills State Park. Specific actions or limitations required to achieve these objectives are also set forth in this element; maintenance operations and details of resource management are left for inclusion in specific resource management programs that will be prepared at a later date.

Summary and Evaluation of Resources

The following resource information is a summary of data gathered by the department. More detailed information is available at the department's offices in Sacramento.

Natural Resources

Topography

Chino Hills State Park is located near the northern end of the Peninsular Ranges Geomorphic Province. The Chino Hills are part of a group of hills that also includes the Puente Hills to the northwest. These hills form a roughly triangular area of approximately 35 square miles of valleys, canyons, hills, and steep slopes. The hills are bounded on the northwest by the San Gabriel Valley, on the northeast by the San Bernardino Valley, and on the south by the Santa Ana River canyon and the Los Angeles basin.

Telegraph Canyon running east to west and Aliso Canyon running north to south are the principal stream drainages in the park. Slopes are generally steeper in the Telegraph drainage than the Aliso drainage. The most level areas in the unit are near Aliso Creek, adjacent to the Santa Ana River, and at the mouth of Telegraph Canyon. The highest elevations in the unit are San Juan Hill (1,781 feet) and Gilman Peak (1,685 feet). The lowest elevations occur along the Santa Ana River (430 feet).

Meteorology

Chino Hills State Park experiences a Mediterranean climate, with cool, moist winters and warm, dry summers. Local weather conditions are greatly influenced by wind patterns. Westerly breezes bring in moist, marine air, which moderates temperatures and frequently brings in low clouds or fog. Easterly breezes bring in dry, desert air, which accentuates temperature extremes (raising maximums and lowering minimums). Occasionally, strong (35 to 50 miles per hour) easterly winds may blow for several days, sometimes raising temperatures over 100° Fahrenheit. These Santa Ana winds produce extremely low humidity and low fuel moisture, which, with the high wind speeds, create extreme fire hazard conditions.

Average annual precipitation in the Chino Hills area ranges from 15 to 18 inches. Typically, the summer months (June, July, and August) at Chino Hills are dry. Rainfall during the fall and early winter (September through December) accounts for 15% of the annual precipitation. These fall rains replenish soil moisture, and initiate the annual cycle of vegetative growth. Late winter and early spring rains (December through March) produce 75% of the

annual precipitation. These rains produce high runoff, which initiates the period of stream flow. Late spring rains account for 10% of the annual precipitation. These rains prolong the period of vegetative growth and of stream flow. The dry, summer period leads to depletion of soil moisture, cessation of vegetative growth, and cessation of stream flow.

Air pollution is a significant environmental problem which restricts visibility and poses health hazards in the Chino Hills area. The concentration of ozone in Chino Hills exceeded the California standard on 30% to 40% of the days during 1981. Similarly, the standard for total suspended particulates was exceeded on 60% to 80% of the days.

Hydrology

The Chino Hills are part of the divide between the Los Angeles and Santa Ana Hydrologic Basins. Most of Chino Hills State Park is in the Carbon Canyon and Aliso Canyon watersheds. The Carbon Canyon watershed, including Telegraph Canyon, Soquel Canyon, and Sonome Canyon, is in the Yorba Linda Hydrologic Subarea of the Los Angeles Hydrologic Basin. The Brush Canyon and Aliso Canyon watersheds are in the Santa Ana Narrows Hydrologic Subarea of the Santa Ana Hydrologic Basin. Bane Canyon and Water Canyon are in the Aliso Canyon watershed.

All of the Water Canyon and Bane Canyon watersheds are in Chino Hills State Park, as is 96% of Telegraph Canyon and 87% of Aliso Canyon. Most of Carbon Canyon, Soquel Canyon, and Sonome Canyon are in private ownership outside the park. Most of these upstream lands are currently used for grazing, but significant upstream portions of the Carbon Canyon, Soquel Canyon, and Sonome Canyon watersheds are residential. Much of this residential use has developed in the past 20 years. Some of the upstream lands in Aliso Canyon are used for production of petroleum.

The only significant human-made hydrologic features in the vicinity of the park are the Carbon Canyon Reservoir, on the western boundary in the Carbon Canyon watershed; the Metropolitan Water District's Lower Feeder Aqueduct, which traverses the southeastern portion of the park; and the Prado Reservoir, east of the park. The Carbon Canyon Reservoir is used for flood control, and to divert water for groundwater recharge. The Lower Feeder Aqueduct supplies water for the Orange County area. The Prado Reservoir is the major flood control facility for the Santa Ana River coastal plain. There are also a number of small stock ponds scattered through the Aliso Canyon, Bane Canyon, Water Canyon, and Brush Canyon watersheds.

Although water quality sampling in Chino Hills State Park has been limited, the failure of any of these samples to meet California domestic water quality standards suggests that local water sources cannot be used for domestic purposes without water treatment. The Metropolitan Water District's Lower Feeder Aqueduct in the southeastern portion of the project may offer a feasible alternative for potable water.

A small portion of the park is subject to flooding by the Carbon Canyon Reservoir. It is projected that the water surface of the reservoir will reach the project boundary once in 400 years, and will reach 2,000 feet upstream of the boundary once in 500 years. The lands adjacent to the confluence of Aliso Canyon Creek and the Santa Ana River are subject to flooding by releases from

Prado Dam. The 100-year flood is projected to reach 434 feet above sea level, and the largest flood expected is projected to reach 445 feet. The other watersheds in the unit are too small to cause other than limited, temporary flooding.

Increases in residential development upstream of the park in the Carbon Canyon, Soquel Canyon, Sonome Canyon, and Aliso Canyon watersheds will cause increased and more rapid runoff, which will, in turn, cause higher stream flows and increased danger of flooding. Such increased development also increases the potential for degradation of surface and groundwater quality.

The steepness of watershed lands, past land use practices, and the rapid surface runoff create a high potential for erosion throughout Chino Hills State Park.

Geology

The Chino Hills are made up of a thick sequence of middle to upper Miocene marine sedimentary rocks of the Puente Formation, deposited from five to 15 million years ago. The composite maximum thickness of the Puente Formation in the Chino Hills is approximately 13,000 feet. The Puente Formation has been divided into four members -- the La Vida, Soquel, Yorba, and Sycamore Canyon members, from oldest to most recent. The La Vida member crops out in the western part of the project area along Telegraph Canyon, lower Soquel Canyon, and Carbon Canyon. The La Vida member, named for the hot springs in Carbon Canyon, is made up of interbedded soft, gray, micaceous siltstone, hard, platy, locally laminated calcareous siltstone, and gray, commonly silty, medium-grained feldspathic sandstone, in isolated beds. The hot springs probably owe their origin to friction and movement along nearby faults. The Soquel member is predominantly gray to light-brown massive to well-bedded marine sandstone, with minor conglomerate and conglomeritic sandstone. It crops out in upper Soquel Canyon, south to Gilman Peak, and west to upper Telegraph Canyon. The Yorba member is a thin-bedded white to brownish marine siltstone, with lesser amounts of fine-grained sandstone. The siltstone of the Yorba member is typically contorted and crumpled, and is prone to creep and slump on hillsides. The Yorba member crops out in a broad north-south band in the area from San Juan Hill and Water Canyon north to the western extension of Los Serranos, in the Chino basin. The Sycamore Canyon member is predominantly gray to light-brown and white marine sandstone, with local pebbly to bouldery sandstone conglomerate and siltstone. The presence of conglomerate beds in the Sycamore Canyon member distinguishes it from the underlying Yorba member. The Sycamore Canyon member extends from the highlands west of Aliso Canyon eastward to the Prado Flood Control Basin.

Petroleum and associated gas have been produced from oil fields in the region since the late 1800s, starting in 1885, with the first commercial production of oil in the Los Angeles basin at the old Puente oil field west of the state park. Numerous oil wells have been drilled in the Chino Hills; however, there is no record of commercial production in the park. In the vicinity, the oil production has mostly been from the Soquel member, although oil has also been obtained from the Yorba and Sycamore Canyon members, south of the Whittier fault zone.

The hills are relatively recent structural features -- a result of uplift and folding along the Whittier fault zone and the Chino fault. Both the Whittier fault zone and the Chino fault may be branches of the Elsinore fault, which is a major structural feature of the Peninsular Ranges Geomorphic Province to the south. The Whittier fault zone exhibits significant right-lateral movement as well as substantial vertical displacement, and is classified as active by the state geologist. The Alquist-Priolo Special Studies Zone, as delineated by the California Division of Mines and Geology, cuts across the western part of the project, in the vicinity of Telegraph and Carbon canyons.

Chino Hills State Park has major geologic hazards and sensitivities.

The Chino Hills are prone to frequent landslides; in fact, the project area has been identified as the most landslide-prone area in southwestern San Bernardino County. The landslides probably developed mostly during the last Pleistocene glacial period, between 10,000 and 20,000 years ago, when the climate was much wetter than at present. Even though many of the landslides occurred long ago by human standards, they must still be considered as areas of instability, since the landslide deposits are generally perched precariously on hillslopes, awaiting only the proper climatic, hydrologic, and perhaps seismic conditions to become activated. In addition to the very widespread, large-scale, Pleistocene-aged landslide features and deposits, many shallow-seated landslides are currently active, resulting in large-scale mass wasting, landscape shaping, erosion, and threats to roads, trails, and other developments.

The Chino Hills area has experienced the effects of many earthquakes during the last 200 years, including the 1857 Fort Tejon earthquake, with an estimated Richter magnitude of more than 8.0. Even the relatively distant 1971 San Fernando earthquake (Richter magnitude 6.4) resulted in structural damage in nearby Colton and San Bernardino, as well as the collapse of a masonry water tank on the nearby Yorba-Slaughter Ranch. Future earthquakes are expected to shake the area, and could also contribute to landslide activity. The Whittier fault zone has been classified as active by the California Division of Mines and Geology, and a segment of the fault crosses the project in the vicinity of lower Telegraph and Carbon Canyons. According to the California Administrative Code, no structure intended for human occupancy shall be permitted to be placed within 50 feet of an active fault (Title 14, Division 6, Chapter 8, Subchapter 1, Article 111, Section 3602(a)).

Paleontological resources are found in the Chino Hills area. The most abundant are the microscopic foraminifera contained in the marine sandstone members. These small animal remains are key indicators used to date strata for petroleum resource evaluations. Some larger shell remains from mollusks have been found, as well as a few bone fragments, shark teeth, and unidentifiable carbonized remains in the Soquel member.

Soils

Chino Hills State Park is located in Soil Region VII - Southern California. In the region, upland soils have clay or clay-loam surfaces, neutral to basic reaction, and often calcareous subsoils. Alluvial soils are mostly sandy loams, light brown in color, and have neutral reaction. The Chino Hills area soils are primarily upland soils, formed in place, with only minor occurrences of alluvial soils.

In the Chino Hills Study Area, 39 soil units representing 20 soil series have been mapped by the Soil Conservation Service. These soils vary widely in depth, fertility, permeability, and other important characteristics. Two important characteristics of the soils in the unit which may affect potential land uses are erosion hazard and shrink-swell potential. Soils with high erosion hazards will require special construction techniques to avoid gullyng and loss of soil. Shrinking and swelling of some soils with high clay content can cause damage to building foundations and other structures unless special designs are used.

The park is riddled with a network of roads, fences, transmission easements, and power lines. In some places, livestock have created linear paths along steep fence lines, leading to development of gullies and loss of soil and vegetative resources, and potentially contributing to development of new landslides. The roads promote gullyng, mass wasting, and loss of vegetative resources. Increased water runoff results from water concentration through culverts, removal of vegetation, and diversion from natural watercourses. Ditches, berms, and improperly constructed water bars also lead to erosion of the roads and adjacent lands in the park.

Plant Life

Five plant communities have been identified and mapped in the Chino Hills Study Area:

	<u>Percent of Total</u>
Southern oak woodland	11%
Grassland	70%
Coastal sage scrub	13%
Mixed chaparral	5%
Cottonwood riparian woodland and riparian zones	1%

The southern oak woodland is the general term for the variable woodlands of coastal Southern California. In the unit, five phases occur: walnut phase, oak phase, oak-walnut phase, walnut savanna phase, and post-fire scrub phase. The most important woodland species are California walnut (Juglans californica) and coast live oak (Quercus agrifolia). The range of California walnut is limited to the Los Angeles basin and the surrounding foothills. This park contains some of the best remaining stands of this species. In the park, the woodland communities generally occur on north-facing slopes and in canyon bottoms.

Extensive grasslands occur in the park. This community is dominated by exotic (non-native) grasses and forbs. Common species include wild oats (Avena spp.), annual rye (Lolium perenne), black mustard (Brassica nigra), filaree (Erodium spp.), and wild radish (Raphanus sativus). California sagebrush (Artemisia californica) is common in the grassland. Remnant stands of native perennial grassland, including Stipa pulchra and Elymus condensatus, occur in this community.

Coastal sage scrub occurs mainly on the south-facing slopes of Telegraph Canyon. This is a soft-leaved shrub community dominated by aromatic shrubs, including California sagebrush, white sage (Salvia apiana), purple sage (Salvia leucophylla), and black sage (Salvia mellifera). This community is less dense than chaparral, with grasses and forbs being common between and among the shrub species.

Mixed chaparral occurs in the draws and minor drainages along the south-facing slopes of Telegraph Canyon. In this community, the shrub cover is nearly 100%, with little, if any, herbaceous understory. Common shrubs include toyon (Heteromeles arbutifolia), laurel sumac (Rhus laurina), lemonadeberry (Rhus integrifolia), and chamise (Adenostoma fasciculatum).

The cottonwood riparian woodland occurs along the banks of the Santa Ana River. Cottonwood (Populus fremontii) is the dominant overstory species. The cottonwoods form small, dense forests, and also occur as individual trees along the river bank. Other species in the community include willow (Salix spp.) and giant reed (Arundo donax).

In addition to these plant communities, narrow riparian zones occur throughout the unit, particularly in the Aliso and Telegraph Canyon bottoms. These important zones are characterized by sycamores (Platanus racemosa), mulefat (Baccharis glutinosa), and willows (Salix spp.). These zones form narrow bands in the other communities.

Seventy-nine exotic plant species have been identified as occurring in Chino Hills State Park. Milk thistle (Silybum marianum) is widespread in the park, and poses a serious resource management problem due to its large size, many prickles, and aggressive nature.

Rare or endangered plants which occur in Chino Hills include many-stemmed dudleya (Dudleya multicaulis), Santa Barbara locoweed (Astragalus trichopodus), Catalina mariposa (Calochortus catalinae), and wind poppy (Stylomecon heterophylla).

Animal Life

Rural areas with elements of the natural environment have become sanctuaries for wildlife. This is all the more true in Southern California, where urbanization, scarce water resources, and limited woodlands combine to restrict wildlife.

The Chino Hills have retained most of the natural features and character of wildlands, including woodlands, riparian systems, and vast open areas. These conditions serve to attract a great variety and abundance of animal life.

In Chino Hills State Park, five biotic communities have been identified. These communities are southern oak woodland, coastal sage scrub, grassland, mixed chaparral, and riparian zones. A sixth biotic community, open water and streams, has been designated to cover aquatic environments. These communities support a rich assortment of animals.

Riparian zones and other woodlands are highly productive and diverse habitats. Interfaces between these communities (ecotones) are especially important, supporting a higher diversity of wildlife than could be supported by either community alone. Open water and streams provide a source of water for wildlife species that live entirely in the riparian zones, and for animals that spend most of their time in surrounding drier environments.

Other communities, without tall vegetation and surface water, offer habitat that meets the specific needs of certain animals that the woodland and riparian communities cannot provide. The coastal sage scrub provides

important forage for wildlife such as small rodents, rabbits, and seed-eating birds. Chaparral provides the dense cover required by birds such as the California thrasher and wren-tit. Both coastal sage scrub and chaparral provide important habitat for southern mule deer. Grasslands support abundant small to medium-sized rodents, such as mice and the California ground squirrel. These become prey of the numerous raptors, including the American kestrel, red-tailed hawk, and barn and great horned owl. Other forms of predators are common here also. Among them, foxes, coyotes, bobcats, and rattlesnakes live primarily on small rodents. One uncommon predator, the badger, has been reported here.

The aquatic component of the animal life of Chino Hills State Park is of great importance to the Santa Ana River ecosystem. At least one Santa Ana River tributary in the project area, Aliso Creek, supports one of the few remaining populations of the native arroyo chub in the Santa Ana River, below Prado Dam. Two other native species, the Santa Ana sucker and the speckled dace, may also use the creek. Aliso Creek provides most of the remaining habitat for native fish in the mostly channelized Santa Ana River. The exotic fathead minnow is found only in upper Aliso Creek, adjacent to the Rolling M Ranch.

Two other important creeks in the park that were surveyed are Telegraph and Soquel Canyon creeks. Neither of these contained fish. Southwestern pond turtles were found in Aliso and Soquel Canyon creeks.

Several stock ponds in the unit were sampled for fish, but none were caught. A pond turtle was seen at one pond. The ponds may also serve as habitat for amphibians.

Historically, wildlife was much more widespread throughout the region. Urbanization and other land use practices have brought about reduced populations of certain species. The impacts from grazing domestic livestock have probably made permanent changes. Cattle have fouled the watercourses and affected aquatic animal species. Road building and maintenance have also been major causes of degradation to habitat and water quality. Some species, including the California grizzly and pronghorn, have been extirpated from this region.

Five state (S) and federally (F) listed rare (R) or endangered (E) species, all birds, may occur in the park. They are the southern bald eagle (SE, FE), American peregrine falcon (SE, FE), least Bell's vireo (SE), California yellow-billed cuckoo (SR), and Swainson's hawk (SR). The state is also concerned about the statewide breeding status of more than 20 bird species that are either known to occur in or may frequent the park. The southwestern pond turtle and the red-legged frog are also species of state concern that occur in the park.

Cultural Resources

Native American Resources

Various Native American cultural resource sites are present in Chino Hills State Park. One temporary campsite near the Rolling M Ranch has been dated to 1,000-2,500 Before Present (B.P.), and likely represents the Late Encinitas Tradition. Another large site at the Rolling M Ranch is currently being

analyzed. Milling sites are represented in Aliso, Bane, and Telegraph canyons. A total of 11 sites and 19 isolates have been identified in the partially completed survey. The state park appears to have been used as temporary camp and work areas for the late prehistoric and historic Indian people who lived along the Santa Ana River and basin.

Euroamerican Resources

Most of the Euroamerican cultural resources surveyed in Chino Hills State Park are of recent origin, and lack significance as historic resources. These particular resources have been identified as non-historic sites. Furthermore, the significance of the sites listed as historic is minimal. The park's value clearly does not lie in its Euroamerican cultural resource base.

Cultural surveys have not been completed, but to date, seven historic sites and 14 non-historic sites have been surveyed and recorded. Several of these sites are located outside present unit boundaries, but are located on land being considered for acquisition by the department.

Native American Ethnographic Overview

Chino Hills State Park is located in the inland southern portion of the traditional Gabrielino territory, in close proximity to the Juaneno, Luiseno, and Cahuilla Indian groups. These groups shared many items of material culture, as well as subsistence practices and similar languages. They are often referred to as Shoshonean language speakers, and were the most recent occupants of the Southern California area before the Spanish arrived.

In the general chronological sequence that has been established for prehistoric human occupation in Southern California, an Early Man Horizon is followed by the Milling Stone Horizon. Late Milling Stone sites are characteristic of the Santa Ana River basin. An Intermediate Period (4,000 to 1,500 B.P.) includes the more local Encinitas tradition sites in Southern California. In Chino Hills State Park, there is one site of the Late Encinitas tradition that has been dated at 1070-2380 B.P.

The Late Prehistoric or Shoshonean period is most probably characterized by a population movement westward from the Great Basin into Southern California. This Shoshonean movement appears to have wedged apart the Hokan-speaking Chumash of Santa Barbara and the Kumeyaay (Diegueno) of San Diego; by the time of European contact, they had settled into local and distinctive cultural patterns. After the Spanish established the mission lands of the San Gabriel, San Juan Capistrano, and San Luis Rey Missions, the Shoshonean speakers living in those respective areas were identified as Gabrielinos, Juanenos, and Luisenos.

Gabrielino territory extended north between Topanga and Malibu Creeks, east through western San Bernardino and Riverside counties, and south to coastal Aliso Creek, and included Santa Catalina, San Nicholas, and San Clemente Islands. In this area, the Gabrielino situated their villages near dependable water supplies, plant and animal resources, and protection from the weather. The Gabrielino also moved to seasonal gathering camps to collect acorns, and possibly walnuts, wild seeds, or coastal marine products.

Gabrielino material culture was varied and noted for its artisanship. Women produced both coiled and twined basketry for household use, collection, and ceremonial containers. Their coiled or paddle and anvil type pottery and their wooden bowls were often inlaid with haliotis shell. Gabrielino men produced a wide variety of fine bone tools, such as needles, saws, scrapers, fishhooks, and awls. Their concern with war was elaborated in an array of weaponry, such as reed armor, war clubs, swords, and large, heavy bows. Men also constructed three types of seagoing vessels: tule rafts suitable for transport in bays, estuaries, and along the coast, and dug-out canoes and plank boats for deep sea hunting and trips to the offshore islands. The highly prized steatite was mined by the Gabrielino living there, and traded in raw or finished form, such as pipes, arrow straighteners, decorated ritual objects, and cooking utensils.

Local and far-flung trade was a significant aspect of Gabrielino culture. Direct barter, reciprocity between trading partnerships, and traveling middlemen all played a part in the exchange system. Knotted cords were used as accounting devices, and strings of olivella shells served as a form of money. A string of olivella shell called napanaa was sent by Cahuilla, Serrano, Luiseno, Juaneno, and Gabrielino clan leaders on the occasion of an important death in another clan.

For the Gabrielinos and their neighbors, the village, or major village center with nearby satellite villages, was the principal socio-political unit. A Gabrielino village might be home to 50-200 inhabitants, and estimates suggest that they numbered approximately 5,000 in total at the time of European contact. Village structures were designed to allow for specified functions; besides the domed, circular houses covered with thatch, which sometimes housed as many as 50 people, they had menstrual huts, at least one sweat house, a ceremonial enclosure, and a practice area for religious ceremonies. Some elite individuals owned real property, or controlled its use by replicating their own body tattoos on certain trees, posts, and rocks which formed boundaries.

Although the European explorations of coastal California began in the mid-16th century, it was not until the Portola-Serra expedition of 1769 that colonization and conversion began to affect the Gabrielinos and their neighbors. The San Gabriel Mission, founded in 1771, was assigned an area that generally encompassed the Chino Hills and the adjacent inhabitants, and cattle belonging to the mission roamed the Chino Hills.

San Gabriel Mission baptism records list village names and an occasional note concerning village locations. These locational notes and the number of individuals baptized suggest that the large villages of Totabit, Jutucabit, Pasinongna, and Wapijangna were situated in the Santa Ana River basin. The Indians of these villages could have been using the resources of the Chino Hills. Despite the missionizing influence, migration to the mission, and village relocation, many traditional subsistence patterns persisted into the rancho period.

Euroamerican Historic Overview

The following overview provides a summary account of significant personalities and land-use patterns in what is now Chino Hills State Park, from the first recorded European explorations along the Santa Ana River in the late

18th century to the mid-20th century. Research materials, archival research notes, maps, and photographs are retained by the department's Cultural Heritage Section as part of its inventory data. Oral histories are being conducted.

The area now known as Chino Hills State Park was originally part of the extensive grazing lands granted to Mission San Gabriel, established in 1771. During the Mexican-California era, the area served as spill-over grazing land for Rancho Santa Ana del Chino to the north, and ranchos Canon de Santa Ana and La Sierra Yorba to the south. In 1848, when Mexico ceded California to the United States, the area became part of the United States public domain. Land acquisition in the area began during the last three decades of the 19th century.

Throughout its recorded history, the area has served principally as grazing land, although some late 19th and early 20th-century oil exploration and mining activity occurred in the northwestern part of the park. The modern period has left the lands of Chino Hills State Park relatively undisturbed.

The earliest documented European exploration in the Chino Hills vicinity occurred in 1769, when members of the Gaspar de Portola expedition camped on the banks of the Santa Ana River near the present-day city of Olive, several miles southwest of the state park. Five years later, on March 21, 1774, Juan Bautista de Anza's party -- the first to enter Alta California by an all-land route -- camped on San Antonio Creek, some eight miles northeast of the park. Two years later, Anza, leading a party of 240 men, women, and children to found a settlement on San Francisco Bay, again camped at this spot. Father Font, diarist for this second expedition, made the first recorded references to this region. Struck by the sycamores which grew abundantly along the creek, he noted that they were the "only timber and firewood found on these plains". Although exploration occurred both north and south of the state park, there is no recorded evidence that any part of the park was explored by Europeans during the 18th or early 19th century, nor acquired by Europeans before the 1870s.

The earliest recorded settlement in the Chino Hills vicinity occurred in 1810, when Jose Antonio Yorba -- a member of Portola's 1769 expedition -- and Juan Peralta were granted Rancho Santiago de Santa Ana, 11 square leagues south and east of the Santa Ana River. This was the only Spanish land grant made in the vicinity.

Twenty years later, with secularization of the missions underway, the Mexican Government initiated a generous land grant policy. Bernardo Yorba, Jose Antonio Yorba's son, was among the first to take advantage of this policy. Yorba applied for Rancho Canon de Santa Ana, three leagues of land, more or less, lying north of the Santa Ana River. (The northeast tip of this grant extends into the state park.) Although Mission San Gabriel immediately lodged a protest, claiming that it had always used the area north of the Santa Ana River as mission grazing land, Jose Figuero granted Rancho Canon de Santa Ana to Bernardo Yorba in 1834.

Bernardo Yorba laid the foundations for a self-sufficient establishment on Rancho Canon de Santa Ana, maintaining a large Indian labor force. His adobe, located some five miles south of the park in Township 3 South, Range 9 West, was one of the few two-story adobes built in southern California before statehood.

The Yorba family continued to pursue land grant claims, eventually acquiring 213,331 acres on the Santa Ana watershed of Los Angeles and San Bernardino counties. Bernardo's grant alone constituted one of the largest cattle holdings known in Southern California. In 1839, he acquired El Rincon, several miles east of the park, and in 1846 added Rancho La Sierra Yorba, four square leagues lying just east of Rancho Canon de Santa Ana, to his holdings. La Sierra Yorba touches on the present-day state park at the conjunction of San Bernardino, Riverside, and Orange counties.

In 1834, the same year Yorba acquired Rancho Canon de Santa Ana directly south of the present state park, Antonio Maria Lugo and Jose Antonio Carrillo petitioned for Rancho Santa Ana del Chino, directly north of the park. Action on their petition was delayed for years, perhaps because Chino continued to be an important and productive unit in Mission San Gabriel's rancho system. Eventually, Don Jose Carrillo grew discouraged, and withdrew his claim. Finally, in 1841, Governor Juan B. Alvarado granted Lugo five square leagues, directly north of what is now Chino Hills State Park.

That same year, Lugo deeded a half-interest in Rancho Santa Ana del Chino to his American son-in-law, Isaac Williams, who had arrived in California from Pennsylvania in 1832. Williams proceeded to develop Chino into a major Southern California rancho. He cultivated more than 1,000 acres, established one of Southern California's first gristmills, and built an elaborate adobe compound for himself and his family. As did Bernardo Yorba, he depended on Indian labor.

The Williams' ranch headquarters, located four miles north of the park, was the site of the 1846 "Battle of Chino." This was a minor skirmish between Mexican Californians and a group of Americans during the Mexican War; there were no injuries. This ranch headquarters later served as a major waystation for emigrants and gold seekers entering California over the southern emigrant trail; still later -- between 1858 and 1861 -- it was a stopping point on the Butterfield State route.

In contrast to the surrounding region, there is no evidence of activity, other than grazing, in the present-day state park prior to the U.S. Surveyor General's public domain surveys, which began in 1853 and were not completed until 1894. The deputy surveyor's field notes do not note any structures, fences, or wagon roads in the park over this timespan, although the 1865 plat for T3S R8W notes a road crossing the boundary between Rancho Canon de Santa Ana and the public domain in Section 25. This plat also notes a field at the boundary between Section 24, which is outside the state park, and Section 25, which is within.

Legal acquisition of land in Chino Hills State Park by private individuals did not begin until the 1870s, 30 to 40 years later than land grant acquisition and activity in the surrounding area. Of the 38 original public domain patents in the park, 20 -- or little more than half -- were obtained by private individuals, in tracts ranging from 40 to 160 acres. Eighteen of these patents were cash entries; only two were homestead entries. Seven were obtained in the 1870s, one in 1889, and eleven in the 1890s. Eight of the remaining patents were railroad grants, ranging in date from 1879 to 1897; nine, dating from 1869 to 1896, were indemnity school land selections; and one was an 1868 Section 16 school grant. It should be noted that land acquisition does not necessarily indicate actual settlement. As noted above, there is no evidence of 19th-century settlement within the boundaries of the present-day state park.

The 160-acre parcel surrounding the Rolling M Ranch headquarters was originally patented by Francis Defley in 1872. No documentation has been discovered which indicates that Defley settled on the land, however.

The Rimpau family, which recently sold 404 acres to the department, originally patented 320 acres in 1891 by cash entry.

On Isaac Williams' death in 1856, Rancho Santa Ana del Chino passed to his daughters Mercedes and Francisca, who shortly thereafter married John Rains and Robert Carlisle respectively. Chino continued to prosper under Carlisle's direction until his death in 1865. It then passed into management by trustees. In 1881, it was sold to Richard Gird, an enterprising miner and engineer. Gird continued to expand his holdings, and in 1887 the Chino townsite -- one mile square -- was laid out. The 1887 land boom ruined Gird, however, and in 1894, the rancho was sold to Charles H. Phillips for \$1,600,000. Two years later, it was bought by an English investment syndicate, and broken into small tracts for sale.

Bernardo Yorba maintained his vast cattle holdings along the Santa Ana River directly south of the state park until his death in 1858. Eight years later, the United States confirmed Rancho Canon de Santa Ana to Bernardo Yorba and his heirs. Distribution of the rancho was in dispute, however, until 1874, when a final decree of partition distributed the property among Yorba's heirs. John W. Bixby, who had arrived in California from Maine several years earlier, began negotiations for the purchase of the league of land that had been left by Bernardo's will to his widow, Andrea E. de Davila, and two youngest sons, Bernardo and Javier. This property, which included the portion directly south of the park, contained 5,156 acres, which Bixby purchased for \$15,780.93. In 1881, Bixby bought the remaining 501 acres. Bixby's Rancho Santa Ana, today known as the Bryant Ranch, has been actively farmed by Bixby's heirs since its purchase. John and Susan Hathaway Bixby's daughter, Susanna Patterson Bixby, who married Ernest Bryant in 1904, later established the Rancho Santa Ana Botanic Garden.

When oil was discovered in the late 1880s in the Puente Hills northwest of the state park, it was hoped that the Chino Hills would also produce oil. The oil town of Olinda, located directly west of the park, sprang up in 1897, and prospered until the 1940s, when the fields began to shut down. Abandoned in

the 1940s, the town was torn down to permit construction of the Carbon Canyon Reservoir. The 1922 Official Map of Orange County notes that the Standard Oil Company owned a quarter section directly south of the park. In 1983, Shell Oil sold 1,010 acres to the State of California, for inclusion in Chino Hills State Park.

In 1948, the Mollin Investment Company acquired 1,720 acres, which subsequently became known as the Rolling M Ranch. The company leased more than 2,000 acres from the McDermont Ranch and other property owners, expanding their grazing capacity to 4,000 acres. The company enlarged and improved the corral system, and rehabilitated and enlarged the main house. Mollin Investment acquired the property from I. C. Stearns, a Los Angeles land speculator, who had, in turn, purchased the 1,700 acres from the Brown sisters, who originally ran purebred Angus cattle on the ranch. No other ranch headquarters are located in the state park.

Esthetic Resources

The appearance of the Chino Hills landscape is relatively unaltered by the works of humans, especially when compared to the surrounding urban landscape. Long distance views of natural terrain and vegetation are available from selected locations. The acquisition plans for this park have emphasized the value of acquiring viewsheds to protect the interior views of the unit. As a result, the relatively pristine views of the hills from Telegraph and Aliso Canyons and from selected panorama points have been protected from urban encroachments. Viewpoints of particular interest are San Juan Hill, Gilman Peak, and Panorama Point.

A wide variety of more intimate natural scenes are available throughout the park. Densely wooded canyon bottoms offer dark shade, lush vegetation, and running water. Many species of wildflowers provide scenes of great beauty during the spring. The grassy hills are brilliant green during the spring, and golden brown in the summer.

Due to the proximity to urban environments, the hills are interlaced with utility easements, roads, and other human-made works which are significant negative visual features in the unit. By far the most prominent negative visual features are the many high-voltage electrical transmission lines which traverse the park.

Other negative visual features include partially buried natural gas pipelines and the many unsurfaced roads.

Recreation Resources

The lands which comprise Chino Hills State Park have historically been used for livestock grazing. The area was unavailable for public recreation until it was opened on a limited basis in the spring of 1983. Before 1983, the only recreation uses were those by private landowners and their guests, and illegal uses by trespassers.

The demand for recreation opportunities in this park is great due to its proximity to densely populated metropolitan areas. Nearly 9.2 million people can be served in a zero-to-one hour travel time zone (40 miles), and this number is expected to increase to 11.2 million in 20 years. About half of the state's population is within a zero-to-two hour travel time zone.

Recreation activities which have occurred in Chino Hills State Park since the area was opened to the public include:

Camping	Walking
Hiking	Relaxation
Horseback riding	Picnicking
Sightseeing by car	Photography
Nature study	

Resource Policy Formulation

Acquisition and Classification

In June 1977, the California Legislature passed a resolution directing the Department of Parks and Recreation to undertake a study of the feasibility of acquiring land in the Chino Hills for park purposes. The department issued the Chino Hills Feasibility Study in April 1979, which identified 30,000 acres of the Chino Hills area as suitable for State Park System purposes. The report recommended that selected portions of the Telegraph and Aliso Canyon viewshed area (4,500 acres) in Orange and San Bernardino counties be acquired in the immediate future, as an initial unit of the State Park System in the Chino Hills. The report also called for eventual acquisition of the remainder of the Aliso viewshed and the Tonner Canyon viewshed in Los Angeles and San Bernardino counties.

As a result of this report and following the direction of the legislature, the department initiated the Chino Hills Acquisition Project. The department's first acquisition was 2,237 acres, in November 1981. The department has acquired approximately 9,400 acres to date, for \$45.7 million.

Throughout the process of the creation of this unit of the State Park System, the local volunteer group, Hills For Everyone, has worked closely with the department and the legislature to see Chino Hills State Park become a reality. In 1982, Hills For Everyone entered into a lease agreement with the Department of General Services to manage the land involved in the early acquisitions until DPR was ready to assume management responsibility. Hills For Everyone opened the area to the public on a limited basis beginning in the spring of 1983.

On April 13, 1984, the state Park and Recreation Commission, meeting in Santa Ana, officially established the project as a unit of the State Park System by classifying and naming the unit Chino Hills State Park. The state park classification provides the department with guidelines for management and operation of this unit. The policies in this Resource Element are designed to guide the Department in achieving the goals outlined in the Public Resources Code definition of a state park. Public Resources Code Section 5019.53 defines a State Park as follows:

State parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of such ecological regions of California as the Sierra Nevada, northeast volcanic, great valley, coastal strip, Klamath-Siskiyou Mountains, southwest mountains and valleys, redwoods, foothills and low coastal mountains, and desert and desert mountains.

Each state park shall be managed as a composite whole in order to restore, protect, and maintain its native environmental complexes to the extent compatible with the primary purpose for which the park was established.

Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, sightseeing, nature study, hiking, and horseback riding, so long as such improvements involve no major modification of lands, forests, or waters. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within a reasonable distance outside the park, shall not be undertaken within state parks.

State parks may be established in either the terrestrial or underwater environments of the state.

Declaration of Purpose

The purpose of Chino Hills State Park is to perpetuate, for public use, inspiration, and esthetic enjoyment, an area of natural beauty, including oak-walnut woodlands, grasslands, riparian habitat, and archeological resources. All scenic, natural, cultural, and recreational resources shall be managed as a whole, preserving, restoring, and protecting the park's natural resources in accordance with ecological principles.

The function of the Department of Parks and Recreation at Chino Hills State Park is to ecologically manage the area's varied, interdependent resources, in order to ensure perpetuation of the

diverse environmental complexes; restore those natural resources which have been damaged by the works of humans; interpret the park's resources effectively; and provide, consistent with perpetuation of park resources, such facilities and services as are necessary for the public's full enjoyment of the unit's natural and cultural features and recreational opportunities.

Zone of Primary Interest

The zone of primary interest is that area outside the unit in which land use changes could adversely affect the resources of Chino Hills State Park. This zone includes the watersheds of Aliso, Telegraph, and Soquel Canyons, and the adjacent areas which could have a direct visual or environmental impact on the park. The department is generally concerned about land uses adjacent to Carbon Canyon Road, Pomona-Rincon Road, the Riverside Freeway, and State Highway 71. The operation of Carbon Canyon Dam, Prado Dam, and the Aerojet munitions facility could all affect the park.

Discharges of treated wastewater into the Santa Ana River upstream from the park currently affect the suitability of the river in the park for water contact recreation activities. The department is concerned about all upstream activities which affect water quality and aquatic life in the park.

In addition, the department is concerned about all lands, no matter how far away, that, through their use and development, adversely affect the park's resources and features. Air pollution and acid rain are regional problems that affect the park, and which may be affected by changing land uses on distant lands. Long-term protection of the resources of Chino Hills State Park will require involvement by the department in these regional problems.

Resource Management Policies

Resource management in the State Park System is governed by laws contained in the Public Resources Code and the California Administrative Code, and is further guided by directives approved by the department's director and by policies approved by the state Park and Recreation Commission. General policies related to unit classification and the declaration of purpose have been addressed in previous sections.

Specific departmental Resource Management Directives amplify the legal codes, and provide clearer management guidelines. Directives that are especially pertinent to existing or potential problems related to the management of resources in Chino Hills State Park are:

- #3 -- Inventory of Features Updates
- #5 -- The Purposes of Developments in State Parks
- #7 -- Acquisition Boundaries
- #31 -- Implementing Resource Elements
- #33 -- Exotic Plant Introduction

- #34 -- Exotic Plant Removal
- #35 -- Wildlife Management
- #37 -- Controlling Erosion
- #43 -- Water Diversion
- #58 -- Cultural Resources
- #59 -- Underground Work
- #70 -- Archeological Values
- #72 -- Archeological Research

In addition to systemwide policies, specific policies that pertain to existing or potential resource issues or problems have been formulated for Chino Hills State Park, and are given below by major subject.

Natural Resource Policies

Resource Management

The negative effects of past livestock grazing practices, the abundance of exotic plant species which exist on the property, and the need to restore fire to its natural role in the ecosystem constitute major resource management problems which will require active resource management programs to fully restore and protect the natural values of Chino Hills State Park. In addition, the annual nature of the extensive herbaceous grassland occurring in the park is subject to rapid change as ecological conditions change. It is important that the species composition of the grassland be closely monitored, and that appropriate action be taken to control and reduce the presence of the undesirable exotic plant species which now limit full use of the park by wildlife, and degrade the park's recreational values. If existing stands of exotic species like milk thistle and spiny clothbur were to spread throughout the park, the natural and recreational values of the land would be greatly reduced.

In order to protect the department's investment in Chino Hills State Park, it is essential that a significant commitment be made to restoration, protection, and management of the park's natural resources.

Policy: The department shall take appropriate actions to establish major resource management programs in Chino Hills State Park, to protect and restore the park's natural features.

Hydrology

Aliso Creek Rehabilitation

Livestock grazing, road construction, and vehicle use in and near Aliso Creek have resulted in streambed and bank erosion in upstream areas, and sediment deposition downstream. Downcutting (erosion) has resulted in a deeply entrenched stream, lowering the water table, undercutting large sycamore trees, oversteepening stream banks, increasing sediment loads, and creating bedrock falls which are barriers to fish movement. The sediment deposition in lower Aliso Creek has filled the streambed to such an extent that the creek's base flow runs underground. Surface flows now occur only during and immediately after periods of precipitation. This underground section of the stream acts as a barrier to fish movement to and from the Santa Ana River.

Policy: A resource management plan for restoration of Aliso Creek shall be developed and implemented. Small, inconspicuous, and non-obtrusive structures shall be used to help build up deeply incised areas. Riparian vegetation will be planted in and adjacent to the creek, to hold sediment on the floodplains, and stabilize streambeds and banks.

Livestock Ponds

At least six ponds were constructed in the park during the ranching era. Four of these ponds still exist, and hold water year-round during most years. These ponds provide water supplies for wildlife, and habitat for aquatic plant life. Some of the ponds have a positive effect on park resources by improving wildlife habitat, and by increasing visual and vegetative diversity. Three of the ponds have been determined to have stable earthen dams, are sufficiently deep to provide habitat values, and are not interfering with fish migration routes. They are the McDermont Spring, Windmill, and Panorama ponds.

Policy: The McDermont Spring, Windmill, and Panorama ponds shall be retained. Appropriate efforts shall be taken to maintain the earthen dams, and to promote and maintain native vegetation around the ponds. The remaining ponds in the park shall be removed, the streambeds restored to natural contours, and native vegetation reestablished.

Riparian Zones

Riparian zones in Chino Hills State Park provide important native plant and animal habitat. The riparian zones provide cool, moist zones that are in sharp contrast to the hot, dry hillsides during the summer months. The principal tree species, including sycamore, walnut, coast live oak, and elderberry, all grow in the riparian zones. These trees are important habitat for birds, and provide many nest sites. The greatest diversity of plant life occurs in the riparian areas. Aquatic life, including turtles, frogs, and fish, also depends upon these zones.

Roads currently exist in these riparian zones, in Bane, Aliso, Telegraph, and Soquel Canyons. All of these roads include stream crossings. These stream crossings now result in vehicles entering the streambed, resulting in accelerated erosion, siltation, reduction in water quality, and wildlife habitat destruction. Many existing culverts on interior roadways have failed to control runoff during periods of heavy precipitation, have not been maintained, and now are continuing to result in loss of riparian habitat.

In addition to roads, other types of facility development and intense visitor use within riparian zones can greatly reduce the zones' natural values.

Policy: Facility development in the vicinity of riparian zones shall be designed to minimize removal of native riparian vegetation. Facilities should be designed to leave a 200-foot wide undisturbed corridor along any riparian zone. Roads which cross riparian zones should cross perpendicular to the zone, to minimize negative impacts. Stream

crossings should not use any device or design that impedes sediment movement, or impairs upstream or downstream movement of fish. Roadbeds shall be maintained in a condition that will minimize runoff and erosion into streams.

The department shall study the feasibility of realigning existing roads, to avoid as much riparian habitat as possible. The benefits of reducing the current impacts on riparian habitat by realigning roads should be balanced against the possible impacts of road construction on alternative alignments.

Santa Ana River

The Santa Ana River, which passes through the park, drains a large watershed area of Southern California. The stream passes through the cities of San Bernardino, Riverside, and Corona, and many other, smaller communities upstream from the park. Treated sewage effluent is discharged into the stream by many of these communities. As a result, the river is polluted. The water quality in the vicinity of Chino Hills State Park often does not meet the minimum legal standards for water contact recreation activities. Poor water quality is a serious limitation on use of the river for recreation.

Policy: The department shall work with the state and regional water quality control boards and other appropriate agencies to seek solutions to the water quality problems in the Santa Ana River stretch which passes through Chino Hills State Park. The department's goal shall be to provide the public with opportunities for full enjoyment of the Santa Ana River's recreation potential in the park.

Geology and Soils

Erosion

Roads, trails, dams, stream banks, and hillsides in Chino Hills State Park are all experiencing erosion. In some cases, the erosion is the result of natural causes, such as soil creep down steep slopes and stream bank failures adjacent to an actively downcutting stream. However, much of the park has experienced major erosive impacts as a direct result of past land uses -- principally ranching and cattle grazing. In keeping with a major thrust of the Declaration of Purpose for Chino Hills State Park,..."to restore those natural resources which have been damaged by the works of humans...", it will be necessary to actively manage those areas most severely eroded.

Policy: Appropriate efforts shall be undertaken to minimize human-caused erosion in Chino Hills State Park. Gullied and bare areas shall be identified, restored to natural contours, and revegetated.

Roads

Unsurfaced roads occur throughout Chino Hills State Park. These roads provide access to the electrical transmission lines and water and gas pipelines, and were used for ranch management. Runoff down steep portions of roads has interrupted normal runoff patterns, accelerated erosion, and developed gullies

in adjacent areas. The large number of roads in the park, many of which seem to be unnecessary, and which traverse steep, highly erodible areas, indicates that no planned road system has been developed for the area.

Policy: Existing roads in Chino Hills State Park shall be evaluated and a written plan developed for their maintenance, relocation, removal, and/or rehabilitation. Rehabilitation of abandoned roads shall include restoration of the site to natural contours, and revegetation whenever possible.

Landslides

Blockslide landslides, debris flows, and debris avalanches are all common throughout Chino Hills State Park. The tilted beds, clay layers, and incised drainages combine to make the park a landslide-prone area. Stream downcutting can remove stabilizing materials at landslide toes, leaving the slopes in an unstable condition. Cattle grazing, wildfires, roads, and trails can also contribute to landslide susceptibility. Old landslides are potentially unstable.

Policy: Landslide maps shall be consulted when planning development of facilities to avoid active landslides and potentially unstable areas. When new landslides occur, they shall be mapped and incorporated into the park's landslide map, with the dates of failure noted.

Paleontological Resources

Significant vertebrate fossils may exist in Chino Hills State Park. The park has not been systematically surveyed for fossil resources; however, a fragment of a cetacean rib bone was recovered from a road cut in the Yorba member of the Puente Formation. Such fossil finds are significant, and may yield valuable ecological, meteorological, and evolutionary data.

Policy: Before development of new structures, development sites shall be surveyed for paleontological remains, to ensure avoidance of areas containing important fossils. If new discoveries are made as a result of routine maintenance operations, stream downcutting, or slope failures, a professional paleontologist shall be consulted to evaluate the find.

Seismicity

A branch of the Whittier fault cuts through the unit, in the vicinity of Telegraph and Carbon Canyons. This fault has been designated by the state geologist as active, and is capable of producing surface rupture throughout its length. In addition to the impacts of fault rupture, damage to structures or facilities could result from seismic shaking. Landslides could also be generated, especially if the slopes are saturated.

Policy: No new buildings designed for human occupancy shall be constructed in the Whittier Fault Special Studies Zone (required by the Alquist-Priolo Special Studies Zone Act).

All structures shall be constructed in accordance with the state Building Code (Title 24).

Plant Life

General Vegetation Management

Past management practices, including livestock grazing and fire suppression, have changed the ecological conditions under which plants grow, favoring the presence of exotic (non-native) annual grasses and herbs over native vegetation.

Policy: The department shall develop and implement a vegetation management program for Chino Hills State Park. The principal goals of the program shall be to reestablish the natural processes which allowed the pristine vegetation patterns to develop, and to remove or reduce exotic plant species....

Livestock Grazing

Livestock grazing has occurred for more than 100 years on lands which now constitute Chino Hills State Park. Grazing has changed the ecological conditions under which plants grow, favoring exotic annual grasses and forbs over native grasses and wildflowers. Elimination of grazing will allow the return of natural ecological processes under which native plants developed and reproduced before modern human influences. Livestock grazing heavily affects riparian zones, since these are the only areas where water and green vegetation occur during the summer months. Livestock pollute surface waters, destroy riparian vegetation and aquatic habitat, and displace potential habitat for animal life dependent on the riparian zone. Areas where cattle congregate often provide favorable seedbeds for highly undesirable exotic plant species, including milk thistle, which has become a major resource management concern in the park. Elimination of livestock grazing is a necessary step in meeting the department's goals of promoting natural processes and restoring natural ecosystems.

Policy: The department shall prohibit commercial livestock grazing in Chino Hills State Park.

Prescribed Fire Management

Before 1900, fires burned regularly throughout Southern California, including the Chino Hills. The fires were ignited by lightning, and by the intentional or accidental activities of Native Americans. Wildfires began to be effectively suppressed in the early 1900s, and since that time, fire has only infrequently burned through the Chino Hills. Native plants and pristine plant communities developed under a regime of frequent fires. The current disruption of this regime has resulted in ecological imbalances and the increased likelihood of very destructive fires, due to fuel accumulation. Reintroduction of fire through a carefully controlled prescribed fire program is needed to restore the ecological processes occurring in the park to a more natural status.

Policy: Fire shall be restored to its natural role in the Chino Hills State Park ecosystems. An ongoing prescribed fire management program shall be established and maintained.

Fire Suppression

Wildfire has always been a threat to natural resources, facilities, and human safety in the dry hills of Southern California. A prescribed fire management program which simulates the historic natural fires of this region will reduce the damage from future wildfires. However, given the periodic extreme fire weather conditions and the high incidence of human-caused ignitions, an established prescribed fire program cannot eliminate the threat of destructive wildfires in the park. Therefore, it is prudent to plan for such an emergency. The department requires that a wildfire management plan be developed for every State Park System unit that experiences wildland fires.

A significant problem with unplanned fire suppression is that suppression activities may have more serious and long-lasting impacts on park resources than the wildfire itself. For example, bulldozer fire control lines remove roots and the upper organic soil horizons, which will significantly increase erosion and slow vegetation recovery. Also, chemical fire retardants may enter permanent aquatic ecosystems if indiscriminately applied.

These undesirable effects of suppression activities can be avoided by using a planned program of modified fire suppression. This program divides the park into compartments bordered by existing natural and artificial firebreaks. In the event of a wildfire, suppression activities are concentrated along the borders of a compartment, the goal being to control the wildfire at these predetermined boundaries, and thereby minimize resource damage. The program would also identify resource sensitivities of the park should additional suppression activities be required. Wildfire contingency planning in this manner will greatly reduce the likelihood of damage from suppression activities, while providing for necessary protection of park resources and public safety.

Policy: The department shall work with the California Department of Forestry, the Orange County Fire Department, and other appropriate agencies to implement a wildfire management plan at Chino Hills State Park. This plan shall address all aspects of wildfire planning, including prevention, suppression, and suppression. The plan shall identify modified fire suppression methods designed to preserve sensitive park resources, while protecting human lives and facilities.

Exotic Plant Species Control

Of 305 plant species identified in Chino Hills State Park, 79 are exotic (non-native) species. Native perennial bunch grasses within Chino Hills State Park are now limited to a few relict stands. Mustards, thistles, and other exotic species have naturalized and spread, and now dominate many areas of the park.

Milk thistle is the most conspicuous of the exotic species in the park. It is a 3-6-foot-tall herbaceous winter annual, with spiny, white mottled leaves. It competes with riparian vegetation and grasses along roadsides, under trees, and near old corrals, where the soil is fertile and has been disturbed. Thick stands of this weed are unsightly, impenetrable to park visitors and many forms of wildlife, and displace native plants. The proliferation of milk thistle in Chino Hills State Park is the park's most pressing resource management problem.

Policy: The department shall control the proliferation of exotic plant species in Chino Hills State Park. A milk thistle management plan shall be developed and implemented as a necessary part of development of recreation opportunities within the park. Other exotic species which shall be controlled include spiny clothbur, tree of heaven, tree tobacco, black mustard, and cheeseweed.

Rare or Endangered Plant Species

Several rare or endangered plant species have been identified within Chino Hills State Park. Dudleya multicaulis, Astragalus trichopodus, and Stylomecon heterophylla were identified during a field survey conducted in February, March, and April 1984. The plant locations were mapped, and this information was used in developing the Allowable Use Intensity Map. Drought conditions and the staff's inability to gain access to the entire unit have left us with some serious gaps in our data on rare or endangered plant species in Chino Hills State Park. Other species which have been reported or may occur include Calochortus catalinae, Astragalus brauntonii, and Chorizanthe parryi var. fernandina.

Policy: The department shall identify rare or endangered plant populations in Chino Hills State Park. A site-specific search for rare or endangered plant populations shall be conducted on the sites designated in this General Plan for potential recreation facility development. All rare or endangered plants which are discovered shall be protected.

Sycamore, Walnut, and Oak Regeneration

Chino Hills State Park contains stands of three important tree species -- sycamore, California walnut, and coast live oak. For the most part, these tree stands consist of mature specimens, and very few young or seedling trees can be found. The poor representation of young age classes may be the result of consumption of seedlings by livestock, and attempts by ranchers to convert woodland to grassland to increase the land's capability to support livestock. The alluvial soils in the Telegraph, Aliso, Bane, and Santa Ana River canyons are capable of supporting woodland vegetation. Woodlands along these relatively flat alluvial areas would make excellent sites for recreation activities, improve wildlife habitat, and would probably provide a pattern of vegetation more closely fitting the pristine patterns than the current situation.

Policy: The department shall institute a program to assure that young native trees are successfully established in the park, and that the extent of the southern oak woodland plant community is expanded to form a vegetative mosaic more closely resembling pristine patterns of vegetation. This program should emphasize restoration of natural processes, but may also include planting of seeds or seedlings. If a planting program is instituted, the plant materials should originate from trees occurring naturally in the Chino Hills area.

Walnut Woodlands

The California walnut (Juglans californica) has a limited natural distribution. It occurs only in a few Southern California counties in and around the Los Angeles basin. Many of the native stands have been destroyed by urban development, and by channelization of rivers. The occurrence of the California walnut in Chino Hills State Park represents the largest remaining stands which are protected anywhere. It is important that management and protection strategies be developed to assure perpetuation of these trees in their natural state.

Policy: A management plan shall be developed to assure perpetuation of California walnut in Chino Hills State Park.

Animal Life

Wildlife Management

Animal life is an important part of natural ecosystems, and adds interest and variety to the park experience. Protection and perpetuation of natural wildlife populations is a major management objective at Chino Hills State Park.

Policy: Altered natural habitats shall be restored as nearly as possible to conditions that would exist had natural ecological processes not been disrupted. Whether or not restoration of natural conditions is possible, it shall be the policy of the department to avoid significant imbalances caused by human influences on the natural wildlife populations. If it is necessary to regulate animal populations, the methods used shall be based on sound principles of ecosystem management, shall be consistent with the general policies of the department, and shall avoid disturbance to other natural values of the park.

Animal Life Requiring Special Management Consideration

Five rare or endangered animal species may occur in the park or frequent the vicinity. They are the southern bald eagle, American peregrine falcon, least Bell's vireo, California yellow-billed cuckoo, and Swainson's hawk.

Additionally, more than 20 bird species, the southwestern pond turtle, and the red-legged frog occur in Chino Hills State Park. These are animals that the State Department of Fish and Game is concerned about because of a statewide reduction in breeding status.

Habitat preservation is a critical factor in the well-being of all of these animals.

Policy: Specific management programs shall be developed when appropriate for animal species that are rare, endangered, or of special concern. Necessary and suitable habitat, where it exists, shall be perpetuated. Programs or projects undertaken at this park shall be planned and designed so animal life requiring special management consideration will not be adversely affected. Resource management actions will focus on natural processes, in recognition that natural processes are mutually beneficial to all important resources.

Native Fish

Fish habitat in the Santa Ana River and in most of its tributaries has been significantly reduced from its pristine condition. Channelization, dams, and other projects related to urbanization of the Los Angeles plain have contributed to this habitat loss. As a result, of the four native freshwater fish species once found in the Santa Ana River, only the arroyo chub still remains. The other freshwater fish which are native to the area are Santa Ana sucker, speckled dace, and unarmored three-spine stickleback. In addition, two anadromous species, steelhead and Pacific lamprey, once inhabited the Santa Ana River.

Chino Hills State Park includes a one-mile long unchanneled section of the Santa Ana River, and Aliso Creek, an important tributary of the river. Aliso Creek provides suitable habitat for the four freshwater fish native to the area; it is the only tributary which has unchannelized access to the river downstream from Prado Dam.

The unarmored three-spine stickleback is listed as endangered by both the state and federal governments. The stickleback recovery team is looking for appropriate transplant sites in its former range.

Policy: The department shall undertake appropriate efforts to maintain and restore native fish habitat in Chino Hills State Park.

Extirpated native fish shall be reintroduced into Aliso Creek in Chino Hills State Park if further study confirms that suitable habitat exists. The department shall work with the Department of Fish and Game and the U.S. Fish and Wildlife Service in this endeavor.

Cultural Resource Policies

Native American Sites

The Native American sites located in Chino Hills State Park indicate that the area was used for hunting and gathering by Indians of the Santa Ana River basin. To date, 11 Native American sites and 19 isolates have been identified and recorded in the park. Native American sites are nonrenewable resources, and, as such, require special management consideration.

Some areas of the park have, as yet, not been surveyed for cultural resources; therefore, the full extent of cultural resources which may occur in the park is not fully known. A map delineating the current extent of cultural resources surveys is on file in the department's Resource Protection Division office.

Policy: Cultural resource surveys for Chino Hills State Park shall be completed before major recreational facility development. Unsurveyed areas of the park shall be considered culturally sensitive. Any project or undertaking that would disturb the surface or subsurface of a known site or culturally sensitive area (i.e., an unsurveyed area or the vicinity of an isolate find) shall be surveyed and/or monitored to minimize or prevent disturbance of significant archeological resources.

Temporary Campsite

Site CA-SBR-3690 is a temporary campsite located six-tenths of a mile north of the Rolling M Ranch headquarters, west of the creek. It is bisected by an unsurfaced road. The road has eroded, damaging the site.

Policy: The road bisecting site CA-SBR-3690 shall be filled in with sterile soil in the vicinity of the site. Road grading or other subsurface disturbance on the site should be avoided.

Milling Stone Scatter

Site CA-SBR-5097 is a large milling stone scatter situated in the southern portion of the Rolling M Ranch headquarters area. Two roads cut through the site; one road is currently in use, and the other is blocked off.

Policy: The blocked off road which cuts through site CA-SBR-5097 shall be permanently abandoned. Road grading on the road in use on the site should be avoided.

Milling Site

Site CA-SBR-5283 is a milling site bisected by a road, and located near a small pond east of Bane Canyon.

Policy: Archeological site CA-SBR-5283 shall be tested and a management strategy developed to minimize loss of resource values before road development.

Cupule Rock

Site CA-SBR-5282 is a cupule rock located west of upper Aliso Creek, approximately six-tenths of a mile northwest of the Rolling M Ranch headquarters. It is immediately adjacent to a horse trail.

Policy: The horse trail in upper Aliso Canyon shall be relocated away from site CA-SBR-5282.

Milling Station

Site CA-SBR-5286 is a milling station where an unusual find, a large, unworked obsidian boulder, was found. The site is bisected by the main road through Aliso Canyon.

Policy: Site CA-SBR-5286 shall be tested to evaluate its significance. Until the testing is completed, no road grading will occur on the site.

Projectile Point

Location CH-4 is where an exceptionally fine leaf-shaped, serrated volcanic tuff projectile point was found.

Policy: Location CH-4 shall be tested for subsurface archeological components.

Euroamerican Sites

Rolling M Ranch Headquarters (Historic Site 1)

HS 1, the Rolling M Ranch headquarters, is located in T3S R8W, Section 10, on the west side of Aliso Canyon, upstream from the Bane Canyon junction. It consists of seven features: a wood-frame barn, a loading chute, a cattle scale, a wood-frame main house, a foreman's house, an open storage shed, and a metal storage shed. These headquarters, which date from the 1920-1930 period, were substantially rehabilitated and enlarged after 1948. The site's major significance is that it is the only ranch complex located within the state park boundaries. The residences could be used as a temporary park office and ranger residences. The barn, with minor stabilization, could be used for storage. The farm equipment, donated by former owner Marcus Godfrey, constitutes a separate entity.

Policy: The Rolling M Ranch headquarters buildings may be preserved in place, modified, or removed as needed for park purposes.

Windmills (Historic Sites 2, 3, 5, and 7)

Four Aerometer (Chicago) windmills dating from 1900-1930 are located within Chino Hills State Park. They are more than 50 years old, and therefore, have been identified as historic sites.

Policy: The Aerometer windmills in Chino Hills State Park should remain in place unless they are determined to be a hazard to visitors or staff. The options of repairing them, fencing them off, or restoring one or more should be considered before any of the windmills are removed.

Non-Historic Sites

As part of the cultural resource inventory for Chino Hills State Park, 14 non-historic sites (NHS) were inventoried. The non-historic sites include corrals, mining equipment, piles of lumber, water troughs, small buildings,

and storage sheds. None of these sites are significant cultural resources. Descriptions of each of these sites and their locations are included in the Resource Inventory, on file in the department's Resource Protection Division office.

Policy: Non-historic equipment and structures in Chino Hills State Park should be removed and the area restored to a natural setting, unless the facilities and equipment can be used for park purposes.

Esthetic Resource Policies

Cross Fencing, Corrals, and Farm Equipment

Chino Hills State Park was used for cattle and sheep ranching for many years. Many miles of barbed-wire fencing and various tools and pieces of equipment associated with livestock operations still remain on the property. These items degrade the natural, esthetic beauty of the park. The cross fencing restricts wildlife movement, and may pose a danger to wildlife and the public. Much of the other equipment poses a danger to the public.

Policy: All interior fencing, other than that which is specifically needed for park purposes, shall be removed from Chino Hills State Park. All ranching equipment, other than those items which have significant historic value or which are needed for park purposes, shall be removed from the park.

Dedications of Land

The lands adjacent to Chino Hills State Park are being developed as homesites and other suburban uses. Developers may be interested in dedicating lands not suitable for development to the state for open space preservation purposes. The department must be cautious when considering acceptance of land adjacent to developed areas. The hazards of accepting these lands include obligating the department to take action on state park land to reduce wildfire, flooding, or landslide hazards which threaten structures on adjacent private land. Other problems which may occur include illegal refuse dumping, illegal off-highway vehicle activity, the spread of exotic plant species onto park land, and wildlife predation and harassment by domestic dogs and cats. The department is not obligated to accept offers of land dedications, and should not accept them if the land is not suitable for inclusion in the state park. Local jurisdictions have other options for preserving open space adjacent to suburban areas.

Policy: The department shall evaluate each land dedication proposal, and should accept only those dedications which are in keeping with the purposes of the state park. The department shall work with appropriate local agencies to see that firebreaks and other necessary buffers between developments and state park land are constructed outside the boundaries of the state park.

Proposed Roads

Soquel Canyon

The Chino Hills Specific Plan (San Bernardino County), the Brea Circulation Element, and the Orange County Master Plan of Arterial Highways indicate a conceptually proposed major arterial highway for Soquel Canyon, including a one-mile section through the northwestern portion of Chino Hills State Park and a half-mile section adjacent to Carbon Canyon Road. Construction of this road would have major negative impacts on park resources. Habitat for the southwestern pond turtle would be lost, walnut forests would be destroyed, and the esthetic and recreational values of the Orange County portion of the park would be severely diminished. While the loss of resources would be significant, this canyon is outside the major watersheds (Telegraph and Aliso) the department is trying to protect.

Policy: The department is opposed to a highway in Soquel Canyon; however, the department may consider exchange of state land in Soquel Canyon for lands necessary to protect Telegraph and Aliso Canyons.

Lakeview/Valley View Avenue

Orange County has amended its Master Plan of Arterial Highways (MPAH) to eliminate several circulation routes from the Telegraph Canyon area of the state park which would have had a devastating effect on the natural resources and recreational potential of the park. The Master Plan proposes to relocate the Lakeview/Valley View Avenue Extension from Telegraph Canyon to the western end of the state park, adjacent to Carbon Canyon Regional Park.

The department has concurred with the concept of the new road alignment, subject to the condition that adequate measures be implemented at the time of construction to mitigate the impacts noted in the following policy:

Policy: The department shall work with Orange County to insure implementation of mitigation measures for the following impacts caused by the proposed Lakeview/Valley View Avenue Extension:

1. Loss of approximately 24 acres of the western tip of the state park, including seven acres which have significant potential for recreation facility development. This seven-acre parcel may be the site of the original Olinda School, although no physical evidence has been found to date.

Mitigation: Conduct an archeological test excavation to determine if this is the school site.

Purchase the approximately 24-acre area from the state, or provide an area of equal value contiguous to existing state park land in exchange for this site.

2. Loss of riparian habitat and restriction of natural stream flows on Carbon Canyon Creek.

Mitigation: Develop a bridge design which minimizes these impacts.

3. Deterioration of the natural scenic values of the park due to installation of large, engineered fill slopes.

Mitigation: Develop a grading plan which eases the steepness and varies the slope of fill structures and blends them in with the natural terrain.

Replant the disturbed area with native plant material approved by the State Park Resource Ecologist.

4. Elimination of necessary access between Carbon Canyon Regional Park and Chino Hills State Park.

Mitigation: Include a vehicle and pedestrian underpass in the roadway design, on the north side of Carbon Canyon Creek.

Utility Easements

Chino Hills State Park is interlaced with utility easements, including Southern California Edison's high-voltage power lines, the Southern California Gas Company's natural gas pipelines, the Metropolitan Water District's aqueduct, and the proposed site of a Yorba Linda Water District reservoir. All of these easements are detrimental to park resources, through the visual and physical impact of each facility and the presence and maintenance of the many roads which are necessary to maintain them. By far, the easements which have the greatest detrimental visual impact are the high-voltage power transmission lines. The power lines significantly reduce the esthetic qualities of the park.

Policy: The department shall work to reduce the negative impacts of utility easements in Chino Hills State Park. All utility companies shall be encouraged to relocate their easements outside the park, or reduce the impacts by consolidating the easements into fewer or smaller corridors, or by placing the equipment underground. The department is opposed to any new easements within the park unless there can be mitigation work accomplished to create a clear net benefit to park resources.

All organizations which use or maintain access roads into or through the park shall be required to adhere to departmental road use and maintenance standards. Utility companies which unnecessarily damage park resources shall be required to restore the site to natural conditions, or to pay the cost of restoration.

Allowable Use Intensity

California State law (Section 5019.5, Public Resources Code) requires that a land-carrying capacity survey be made before any park or recreational area

development plan is prepared. To determine carrying capacity, the department determines allowable use intensities for the various parts of the unit. This evaluation serves as a general guide, indicating areas in which natural or cultural resource sensitivity will affect development planning.

Allowable use intensity is determined by the analysis of three components: 1) management objectives; 2) visitor perceptions and attitudes; and 3) the impact of any development or use on natural and cultural resources.

The management objective for Chino Hills State Park is set forth in the statutes defining a State Park.

The second component, visitor perceptions and attitudes, involves assessing the social objectives of the department, what recreationists perceive as an acceptable recreational environment, what degree of isolation or crowding is acceptable, and other perceptions and attitudes pertaining to the quality of the visitor's recreation experience. Although these factors are very difficult to quantify, this component's influence is extremely important. State Park System planners must take a leading role in enhancing the public's awareness and appreciation of a high-quality recreation experience.

The third, and most important, component in determining allowable use intensity involves an analysis of natural and cultural resources to determine the area's physical limits for facility development, and the ecosystem's ability to withstand human impact (ecological sensitivity). This analysis is based on a number of considerations, including: cultural resources sensitivity; soils and their erodibility and compaction potential; geological factors, such as slope stability and relief; hydrologic considerations, including potential for pollution of surface waters, flooding, and depleting surface and ground water through water use; vegetation characteristics, such as durability, fragility, and regeneration rates; occurrence of paleontological strata; and wildlife considerations, such as population levels, tolerance to human activity, and stability. Additional considerations in determining ecological sensitivity are: rare and/or endangered plants and animals, unique botanical features or ecosystems, or examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

Based on the preceding factors, allowable use intensities for lands in Chino Hills State Park were determined, and are shown on the Allowable Use Intensity Map (see Sheet 2). Three intensity classes, ranging from high to low, are indicated. Also included is a general description of the types of activities or uses which may be appropriate in each class.



LAND USE AND FACILITIES ELEMENT

LAND USE AND FACILITIES ELEMENT

The Land Use and Facilities Element consists of an identification of the various types of potential uses that are consistent with the allowable use intensities and the classification, and an identification of the physical facilities that should be developed in order to accomplish the unit's purpose.

This element outlines the long-term facilities development goals for the unit and proposes a priority schedule for their implementation based on resource preservation and public recreation needs. Design parameters for each type of facility are also proposed.

Existing Conditions

The few existing facilities in the park were established by the citizens' group, Hills For Everyone, during its tenure as manager of the park land (1982-84). These included the following: an entry station, a trailhead and trail, a viewpoint, an equestrian camping area, family camping and picnicking sites, parking areas, and signing.

These interim facilities were established with volunteered labor and materials.

The existing dirt roads in the park were developed over many years as a result of ranching and utility development activities, and, in general, do not meet state park maintenance standards.

At the Rolling M Ranch headquarters, there are several structures, including two residences, a barn, and a shed. The smaller of the two residences is located nearest the creek. This structure is structurally sound, but the existing electrical, mechanical, and plumbing systems are improperly constructed, and in need of repair and/or replacement. The interior walls of the structure are covered with a type of fiberboard, and do not meet the necessary codes. The concrete patio on the back side of the residence has been undermined by the creek, and has partially collapsed into the creek. Repair and/or replacement of these items would be necessary for the building to be inhabited.

The larger residence at this location is structurally sound, with no obvious pest or other problems. Minor repairs and replacement of electrical and plumbing systems and other minor repairs could be done.

The shed on the upper level is wood construction, uninsulated, and inadequate for anything except storage.

The barn consists of a center bay or post and beam construction, with trusses spanning the distance between the two lines of posts. This portion of the barn is structurally sound. The side bays are spanned by 2x4 and 2x6 rafters, and are inadequate for the distance spanned. The top plate and foundations of the two side bays are non-continuous, and require repair and replacement, along with the rafters. The barn has no diagonal bracing for wind shear or earthquake, and any use other than as a barn would require these and other code violations to be rectified.

Ownership

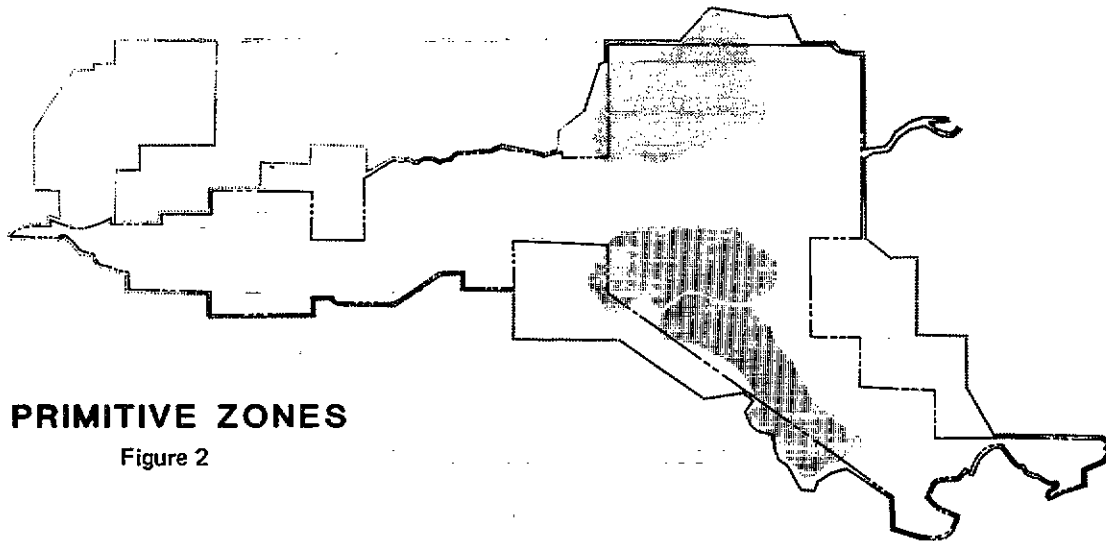
State park land ownership totaled 9,418.40 acres in September 1985. The proposed unit boundary reviewed at a public hearing in February 1985 identified additional lands as having potential for inclusion in the park, via fee acquisition or dedication. These potential additions would bring the size of the park to approximately 13,500 acres (see Sheet 1).

Land Use

Chino Hills State Park is a large area of relatively undeveloped land. One of its principle appeals for recreationists is the natural character of the landscape. The proposed land use zones have been carefully formulated to accommodate natural and cultural resource needs, recreational deficiencies and opportunities, and operational requirements.

Primitive Zones

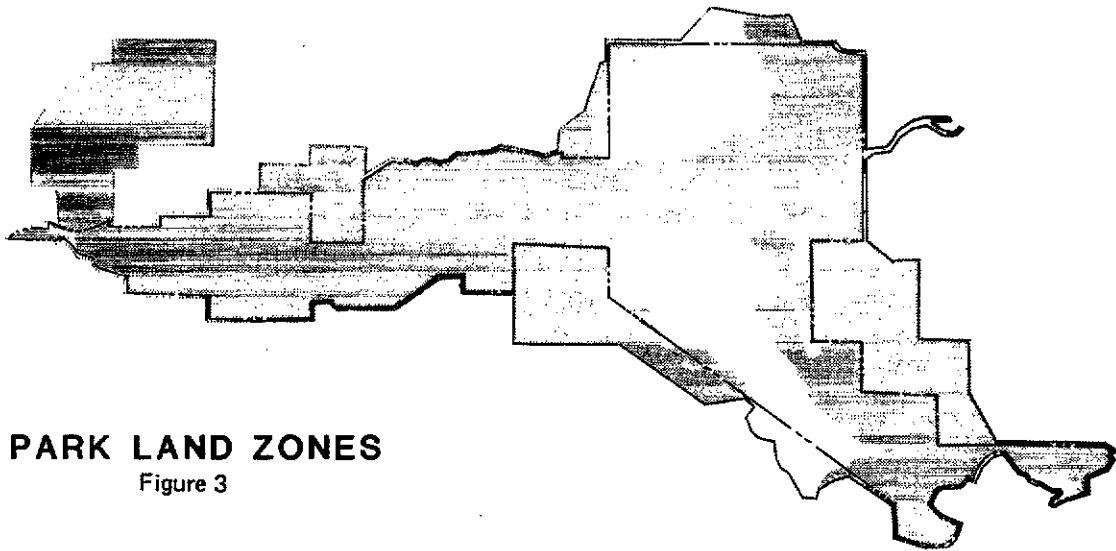
The relatively small size of parcels in the park without utility easements, roads, or other improvements makes any formal designation of wilderness areas impractical. There are, however, several areas large enough to be managed as primitive zones (see Figure 2).



Three such areas are proposed to be managed in this manner: Upper Aliso Canyon (1075+ acres), Water Canyon (850+ acres), and Brush Canyon (900+ acres). All three areas will be managed toward their pristine, natural character, and toward giving park users opportunities for solitude in a wilderness-like setting. Land uses will be limited to trails and trail camping. Routine vehicle patrols by park rangers will be limited in these zones; when practical, patrol will be performed on foot or on horseback. Vehicle access by park personnel will be possible whenever needed for health and safety reasons, or for resource management or maintenance activities. Appropriate management actions will be taken to restore the natural character of these zones where there is evidence of human impacts. If these efforts are successful, the zones may eventually warrant designation as natural preserves.

Park Land Zones

Park land zones (see Figure 3) include all state park lands not designated for a special purpose (i.e., primitive zone, developed park zone). Land uses will be limited to trails, trail camping, walk-in camping, and family picnicking. Vehicle access will be limited to park personnel for patrol, resource management, and maintenance activities.

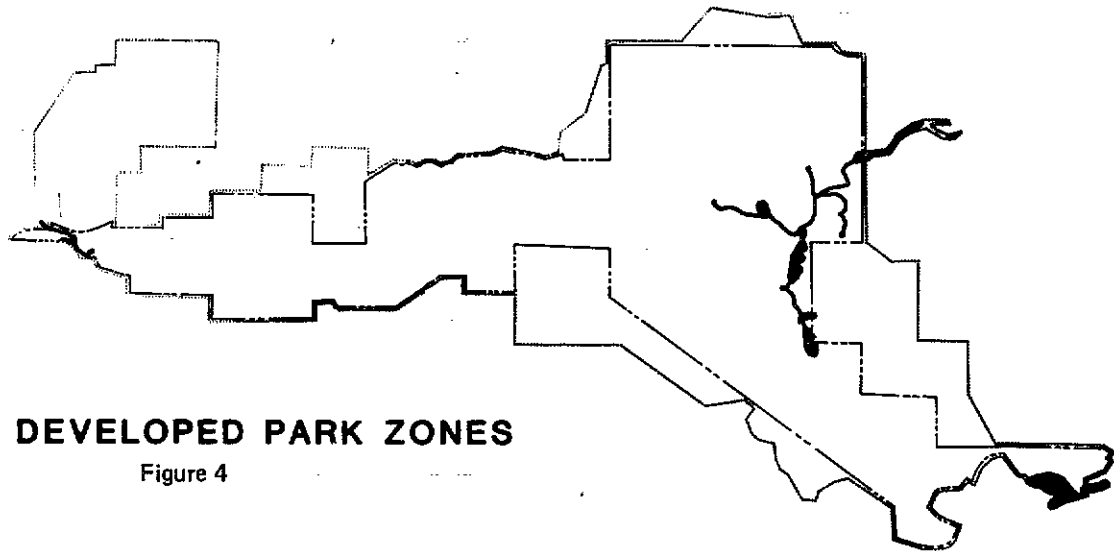


PARK LAND ZONES

Figure 3

Developed Park Zones

In accordance with the state park classification, land uses in these zones will include parking, day-use, overnight use, and administrative and operational use. Public vehicle access will be allowed only in this land use zone (see Figure 4).



DEVELOPED PARK ZONES

Figure 4

Access

It has been determined that the main entry to the center of the park should be developed through Slaughter Canyon, and the existing entry road through Bane Canyon should be closed to public vehicle access. The following factors contributed to this determination: ease of access to a major arterial road, development of adjacent residential land uses, road gradient, topography, impacts on riparian areas, proposed development of San Bernardino County water reservoirs in upper Bane Canyon, adequate room to develop administrative facilities, viewsheds, and visitor orientation opportunities.

Until the Slaughter Canyon entry is developed, the existing road through Bane Canyon shall continue to serve as the primary access to the center of the park.

Facilities











State Park System Facilities Description

The list of facilities (Table 3) describes the typical components, activities, and/or purposes of each type of development being proposed in this General Plan. The list is a guide; actual development will be based on resource, recreational, and operational considerations.

General Design Criteria

The following standards for design are presented here to set the tone for development which is appropriate in this park setting.

TABLE 3 STATE PARK SYSTEM FACILITIES

GRAPHIC SYMBOL	FACILITY – DESCRIPTION/COMPONENTS	ACTIVITY/PURPOSE
	ENTRY ROAD Vehicle access point.	<i>Public vehicular access.</i>
	PEDESTRIAN ACCESS Non-vehicle access point.	<i>Public non-vehicular access.</i>
	CONTACT STATION Small structure, entry gates, park information display, telephone, electricity, staff restroom, storage area.	<i>Fee collection, public information and safety, and control of park access.</i>
	RANGER STATION Structure for office, staff meeting area, park information display, dispatch radio, public telephone, restroom, staff shower. Structure(s) for maintenance shop, equipment and material storage (optional – may be located separately). Structure(s) or trailer pad(s) for employee housing (optional – may be located separately) utilities.	<i>Park administration, information, maintenance, public safety, storage of equipment and materials, employee living area.</i>
	EMPLOYEE HOUSING AREA Structure(s) or trailer pad(s) for employee housing (when located separately from Ranger Station) utilities.	<i>Employee living area.</i>
	RESTROOM Portable toilet or pit toilet or comfort station or combination building. Utilities as required.	<i>Sanitation.</i>
	FAMILY PICNIC AREA The number of units is as indicated on the plan. Each unit contains a parking space, a picnic table, and a BBQ. Each group of units contains a water supply point, a refuse collection point, a restroom.	<i>Family picknicking, day-use activities.</i>
	GROUP PICNIC AREA The number of units is as indicated on the plan. Each unit contains parking for 20 cars or 2 buses, 20 picnic tables, a group BBQ, a water supply point, a refuse collection point, a restroom, and an open area for group activities and informal games.	<i>Group picnicking, day-use activities.</i>
	FAMILY CAMPGROUND The number of units is as indicated on the plan. Each unit contains an individual flat parking pad, a picnic table, and a fire ring or BBQ. The campground includes: a road system, gates, water supply points, refuse collection points, and restrooms with showers.	<i>Overnight use by families and individuals in self-contained vehicles, or cars/motorcycles with tents.</i>
	HIKE-IN/BIKE-IN CAMPGROUND The number of units is as indicated on the plan. Each unit contains space for up to 5 people, a picnic table, a food/pack box, a fire ring or BBQ, 5 bicycle racks. Each group of units contains a water supply point, a refuse collection point, and a restroom with showers.	<i>Overnight use by families, small groups, or individuals on foot or bicycles.</i>



EQUESTRIAN CAMPGROUND

The number of units is as indicated on the plan. Each unit contains a parking space for a vehicle and horse trailer, a picnic table, and a fire ring or BBQ. The staging area includes: corrals, a saddling area, a water supply, a refuse collection point, a manure collection point, and a restroom with showers.

Overnight use by families, groups, or individual horsemen.



WALK-IN CAMPGROUND

The number of units is as indicated on the plan. Each unit contains space for up to 5 people, a picnic table, a food/pack box and a fire ring. Each group of units contains a refuse collection point and one restroom. Located no further than ¼ mile from the parking area.

Overnight use by families, small groups, or individuals who may be unable to backpack long distances.



TRAIL CAMP

The number of units is as indicated on the plan. Each unit contains space for 15 backpackers/horseback riders, 3 fire rings, and a restroom. Temporary hitching post or corral (optional). Note: there is no water and no refuse collection point). Trail camps are located no closer than one mile from the trailhead.

Overnight use by families, small groups, or individual backpackers/horseback riders.



SCENIC OVERLOOK

Bench, locator map, interpretive exhibit (optional), hitching post.

Rest stop, public information.



NATURAL HERITAGE POINT OF INTEREST

Natural feature site, interpretive exhibit (optional).

Preservation, interpretation.



TRAILHEAD

Parking, restroom, picnic tables, refuse collection point, water supply point (optional), interpretive display (optional), locator map.

Walking, hiking, and/or bicycling starting point, public information.



TRAILHEAD – EQUESTRIAN

Parking (15 vehicles and trailers), restroom, picnic tables, refuse collection point, manure collection point, water supply point, interpretive display (optional), locator map.

Horseback riding starting point, public information.



HIKING TRAIL

Unpaved with varying lengths and degrees of difficulty, loop opportunities, rest stops with picnic tables.

Walking, hiking, jogging.



EQUESTRIAN TRAIL

Same as above.

Horseback riding, mountain bicycling, walking, hiking, jogging.



BICYCLE TRAIL

Destination type, paved.

Bicycle riding, walking, hiking, jogging.



INTERPRETIVE TRAIL – SELF GUIDED

Short length, loop trail with guide brochure, numbered posts and/or interpretive displays.

Walking, public education.

Roads/Parking

The main entry road and spur roads should be designed to minimize speed, and to reduce impacts on the resources. Special care must be taken in design of grading, paving, drainage structures, and stream crossings, due to the fragile nature of the soils, geology, flora, and fauna in the park. A maximum width of twenty feet is recommended (plus a bicycle lane where appropriate) for these asphalt-paved roads.

Campground roads should be designed in a more rustic manner, for slower speeds and minimal visual impact on the natural setting. A maximum width of ten feet (one-way) or sixteen feet (two-way) is recommended for these roads.

Public parking areas and campground spurs should receive a rustic treatment similar to the campground roads, such as a double chip-seal paving or a paving surface which allows water to percolate directly through to the underlying soil.

Structures

The site of the visitor center is just below the ridge of a former drilling site, with views of a great percentage of the park. The structure designed for this location should take advantage of the views and topography that would allow a building to be built partially into the hillside, to minimize the impact on the skyline and make maximum use of the site. Due to utility locations, the building should also make maximum use of any energy efficient techniques available, including solar heating and wind-generated electricity, provided that visual intrusions on the natural landscape can be minimized.

At the Slaughter Canyon area, there will be a contact station and a ranger station that will include: office space, a meeting area, structures for maintenance, shop, equipment and material storage, and up to five trailer pads for employee housing. These structures should be grouped to provide maximum accessibility for the public buildings and display areas, while maintaining as much privacy and screening as possible for the maintenance and housing areas. Structures should be of block or other suitable fire-resistant material, and should be designed to reflect the character and nature of the park and the surrounding area. These structures should also make full use of energy-efficient design.

Restrooms and other utilitarian structures located at the campsites should be constructed of block with concrete tile or other non-combustable roofing, or other suitable material, with size, location, and orientation dictated by the location and number of campsites, roads, and utilities. The structures should be designed to be compatible with the surroundings and other structures in the park.

The contact station at the Santa Ana River Flat area will be a small structure, designed to be compatible with the other structures in the park and the nearby residential area. The station should contain an office/contact area and restroom facilities.

Campgrounds

Campgrounds should be designed as small clusters of units which can be tucked into the landscape, to avoid negative visual impacts and sensitive resources. At least two of the clusters should be able to accommodate groups as well as family units. Use of separate clusters will also facilitate phasing of campground development over a period of time.

Picnic Areas

Picnic areas should be sited to take advantage of adjacent natural features, such as streams and vegetation. Due to the small scale and passive nature of this activity, adverse impacts on the resources can easily be avoided.

Trails

Trail design and construction should be in accordance with the Department of Parks and Recreation standards and specifications delineated in the California Recreational Trails Plan. When possible, trails should follow existing dirt roads, trails, or cattle paths.

Development Areas

In accordance with the Allowable Use Intensity Map (Sheet 2) and the proposed land uses for the park, development proposals have been concentrated in several distinct areas. For convenience in mapping and identification, each area has been named, keyed (see Sheet 3), and enlarged for clarity (see Sheets 4-9).

Following is a narrative description of the facilities proposed in each area, and a summary of each type by area (see Table 4).

Slaughter Canyon (see Sheet 4)

Slaughter Canyon in San Bernardino County is proposed as the main entry to the center of the park. (NOTE: The entry road development will require additional acquisition of land or easements.) Access will be via the proposed extension of Euclid Avenue, west of Highway 71. (NOTE: The Euclid Avenue extension construction will be done by the county, in conjunction with sub-division development in the area. A development schedule has not been set.) The entry corridor will include a road with shoulder areas for a bicycle trail, and a separate equestrian trail which will connect with a trail from Prado Regional Park at Euclid Avenue. Rehabilitation of the riparian area of Slaughter Creek is also proposed.

Clustered on the bench at the eastern park boundary, near the head of Slaughter Canyon, will be a contact station and the administrative complex of the park. This complex will include structures for the ranger station, maintenance shop, and equipment and materials storage. It will also include trailer pads for employee housing. The topography in this area offers an opportunity to develop two scenic overlooks; one with an excellent overview

west into the interior of the park, and one with a view down Slaughter Canyon toward San Bernardino/Riverside.

Once into the park, the entry road dips down to an intersection in the bottom of Bane Canyon. To the right (north) lies the Bane Canyon spur, with a trailhead at its terminus. Ultimately, no public vehicular access will be allowed north of this point, to accommodate the need for rehabilitation of the riparian area in Bane Canyon. However, Bane Canyon Road will continue to serve as the park entrance until the east entry is available. Several family picnic areas are proposed adjacent to the road in this area.

Just east of the junction with Bane Canyon, the proposed Slaughter Canyon Road traverses archeological site CA-SBR-5283. Before construction, this site will be tested to determine the road alignment that will have the least impact on the site (capping may be required).

To the left (east-southeast) is the spur road to the Panorama Point visitor center. This structure includes space for collections, displays, a meeting area/theater, a library, a shop, a docent headquarters, and restrooms. A parking area and a scenic overlook complete development along this spur road.

At the junction of the main entry road with the Aliso Canyon spur road lies the proposed hike-in/bike-in campground area.

Upper Aliso (see Sheet 5)

The main entry road passes by a scenic overlook with a view down Aliso Canyon, and turns to the northwest, where it crosses Aliso Creek and splits into two spur roads. The western spur terminates at the Hills For Everyone trailhead, and several family picnic areas are proposed along this road.

The northern spur terminates at an equestrian trailhead. Additional development in this area includes an equestrian campground and a mounted assistance patrol (volunteer) facility which may use the existing barn structure. The remaining structures will be removed, and the riparian area restored to its natural condition. Particular care should be taken in this area to avoid sub-surface disturbance of archeological site CA-SBR-5097. Sub-surface testing of this site will be conducted before development of this area. Substantial capping may be required.

Aliso Canyon (see Sheet 6 and 7)

Six small, separated campground areas are proposed along the mile and one-quarter Aliso Canyon spur road. These areas will be sited to avoid archeological site CA-SBR-5281. Additional proposed facilities include a campfire center, several family picnic areas, two trailheads, a walk-in campground, and two trail camps in Water Canyon.

The southerly trailhead marks the end of the park road/bicycle trail and the beginning of the bicycle trail which will connect to the Santa Ana River Regional Trail at the mouth of Aliso Canyon.

Santa Ana River Flat (see Sheet 8)

This area provides the southern access to the park in Riverside County, via Green River Road, north of Highway 91. Public vehicular access will be limited to the south side of the river, due to the width and nature of the flood basin. All of the proposed facilities will be located on the south side of the river.

Proposed facilities include a contact station, family picnic areas, group picnic areas, a large campground, a trailhead, and an equestrian trailhead.

Access to the north side of the river will be provided by a seasonal bridge crossing for hikers and equestrians. The north side of the river is also the site of a connecting link in the Santa Ana River Regional Trail, between Orange and Riverside Counties.

Rehabilitation of the riparian zone is also recommended for this area.

Telegraph Canyon (see Sheet 9)

This area provides the western access to the park in Orange County, via Carbon Canyon Road in the City of Brea. Public access is proposed through Orange County's Carbon Canyon Regional Park, and responsibility for operation and maintenance of the facilities is proposed to be taken over by the Orange County Parks and Recreation Department. It is proposed that an interim public accessway be provided until facility development can be implemented.

Facilities in this area include several family picnic areas, an equestrian trailhead, and a trailhead at the terminus of the entry road, just inside the mouth of Telegraph Canyon. Public vehicular access will not be allowed east of this point, in order to preserve the natural riparian habitat in the canyon. The proposed Brea-Olinda Trail will require a crossing under Carbon Canyon Road.

Rehabilitation of the riparian area along Carbon Canyon Creek and the mouth of Telegraph Creek will include removal of the existing citrus orchard, removal of naturalized exotic plants including giant reed (*Arundo donax*) and castorbean (*Ricinus communis*), and planting native shrubs and trees such as sycamore (*Platanus racemosa*), California walnut (*Juglans californica*) and willows (*Salix* sp.). Any rehabilitation work that involves grading or recontouring the stream banks will be done in conjunction with archeological and paleontological investigations, to minimize disturbance of any possible resources.

TABLE 4
FACILITY SUMMARY BY AREA

Facility	Slaughter Canyon	Upper Aliso	Aliso Canyon	Santa Ana River Flat	Telegraph Canyon
Contact Station	---1-----				-----1
Ranger Station	---1				
Service Area	---1				
Employee Housing (Trailer Pads)	---1-4-----		-----1		
Mounted Assistance Patrol Area	-----	-----1			
Visitor Center	---1				
Campfire Center	-----		-----1		
Family Picnic Areas (units)	10-15	6-9	8-12	20-30	10-15
Family Campground (units)	-----		-----180-300	100-200	
Group Picnic Areas (units)	-----			-----2	
Hike-in/Bike-in Campground (units)	3-6				
Equestrian Campground (units)	-----	-----30-50			
Walk-in Campground (units)	-----		-----2-5		
Trail Camps (units)	-----	-----3-----	-----2-----		-----2
Trailheads	---1	-----1-----	-----2-----	-----1-----	-----1
Equestrian Trailheads	-----	-----1-----		-----1-----	-----1

Trails (see Sheet 10)

Since maintenance of minimal vehicular circulation and penetration into the site was a prime consideration in development of this plan, trails play an important role in enjoyment and interpretation of the park.

One of the objectives of this trail system is to provide access to the various resources that make up Chino Hills State Park, without creating any adverse impacts.

Beyond simple access, these trails also provide recreational opportunities. Not only will avid hikers have miles of challenging trails, but less athletic walkers will be able to choose less challenging, short and level loop trails. Interpretive trails are being proposed for those who wish to learn more about the natural and cultural values of the unit. An extensive equestrian trail system has been designated to open the park to those who enjoy horseback riding. The variety of trail types and environments will result in a trail system that satisfies the widest range of needs (see Table 1). Trails will be sited to avoid all known archeological sites. Site testing may be required to avoid archeological site CH-4, adjacent to the Aliso Canyon Trail.

Utilities

Electricity is available in the park, and will be routed to the various facilities with underground lines, where possible.

Water is available from several existing wells in the park. However, the quality or quantity available may not satisfy ultimate park needs. Alternate sources which exist in and adjacent to the park should be explored before development of facilities.

Implementation Priorities

The sequence of implementing the General Plan should be based on both the benefit to existing resources and the improvement of recreation opportunities.

The following facilities are listed by phases in order of priority, from highest to lowest:

Phase I

- East Entry Road Development (Slaughter Canyon) and Existing North Entry Closure (Bane Canyon)
- Ranger Station/Contact Station
- South Orchard Campground
- Rolling M Equestrian Campground
- Mounted Assistance Patrol Facility
- Bane Canyon Trailhead
- Family Picnic Areas (Bane Canyon)
- Upper Aliso Riparian Area
- Aliso Canyon Riparian Area
- Bane Canyon Riparian Area

- Upper Aliso Equestrian Trailhead
- Raptor, Windmill, and Aliso Canyon Trail Camps
- Service Road/Stream Crossings Rehabilitation

Phase II

- West Entry Road
- Telegraph Canyon Trailhead
- Brea Equestrian Trailhead
- South Entry Road
- Santa Ana River Trailhead
- Riverside Equestrian Trailhead
- Seasonal Bridge
- Family Picnic Areas (Santa Ana River Flat)
- Telegraph Canyon and Sycamore Trail Camps
- Carbon Canyon Riparian Area
- Telegraph Canyon Riparian Area

Phase III

- Santa Ana River Regional Trail
- Chino Hills Bicycle Trail
- Aliso Canyon Trailhead
- Hills For Everyone Hike-in/Bike-in Campground
- Panorama Point Visitor Center
- Windmill and Low Bench Campgrounds
- Campfire Center

Phase IV

- Hills For Everyone Trailhead
- Water Canyon Trailhead
- Water Canyon Trail Camps and Walk-in Campground
- Upper Aliso and Aliso Canyon Family Picnic Areas
- North Orchard Campground
- River Flat Campground
- Sandbar Group Picnic Areas
- Contact Station (Santa Ana River Flat)

Phase V

- Scenic Overlooks
- High Bench and Old Orchard Campgrounds
- Family Picnic Areas (Telegraph Canyon Area)

NOTE: Trails development/rehabilitation will be scheduled as trailhead facilities are developed.

The sequence of implementation may be modified, depending on such factors as visitor needs, resource protection, and funding.

Unresolved Issues

Issue Number 1 - Slaughter Canyon Entry Road

This plan proposes establishing an entry road and trail corridor along Slaughter Canyon, from the extension of Euclid Avenue to the eastern boundary of the park. The parcels in question are privately owned. Current San Bernardino County planning calls for an extension of Euclid Avenue, to be privately developed and then dedicated as a public road. The exact timing for the housing and arterial road development in this area is under study by the county. The existing entry through Bane Canyon will continue to be used until this issue is resolved.

At this time, no determination has been made about:

- The willingness of private owners/developers to sell land or easements through their land for this major park entry.
- The availability of specific funds for the required acquisition.
- The exact timing for the housing and arterial road development.

Issue Number 2 - Telegraph Canyon Area Facilities Management

This plan proposes that the western entry to the park be routed through Orange County's Carbon Canyon Regional Park, and that facilities proposed for that area be operated and maintained by the Orange County Parks and Recreation department. This proposal has been submitted to the county for its consideration, and has received preliminary support from county staff.

At this time, no determination has been made about:

- The willingness of the Orange County Board of Supervisors to approve the assumption of this responsibility.
- The resolution of an operating agreement.

Issue Number 3 - (Resolved)

Issue Number 4 - Lakeview/Valley View Avenue Extension

Orange County has amended its Master Plan of Arterial Highways (MPAH) to eliminate several circulation routes from the Telegraph Canyon area of the state park, and to relocate the Lakeview/Valley View Avenue Extension from Telegraph Canyon to the western end of the state park, adjacent to Carbon Canyon Regional Park.

The department has concurred with the concept of the new road alignment, subject to the condition that adequate measures be implemented at the time of construction to mitigate the negative impacts.

At this time, no determination has been made about:

- A timetable for implementation of this road project.

Issue Number 5 - Soquel Canyon Road

The Orange County MPAH indicates a conceptually proposed alignment for a conceptually proposed major arterial highway through Soquel Canyon. Development of this road would affect state park lands in two locations through land takes, resource destruction, and air, noise and visual pollution. Before implementation of this project, the department should seek assurances that adequate mitigation measures will be undertaken by the county, and that a trail undercrossing to provide access to the Brea-Olinda area of the park will be provided.

At this time, no determination has been made about:

- A final route location for the road.
- A timetable for implementation of this road project.
- The county's willingness to provide adequate mitigation measures for all of the adverse impacts on the state park.

Issue Number 6 - Brea-Olinda Landfill

This plan shows a proposed state park boundary at the northwest corner of the City of Brea, which overlaps a portion of Orange County land designated as an expansion area for the Brea-Olinda Landfill. The area contains extremely steep terrain and the major north-south ridge and valley trail access ways in this portion of the state park.

The department should pursue development of an agreement with Orange County to allow the department to operate the area as a part of the state park, in order to insure adequate trail and emergency access.

At this time, no determination has been made about:

- The specific long-term county plans for the landfill area.
- The willingness of the county to enter into an agreement to allow the department to operate the area as part of the state park.

- b. Replant the disturbed area with native plant material approved by the state park Resource Ecologist.
4. Elimination of necessary access between Carbon Canyon Regional Park and Chino Hills State Park.

Mitigation:

- a. Include a vehicle and pedestrian underpass in the roadway design, on the north side of Carbon Canyon Creek.

At this time, no determination has been made about:

- A timetable for implementation of this road project.

Issue Number 5 - Soquel Canyon Road

The Orange County MPAH indicates a conceptually proposed alignment for a major arterial highway through Soquel Canyon. Development of this road would affect state park lands in two locations through land takes, resource destruction, and air, noise and visual pollution. Before implementation of this project, the department should seek assurances that adequate mitigation measures will be undertaken by the county, and that a trail undercrossing to provide access to the Brea-Olinda area of the park will be provided.

At this time, no determination has been made about:

- A timetable for implementation of this road project.
- The county's willingness to provide adequate mitigation measures for all of the adverse impacts on the state park.

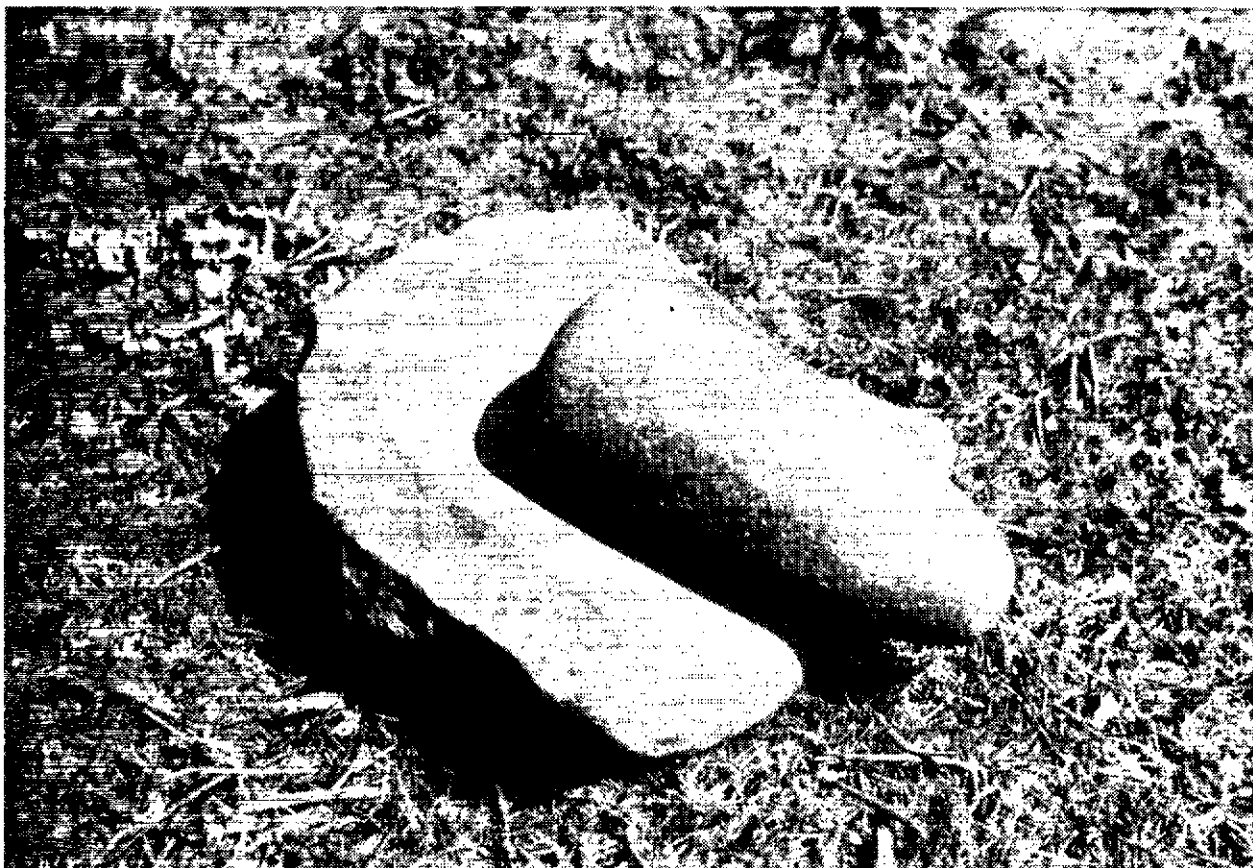
Issue Number 6 - Brea-Olinda Landfill

This plan shows a proposed state park boundary at the northwest corner of the City of Brea, which overlaps a portion of Orange County land designated as an expansion area for the Brea-Olinda Landfill. The area contains extremely steep terrain and the major north-south ridge and valley trail access ways in this portion of the state park.

The department should pursue development of an agreement with Orange County to allow the department to operate the area as a part of the state park, in order to insure adequate trail and emergency access.

At this time, no determination has been made about:

- The specific long-term county plans for the landfill area.
- The willingness of the county to enter into an agreement to allow the department to operate the area as part of the state park.



INTERPRETIVE ELEMENT

INTERPRETIVE ELEMENT

Interpretation aims at enhancing public enjoyment and benefit in the State Park System through increasing understanding of significant natural and cultural resources, and encouraging appreciation of their value. It is founded on the premise that knowledge deepens the park experience, providing lasting benefits not only to individuals but to society in general. The Interpretive Element works toward this goal by identifying park themes and a variety of facilities and programs appropriate for their presentation.

Interpretive Period

Interpretive themes encompass a "flow of history" from geologic times to the present.

Interpretive Themes

Primary Themes

A Remnant of California's Natural Past Survives

The Chino Hills are an example of the natural California landscape and environment as it existed before the urban development of the area. Urban dwellers come to them for recreation and refreshment away from city life. Native animals and plants similarly have found refuge in the park. In its various ecological zones and through the seasonal changes differentiating the dry and rainy seasons, the park confirms nature's continuing mastery in this surviving remnant of the natural California.

Natural Neighborhoods Share the Chino Hills: Visitor perceptions of the natural order are sharpened through awareness and appreciation of different ecological zones and biotic communities, ranging from mixed chaparral to well-watered creek banks.

Native Animals and Plants Find Refuge: Native animals and plants, including some rare or endangered species, find refuge in Chino Hills State Park from former habitats that are now altered or inhospitable to them because of development. Visitors should have opportunities to learn about them, and their relationships to one another in the natural environment.

A Color for Every Season: Natural influences change the look and tone of life in the park from season to season. Wildflowers in springtime come to life with bursts of color. With the gradual restoration of native environmental conditions, such displays may become increasingly evident. The hills grow rich, green grass through the rainy season, then turn straw-colored in the warm, dry months. All plants and animals conform their life rhythms to the larger rhythm of seasonal change.

Help for a Threatened Environment

The Chino Hills are relatively undisturbed only in comparison with the surrounding communities, which exemplify Southern California's explosive

growth. To adequately appreciate the park's natural values, visitors should be sensitized to the varied environmental threats and encroachments that impinge on the park: urban growth, power lines, utility easements, exotic vegetation, air, water and noise pollution, and others.

The Modern World Imperils the Chino Hills: Natural environments such as Chino Hills are more fragile than many people realize. Urban development through modern technology affords prosperity and opportunity for millions, but can have damaging impacts on natural areas. Visitors can be encouraged to appreciate the need to achieve a balance between preservation and development.

Management Works to Restore the Natural Past: The management program developed to restore Chino Hills State Park's natural environment should be interpreted to the public as a means of gaining support and cooperation. In becoming aware of such efforts, visitors heighten their own experiences in natural surroundings.

Enjoying the Chino Hills in Safety

The millions of nearby potential park users have diverse and possibly conflicting interests. An interpretive effort should be directed towards defusing problems that may arise as a result. Safe use of the park will require an informed and cooperative public.

Park Orientation: Visitors will require adequate orientation to the park's landmarks and facilities, because self-guided activities such as hiking, riding, and birding are basically unstructured, and facilities will be minimal in the park's interior.

Trail Safety and Manners: The trails dedicated for bicycle, foot, and equestrian use should be clearly distinguished from one another. Rules for the handling of horses and their permitted use should be prominently displayed. Public cooperation will be essential to minimize potential use conflicts and insure personal safety.

Fire Danger in the Dry Season: Seasonally, grassland fires pose a threat to the park. Visitor cooperation in observing fire rules can be increased through interpretation.

Secondary Themes

A Hidden World Underfoot: Geology of the Chino Hills

Natural forces shaped the topography of the Chino Hills. Their consequences in producing fossil remains and petroleum deposits are of interpretive interest.

Geological Forces Mold the Landscape: Natural forces of great power and long duration created and uplifted the sedimentary rock of which the hills are made.

Surprising Fossil Footprints: Fossils provide evidence of shellfish and other creatures who lived here in eons past, under very different environmental conditions. We learn the history of the earth by reading them.

The Earth Hides Black Gold: In the late 19th and early 20th centuries, the area surrounding the park proved to be a productive source of oil. The same geologic forces that made the hills also account for the presence of petroleum.

A Landscape Touched Lightly by People

In the past, the Chino Hills have been used by people as a physical resource in two ways: Native Americans hunted and gathered food, and Europeans and Americans grazed livestock.

A Harvest Ground for Native Americans: Native Americans whose permanent villages were probably along the Santa Ana River periodically hunted and gathered foods and plant materials in the Chino Hills. Through long experiment and experience, they achieved masterful knowledge of such resources, making of the hills a veritable supermarket whose goods are mostly unnoticed by visitors.

Two Centuries of Cattle Grazing: The mission cattle roamed freely in Southern California, including the Chino Hills. Continued into the 20th century by American entrepreneurs, cattle grazing left a mark on the landscape through fencing, artificial ponds, vegetation changes, and the building of a ranch headquarters for the Rolling M Ranch.

Visitor Activities

Facilities

Visitor Center: A modest, unobtrusive visitor center appropriate to its natural setting can offer visitors an initial interpretive experience. Its exhibits may include photographic essays on seasonal change, a topographic model of park geologic formations, the cattle grazing and management goals stories, and the continuing environmental threats posed by urban and industrial encroachment.

Bookshop: Located in the visitor center and staffed by volunteers, a book sales counter would make detailed information and guides available to the public, describing the area's natural resources and history.

Interpretive Nature Trails: Several such trails should be established through the full variety of the park's ecological zones. Information on birding and such plant resources as the California Walnut and wildflowers should be included. Self-guiding nature trails should be looped, and distinct from hiking and riding trails. Accommodations for disabled visitors should be designed into these trails, including wheelchair access where feasible, and provision for the visually impaired.

Scenic Overlooks: San Juan Hill, Gilman Peak, and Panorama Point should be developed as scenic overlooks from which visitors can survey the surrounding hills, experience the feel of open, undeveloped park space, and gain a perspective on the landscape contiguous to the park property.

Panels: A variety of panels would be useful in presenting interpretation. These would include orientation panels at park entrances, containing maps and regulations; low-profile panels at scenic overlooks to identify landmarks and the location of urban areas hidden from view, interpret geology, and note seasonal changes; informational panels at comfort stations locating water sources and other comfort stations; trailhead panels identifying permitted uses and notable features along the trails; campground and picnic area panels interpreting the fire danger; interpretive trail signage for both Nature and Native American Resources Trails; moveable panels to be installed at the site of management activities relating to parkland restoration or exotic vegetation control efforts; and Santa Ana River access point panels dealing with the effects of water pollution.

Native American Resources Trail: A special interpretive trail aimed primarily at school group use should be created to introduce visitors to plants the Native Americans traditionally used as food and fibre sources. This may entail transplanting of suitable specimens if not naturally occurring.

Brochures: A variety of inexpensive brochures should be available at either dispensing machines or the visitor center sales counter, to enhance self-guided tours. Specific needs include: birding, orientation, nature trails, wildflower identification, park wildlife, and braille brochures for visually handicapped persons.

Campfire Center: Located at overnight camping facilities, the campfire center should be equipped with electrical service for operation of projection and audio equipment by park personnel.

Services

Campfire Programs: These will provide a primary setting for ranger-visitor interpretive contacts. Audio-visual programs should be used to address such subjects as fire prevention, birding, the park's ecological zones, rare and endangered species of plants and animals, and wildflowers.

Guided Nature Walks: Guided tours led by rangers and docents would enhance the value of the interpretive trails. This is particularly true of school groups using the Native American Resources Trail, where tour guides can supervise and monitor the touching, smelling, and tasting of plants.

School Outreach: Volunteers and park personnel should develop contacts with surrounding school districts to encourage and coordinate use of the park in conjunction with social studies and science curricula. The Native American Resources and Nature Trails, as well as the visitor center exhibits, are very likely to be of high interest to area teachers as supplements to classroom activities.

Personal Contacts: Informal contact between park personnel and visitors may provide important opportunities for interpretation. Such contacts are especially valuable because visitor activities at the park are largely unstructured. Campground contacts may be used to discuss fire hazards, seasonal park features, and park rules. Crews involved in prescribed burnings and exotic plant removal may discuss these activities with onlooking visitors.

Interpretive Development Recommendations

Priorities

Post orientation maps and park rules at entrances, comfort stations, trailheads, and campgrounds.

Organize a cooperating association, and train volunteers and docents. A corps of interested and knowledgeable area residents, familiar with the park and its resources, already exists, and should form the basis for such an organization.

Cultivate contacts with surrounding school districts to encourage and channel use of the park as an enrichment source for established curricula.

Develop nature trails for self-guided use, including access for disabled and visually impaired visitors.

Develop the Native American Resources Trail, aimed at school group use.

Produce natural history brochures covering birding and park plants and animals.

Produce Native American Resources Trail brochure for self-guided tour use.

Develop campfire slide programs treating primary themes.

Produce and install interpretive panels at scenic overlooks, picnic facilities, campgrounds, trailheads, and for temporary installation at sites where environmental management programs are actively pursued.

Construct visitor center, and install exhibits.

Collections

Chino Hills State Park has two potential collections needs: natural and Native American. Some half-dozen pieces of old farm equipment, donated to Hills for Everyone in 1982, are housed at the Rolling M Ranch headquarters. They are not encompassed by the interpretive themes, and should be removed from the park.

Natural: Specimens of park plants and animals should be collected in anticipation of visitor center exhibit needs, and in conjunction with the Native American Resources Trail program. Fossils found in future investigations may also be useful in the visitor center.

Native American: Milling stones and other artifacts recovered by
archeological excavations in the park should be considered for eventual
display in the visitor center.

A-2739L



CONCESSIONS ELEMENT



CHINO HILLS STATE PARK

CONCESSIONS ELEMENT

This Concession Element consists of an evaluation of existing concession activities, the potential for additional visitor services and revenues, and appropriate concession policies and guidelines consistent with the unit's classification.

Under legislation effective September 1982, a concessions element is required in the General Plan, in support for future concessions considerations. The Public Resources Code, Section 5080.02 et seq., describes the manner in which concessions can be operated in the State Park System.

Definition

A concession is a general term for a grant of authority by the department to another party, permitting that party to make specific use of park lands and/or facilities for a specified period of time. The intent of the grant is to permit the second party to provide the public with goods, services, or facilities which the department cannot provide as conveniently or efficiently, or to permit the second party to make limited uses of park lands for its own purposes, when such uses are not incompatible with the public interest.

Purpose

It is the department's policy to enter into concession contracts for provision of products, facilities, programs, and management and visitor services which will provide for enhancement of visitor use and enjoyment, as well as visitor safety and convenience. Such concessions should not create added financial burden on the state, and wherever possible, shall either reduce costs or generate revenues that aid in maintaining and expanding the State Park System. In carrying out this policy, the department must observe and adhere to the provisions of the Public Resources Code that forbid commercial exploitation of resources in units of the State Park System, and that limit the kinds of improvements and activities that are allowed in certain types of units.

Compatibility With Classification

Concession developments, programs, or services must be compatible with a unit's classification and general plan provisions. Department policy recognizes that a wider variety, size, or type of concessions may be permissible in units classified as state recreation areas, state vehicular recreation areas, or state beaches than in units where the management purpose is primarily historic or natural feature preservation and interpretation.

Current Conditions

There are no current concession operations in Chino Hills State Park.

Proposed Concessions

No specific proposals for concession operation are being made in this General Plan.

Potential Future Concessions

Due to the isolated nature of the facilities being proposed for the Santa Ana River Flat, management should consider the possibility of administering this area through a concession contract. Possible concession facilities include a 100-200 unit campground, two group picnic areas, and 20-30 family picnic units.



OPERATIONS ELEMENT



CHINO HILLS STATE PARK

OPERATIONS ELEMENT

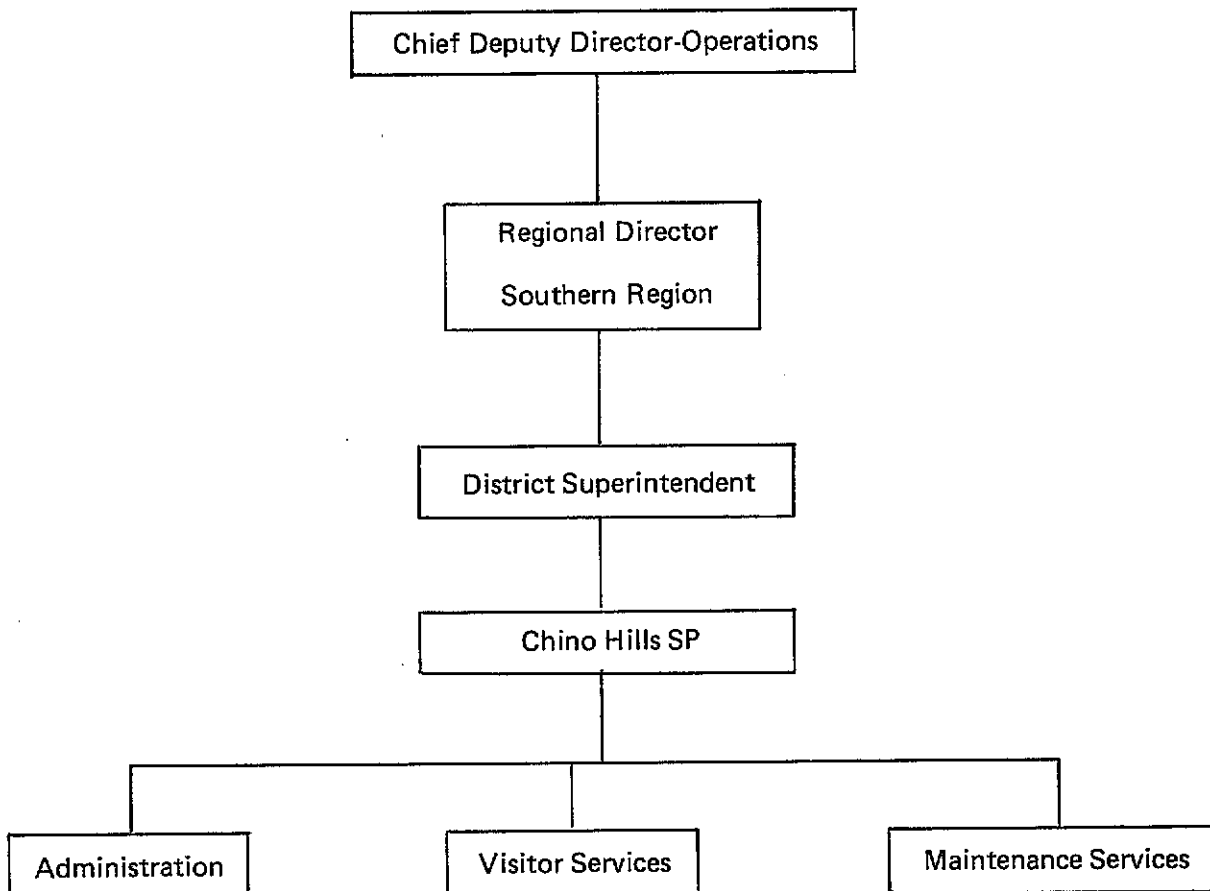
This element defines how the operations staff will carry out its responsibilities to operate the park and maintain its facilities; protect the resources; serve park visitors and provide interpretation; enforce the law and ensure proper park use; and implement statewide standards for maintenance, safety, equipment management, signing, communications, and law enforcement.

The Operations Element outlines broad operational goals for the unit, and objectives for implementing the General Plan. It assesses the impact of the General Plan's resource management policies and land use/facilities proposals on the unit's existing operations. It identifies existing or potential operations problems, and strategies for solving them.

The operational responsibilities are carried out by personnel at the unit level, who are supervised by a district superintendent who reports to one of five regional directors.

At the unit level, operating functions are divided into the visitor services, maintenance services, and administrative services functions.

**TABLE 5
PARK OPERATIONS ORGANIZATIONAL STRUCTURE (1986)**



Existing Operation

Operations Summary

Before initial state staffing being made available in July 1974, Chino Hills State Park was operated and managed through an agreement with Hills For Everyone (HFE). Hills For Everyone's operation consisted of an on-site volunteer caretaker and several volunteer organizations. Through this composite organization, HFE was able to provide for weekend use of the park for both day use and camping.

With initial state staffing (1.5 person-years), the park has continued on a year around basis to be open on weekends and holidays. However, camping has not been made available as much as in the past. This reduction in camping is a result of two factors: (1) implementation of State Park System quality standards; (2) the reluctance of local volunteer organizations to continue as they had in the past.

With the 1985-86 fiscal year, the park will be a fully functional State Park System unit, complete with management, clerical, maintenance, and enforcement capability. The existing park staff is currently in the process of developing and training a volunteer mounted assistance patrol unit (MAU). The MAU will greatly extend the professional staff's ability to provide for resource protection and visitor safety, interpretive, and informational needs.

Chino Hills State Park is in the Chino Hills District, which receives guidance and logistical support from the Los Lagos District, and will probably continue to do so into the foreseeable future.

Special Considerations

Chino Hills State Park is an island, a 10,000-acre vestige of what California was once like, surrounded by an urban sea. Within this setting, park staff members will be forced to resolve two major issues: (1) they will have to resolve the clash between recreational needs and the natural system's ability to absorb these needs; (2) they will be faced with the resolution of community social problems that will spill over into the park. The management of Chino Hills State Park will require that the region and park staff remain constantly alert to the intense urban concentrations surrounding the park, the user demands that these urban concentrations will create, and the unquestionably fragile nature of the park's resources.

Jurisdictions

The park encompasses three counties, with each having its own set of zoning standards, fire, police, ambulance, health interpretations and courts, etc. To avoid misunderstandings and conflicts that could occur when dealing with these problems, the district superintendent will have to carefully coordinate each function to meet the concerns and requirements of the agencies affected.

Easements and Rights-of-Way:

As a further complicating factor, the park is bisected by utility easements and access rights-of-way. The access needs of these utilities will have to be carefully coordinated and controlled to prevent destruction of resource values and possible disruption of visitor activities.

Community Interest:

Chino Hills State Park is supported by a strong, and at times vocal, public group. Hills for Everyone and several other groups worked very hard to develop legislative and local support for the park, and, as a result, have a very strong proprietary interest in the park. The district superintendent should endeavor to keep them fully informed of administrative decisions which affect park operations.

Grazing:

Boundary fencing will continue to be a maintenance problem for the next few years. Until local community specific plans are concluded and housing is developed around the perimeters of the park, fencing will have to be maintained to preclude cattle from entering the park. Management must recognize that the shift from agricultural to residential land uses will require a corresponding reallocation of staff from maintenance to visitor services activities.

Enforcement:

The factors previously discussed in this element, such as population density and its proximity to the park and local law enforcement jurisdictional complexities, will require a highly visible park law enforcement presence, and greater staff expertise and management involvement.

Residential communities bordering the park will require that the park law enforcement staff continue to carefully monitor park boundaries for trespass, off-highway vehicular use, fire hazards, trash dumping, and feral animals. It will be imperative that the park's personnel remain personally involved in the adjacent communities, and that volunteers be recruited from these areas.

Off-Highway Vehicles:

Off-highway vehicles will continue to be a problem for the park. It is recommended that access routes be blocked, that signs be posted at all entrance locations, and that enforcement staff take strict enforcement action.

Animal Control:

Dogs, loose or in the company of hikers, will be a continuing enforcement problem. It is recommended that, as for off-highway vehicles, signs be posted at entrance points, and strict enforcement actions be taken. Feral animals will become an ever-increasing resource problem. A coordinated program should be worked out with the three affected counties.

Hunting:

Shooting and hunting have not been significant problems thus far, however, as urbanization surrounds the park, uninformed children and adults could create serious problems.

Procedures and policies will have to be developed to meet the requirements of the three county court and law enforcement systems having jurisdiction in the park.

Emergency Preparation:

The safety of the visitors, staff, and facilities of Chino Hills State Park is a prime concern. Outlined below are a few of the key emergency elements that will have to be introduced in the unit safety plan.

Steps are currently in progress to develop a wildfire suppression plan for the park. In addition to this plan, the following will have to be addressed:

- A plan to locate and remove visitors from the path of a wildfire.
- Overall coordination of the three or more local agencies having wildfire jurisdiction in the park.
- Identification and development of alternative evacuation routes.
- Identification and development of "Fire Safe Zones".
- The need to construct emergency water sources in the park.
- A plan to protect park and private facilities.
- Development of programs to prevent urban-originated fires from entering the park, and park fires from exiting the park.
- Institution of appropriate "no fires" or closure orders.

Utility Emergencies

There is an ever-present danger of power or gas transmission system failure, through natural causes, vandalism, or aircraft accident. The park will need to develop emergency procedures to notify the affected utility, and to remove visitors from the danger area.

Visitor Accidents

Because of the multitude of jurisdictions, life-saving emergency response agency identification will be a problem. The staff will have to coordinate a pre-accident plan with the serving agencies.

Correctional Emergencies

Emergency notification procedures will have to be developed with the adjacent state correctional institutions that will maximize the safety of staff and visitors.

General Plan Implementation

Goals and Objectives

Chino Hills State Park was established to preserve for the people of California a part of their once abundant California landscape, and to provide for public use, enjoyment, and understanding of the park.

Operational Problems and Solutions

The extensive list of special considerations (page 80) includes problems undergoing current resolution. As developments and facilities evolve and public visitation increases, each of these factors will become significantly more important (see TABLE 6).

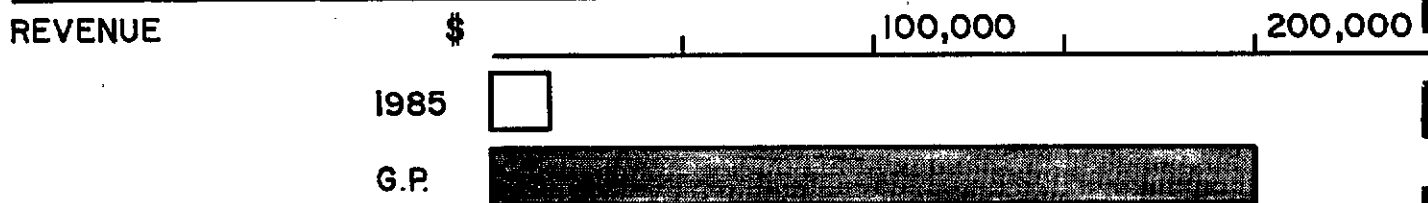
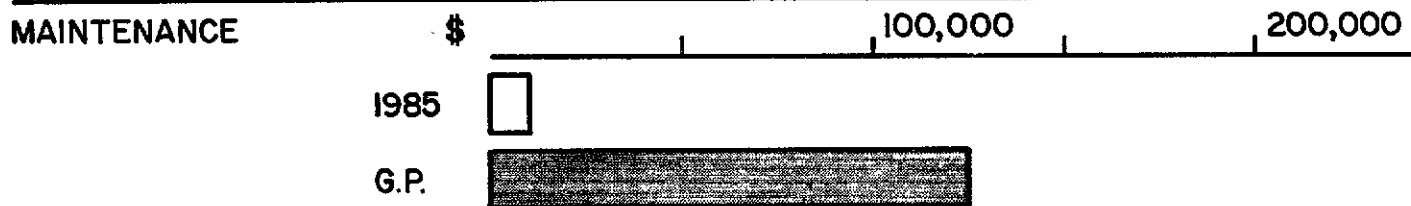
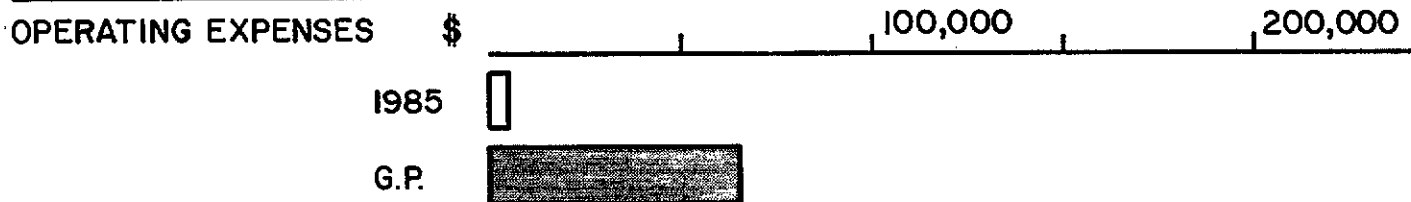
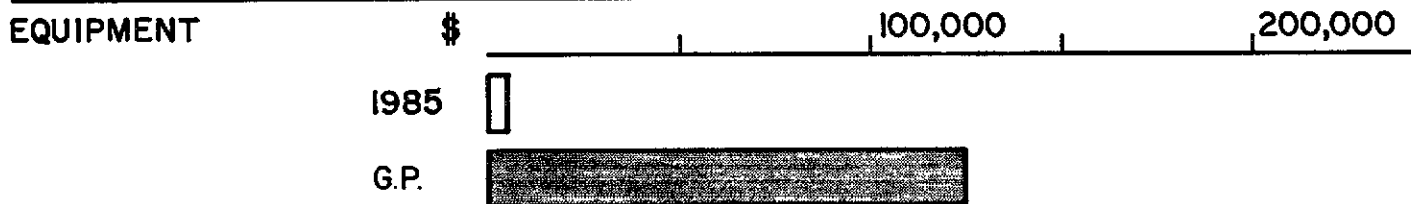
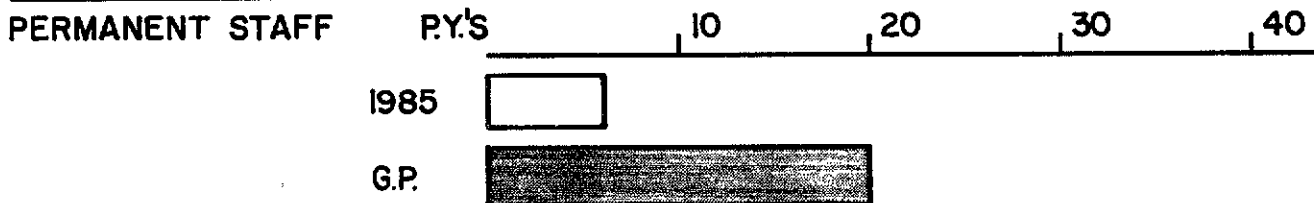
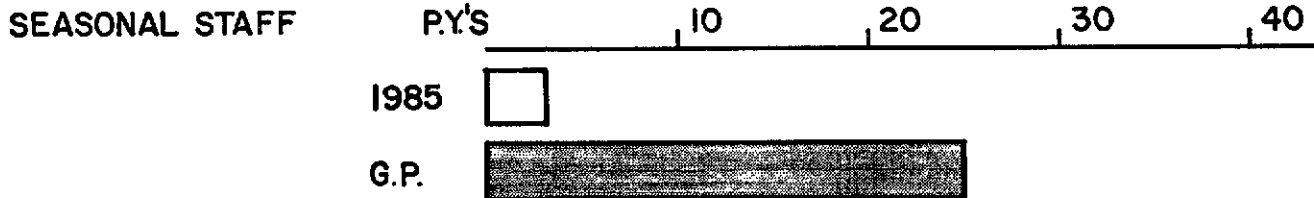
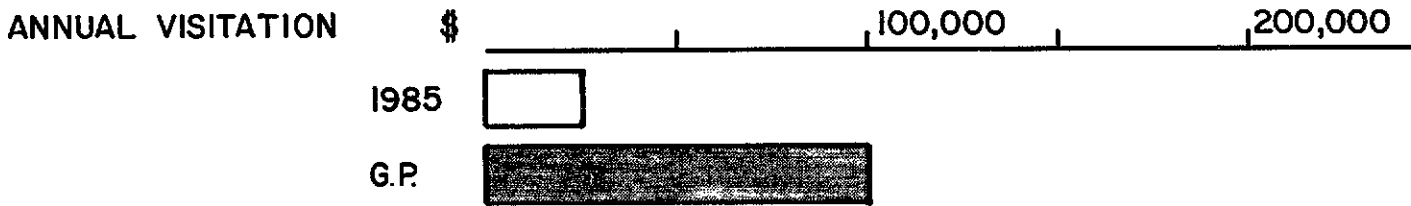
Maintenance

The numbers and kinds of facilities, both public and administrative have been documented elsewhere in this plan. The lifespan of public facilities is directly related to the quality of the facility and the maintenance provided. The experiences gained at Lake Perris, Cuyamaca Rancho, and other Southern Region units has shown conclusively that when quality facilities and maintenance are provided, destructive vandalism, for whatever reason, is minimal. Recognizing that staff availability is never going to meet the park's total maintenance requirements, we must guard against design and development of public use facilities which are difficult or costly to maintain. When considering the cost of maintaining a structure over its useable lifetime, the cost of development is insignificant, and should not be used as the determining criterion.

Telegraph Canyon Development

Day use and equestrian facilities are planned for this sector of the park. This development will be located approximately 15 miles from the park's major development, and will be accessible for maintenance purposes only by highway. It is proposed that Orange County operate this facility as part of its Carbon Canyon Regional Park. In the event that Orange County declines to operate this area, the facilities should be designed for minimum maintenance and maximum (mechanical) control, with lockable one-way roadways and gates.

TABLE 6
OPERATIONAL IMPACTS



Santa Ana River Flat Development

Day-use and overnight facilities are proposed for the south side of the river. These facilities will be accessible to the public from Highway 91. DPR maintenance, administrative, and visitor services staff will have access from the interior of the park via the Chino Hills Bicycle Trail during that period of the year when the proposed seasonal bridge is in place (estimated at 8 months each year).

From an operational point of view, this area, like the Telegraph Canyon area, will be expensive to operate. It will require a separate entrance, a separate contact station and satellite maintenance facilities; it will involve extensive travel time for visitor services and maintenance personnel to provide basic services to the public.

Inasmuch as a public road through Aliso Canyon has been determined inappropriate due to resource considerations, there appears to be no alternative. It should be noted that implementation priorities for these facilities are reasonably low, and this will allow time to consider alternative means of operations, such as an operating agreement with Riverside County or a concession contract with a private organization.

Trails

Both equestrian and hiking use will constitute a major park maintenance item. Trails should not be permitted to simply evolve; they should be carefully planned and constructed for minimum maintenance and the use they were intended to serve. District management will have to recognize this need in its allocation of personnel, budgets, and volunteer programs.

Resource Management

Natural resource restoration and management will be a major function of the staff at Chino Hills State Park. The Resource Element of this plan identifies several major resource management projects and programs which are needed to meet our responsibilities for management, as set forth in the Public Resources Code. Exotic species control, restoration of natural fire cycles, fire suppression planning, riparian system restoration, erosion control, rare and endangered species management, fisheries management, and walnut and oak woodland management are some of the most important programs. A major challenge will be for management to secure adequate staff support to administer these programs. Cultural resource management will also be a significant element of operation of Chino Hills State Park. Archeological sites have been identified in the park, as well as many isolated archeological and historic artifacts. Protecting these resources, and educating the public and staff to the sensitive and non-renewable nature of cultural resources, will be a continuing challenge for management.

Political Concerns

The physical description of Chino Hills State Park has been covered elsewhere in this plan. However, there are political and urban elements of the park's physical location that if not carefully monitored and coordinated, will adversely affect the park.

Chino Hills State Park is located in Riverside, San Bernardino, and Orange Counties. In each of these counties there is at least one county supervisor, and two or more (8 total) state legislators, who look on Chino Hills with pride as their personal contribution to their constituents. Memories of why the land was acquired for a state park are short, and there is a real danger in the adjacent communities looking on the park not for its unique State Park values, but as land that can be used to solve local problems. To minimize this potential danger, management will have to give a high priority to political liaison and community involvement programs.

Volunteerism

Mounted Assistance Patrol Unit

This resource and visitor safety volunteer organization has been formed, but has yet to become functional, due to the lack of a viable communications system in the park.

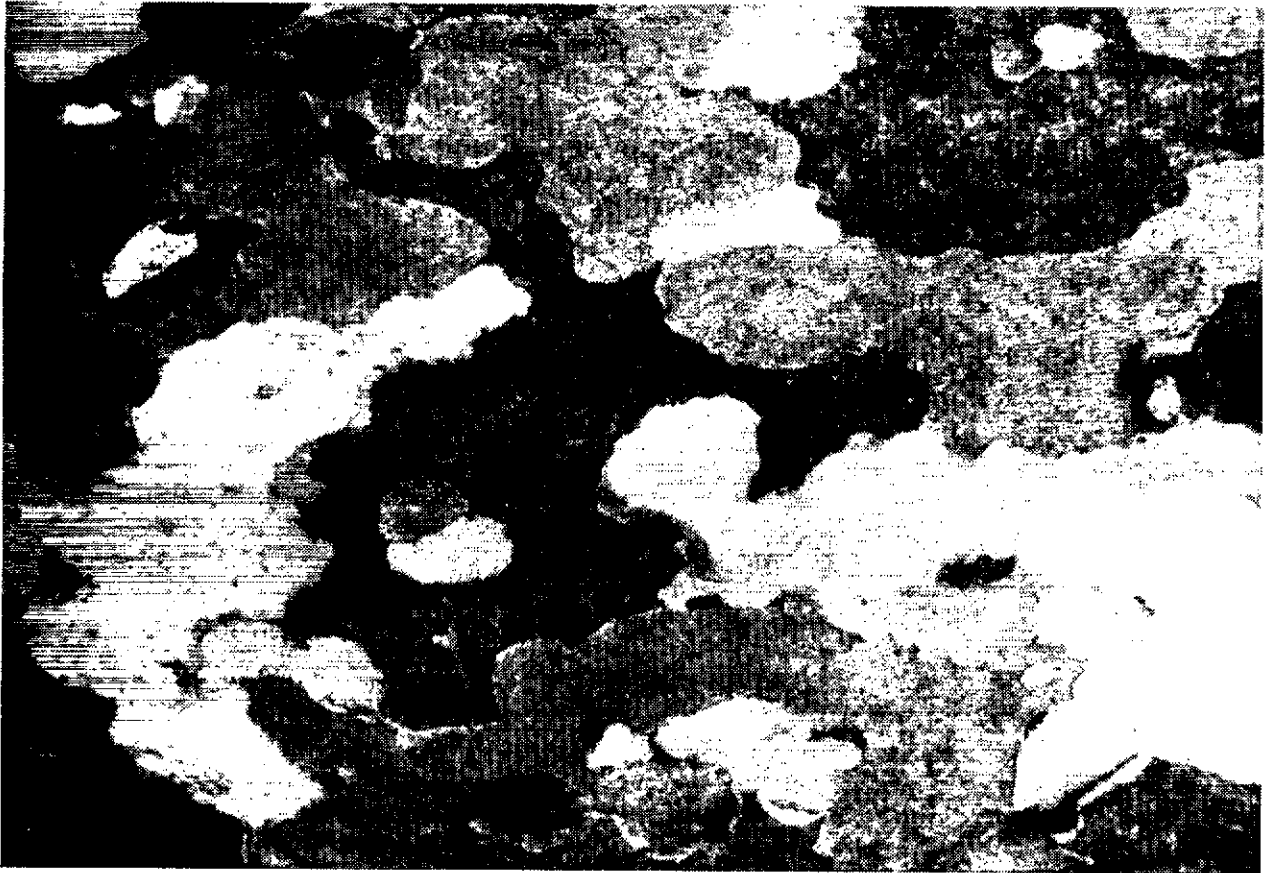
Docent Interpretive Organization

With development of the unit's interpretive center, campgrounds, and interpretive trails and displays will come a requirement for enhanced interpretation. This need, along with the schools and educational institution requirement for specialized interpretive programs, will require that a volunteer program be developed to enhance the park's interpretive capabilities.

Using the park's existing MAU unit as a catalyst, one of the park's initial priorities will be development of a volunteer natural history interpretive association.

Camp Host Program

The department's Camp Host Program has been effective in reducing campground vandalism and adverse activities, thereby releasing both maintenance and ranger personnel for more critical park problems. On completion of the campgrounds, a camp host program will be instituted.



ENVIRONMENTAL IMPACT ELEMENT



ENVIRONMENTAL IMPACT ELEMENT

The Environmental Impact Element serves as the environmental impact report required by the California Environmental Quality Act and state EIR guidelines.

The Environmental Impact Element incorporates by reference the other elements of the General Plan as the project description and description of the existing environment. It should be recognized that the level of detail of the Environmental Impact Element is similar to that of the General Plan. As site-specific development plans are proposed, they will be subject to further environmental review and on-site checks, and the appropriate environmental documents will be prepared, if necessary.

This Environmental Impact Element covers resource management and protection, land use and facilities, interpretation, concessions, and operations for the entire unit.

Project Description

See the Resource, Land Use and Facilities, Interpretation, and Concession Elements.

Description of the Existing Environment

See the Resource and Land Use and Facilities Elements.

Significant Environmental Effects

Given the nature of the site and the proposed development -- a relatively undeveloped site in the middle of a highly developed urban region, and nonintensive development generally designed within the geological and biological constraints of the site or to protect the historic or prehistoric resources -- impacts may be considered significant in the view of the quality of the site, and the goal of the department to preserve and protect the resources.

1. Development of user facilities will encourage increased use. Indirect impacts are soil erosion, vegetation loss, disruption or disturbance of wildlife, vandalism, and accidental destruction of cultural resources. Soil erosion may decrease as recreational use replaces grazing and allows establishment of more vegetative cover, and erosion control structures are developed.
2. Direct impacts of construction are noise generation from construction equipment, fuel consumption, air pollution generation, soil erosion, soil compaction, and loss of vegetation. Noise generation and air pollution are temporary impacts. There are no sensitive facilities nearby, such as schools or hospitals. Grading will be limited to development of visitor use areas and maintenance and upgrading of existing roads. Erosion of disturbed areas in Aliso Canyon and the subsequent increase in sediment load in Aliso Creek could adversely affect the fish habitat.

3. The landslide hazard may be increased through development of trails and increased exposure to the population.
4. Development in Aliso Canyon may contribute to degradation of the habitat for native fish of the Santa Ana River. Aliso Creek supports one of the few remaining populations of the native arroyo chub in the Santa Ana River basin, below Prado Dam. The Santa Ana sucker and the speckled dace may also use Aliso Creek. Water quality could be degraded by restroom leachfields, accelerated sedimentation, and petroleum-polluted runoff from impervious surface areas such as roads or parking lots.
5. Extensive public use may displace or disturb the use of Chino Hills by the five state and federally listed rare and endangered species that may occur in the unit. The five species, all birds, are the southern bald eagle, American peregrine falcon, least Bell's vireo, California yellow-billed cuckoo, and Swainson's hawk. The southwestern pond turtle and the red-legged frog, species of state concern, may also be affected by development and increased use of the park.
6. The increase of visitors would increase the fire hazard. About 90 percent of California's forest fires are human-caused, intentionally or accidentally.

Unavoidable Environmental Effects

The more adverse effects of the proposed developments have been mitigated by land use limitations or facilities locations, or can be mitigated during planning of site specific development plans.

1. Removal of vegetation, construction and maintenance of roads and trails, and creation of impervious surface areas will accelerate soil erosion in those disturbed areas.
2. Indirect impacts of increased use are unavoidable, although they may be reduced. Monitoring of sensitive or critical resources by staff, and implementation of resource protection programs, may be adequate mitigation.

Mitigation Measures

1. All excavation proposals will be reviewed by the department's Cultural Resource Section. Excavations or ground disturbances in culturally sensitive areas will be monitored by a department archeologist or historian.
2. New utility lines, where they could be visual intrusion, will be installed underground, if possible.

3. Facilities will be sited to reduce vegetation loss. Development has generally been proposed where the land and native vegetation has been previously disturbed.
4. The department will develop a fire management plan, in cooperation with local fire protection agencies. The department will also develop a prescribed burning program, to reduce excessive fuel accumulations, and to manage exotic vegetation. During periods of extreme fire hazard, certain uses or activities, such as campfires, may be curtailed.
5. Trail alignments have generally followed canyon bottoms and ridge tops, to avoid the highly erodible steep canyon sides. The campgrounds and trailheads have been located in flat areas for the same reason.
6. Erosion and sediment control structures may be required to reduce the impacts of development to Aliso Creek.

Alternatives

No Project Alternative

The no project alternative would leave development at its current level. Minor development would continue to maintain or upgrade existing facilities. Certain problems would continue; access and use would be limited; sensitive areas may be damaged when there are no designated use areas; and volunteer trails in unsuitable alignments would accelerate soil erosion.

Increased or Decreased Development

The alternatives of less or more intensive development are not ruled out with adoption of the General Plan. The General Plan is only a guideline for development. Additional or more intensive development may be possible to a minor degree within the environmental constraints and General Plan guidelines, to meet increased recreational demands. Conversely, in preparation of site development plans, previously unknown environmental constraints may require less intensive development.

Relationship Between the Short-term Uses and the Maintenance or Enhancement of Long-term Productivity

The proposed long-term and short-term use is preservation and recreation. The resources will be protected, and should another use prove more beneficial to the public than preservation, the resources will be available. There is no intent to enhance the potential productivity; the natural resource value may be improved through resource management programs such as native plant revegetation and watershed rehabilitation.

The state park lies in or near five producing oil fields. Protection of any existing or abandoned oil wells will be coordinated with the Division of Oil

and Gas. Development and operation of the unit should not interfere with oil and gas extraction in the area. New development of oil wells in the unit would not be permitted in accordance with Public Resources Code Section 5001.65, unless easements or rights-of-ways for oil exploration and development were transferred with the properties when acquired by the state.

Irreversible Environmental Changes

No new land areas or natural resources will be irreversibly committed with the implementation of the plan. Development proposals generally involve areas of previous impact or suitability for development, and the nature of the development is such that it could be removed, and sites returned to a near pre-development condition. Only the building materials and the energy consumed in construction, operation, and maintenance may be considered an irreversible commitment of resources.

Growth-Inducing Impacts

There will be a minor growth-inducing impact due to the increased recreational capacity and staffing. The increased recreational capacity may influence demand for support facilities such as service stations, grocery stores, restaurants, and sports equipment outlets. However, the impact is not expected to be significant. The potential increase in use relative to the existing regional supply of visitor support facilities is relatively small. The demands created by staff increases would be typical of residential needs (schools, hospitals, etc.), and would be minor.

Effects Found Not Significant

1. The proposed development will create new impervious surface areas, which will alter the rate and timing of runoff. However, in comparison to the total watershed area, the increase is not significant.
2. Air quality, noise, and traffic impacts resulting from the increased use of the unit were not considered significant.

There are no sensitive facilities (schools, hospitals, residential areas) in the immediate area which would be affected.

3. Sewage and waste production, water consumption, and fuel consumption will rise proportionally with public use. However, there may be no regional change; the majority of the users will come from the Los Angeles metropolitan area. Nitrogen loading of the groundwater will be reduced by reduction of animal wastes, but increased by septic tank seepage.
4. No development is proposed in wetland or riparian areas, other than road and trail crossings. Removal of grazing from these areas should improve habitat values for wildlife.
5. There should be a net reduction in soil erosion, although there may be a temporary increase during construction, causing significant impacts to specific sensitive habitats.

COMMENTS AND RESPONSE
TO COMMENTS
CHINO HILLS STATE PARK
PRELIMINARY GENERAL PLAN

OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

March 21, 1986

James M. Doyle
CA. Dept. of Parks & Recreation
1416 9th Street
Sacramento, CA. 95814Subject: General Plan - Chino Hills State Park
SCH# 85070306

Dear Mr. Doyle:

The State Clearinghouse submitted the above named draft Environmental Impact Report (EIR) to selected state agencies for review. The review period is closed and the comments of the individual agency(ies) is(are) enclosed. Also, on the enclosed Notice of Completion, the Clearinghouse has checked which agencies have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the package is not in order, please notify the State Clearinghouse immediately. Your eight digit State Clearinghouse number should be used so that we may reply promptly.

Please note that recent legislation requires that a responsible agency or other public agency shall only make substantive comments on a project which are within the area of the agency's expertise or which relate to activities which that agency must carry out or approve. (AB 2583, Ch. 1514, Stats. 1984.)

These comments are forwarded for your use in preparing your final EIR. If you need more information or clarification, we suggest you contact the commenting agency at your earliest convenience.

Please contact Peggy Osborn at 916/445-0613 if you have any questions regarding the environmental review process.

Sincerely,

A handwritten signature in cursive script, appearing to read "John B. Chanian".

John B. Chanian
Chief Deputy Director
Office of Planning and Research

cc: Resources Agency

Enclosures

Memorandum

To : State Clearinghouse
Office of Planning & Research
1400 10th Street
Sacramento, CA 95814

Date: March 14, 1986

File : 08-SBd-71-8.424

SCH# 85070306

Attention Peggy Osborn

From : DEPARTMENT OF TRANSPORTATION
District 8

Subject: DEIR - General Plan - Chino Hills State Park

We have reviewed the above-referenced document and request consideration of the following:

1 [o On page 92 it states that traffic impacts "were not considered significant." This is incorrect. Any increase in traffic generation in the Chino Hills area is significant and could have severe adverse traffic impact on the already overloaded transportation system. The report should address these traffic impacts.

2 [o Page D2-13 of the Chino Specific Plan states that Soquel Canyon Road will be expanded and constructed as a six-lane major arterial and scenic corridor. It is imperative to have an alternate routing to existing Route 142 to accommodate other planned growth, and this report should consider the cumulative effect of continued developments. Any measure necessary to mitigate the cumulative impact of traffic is to be considered.

3 [o The Euclid Avenue improvement on Route 71 is subject to approval in the environmental process. No funding has been programmed.

Should any work be required within State highway right of way, Caltrans would be a responsible agency and may require that certain mitigation measures be provided as a condition of permit issuance.

If you have any questions, please contact Marie J. Petry at (714) 383-4541.

G. G. Visbal
GUY G. VISBAL
Chief, Transportation Planning
Branch A

MP:mb

cc: FDHusum, Plan Coordination Unit, DOTP
File (2)
RBrown
WBrisley
RWAustin
SNDavies

RECEIVED
MAR 19 1986
State Clearinghouse



United States Department of the Interior

FISH AND WILDLIFE SERVICE
LAGUNA NIGUEL FIELD OFFICE
24000 Avila Road
Laguna Niguel, California 92656

March 11, 1986

James M. Doyle, Supervisor
Environmental Review Section
Department of Parks and Recreation
P.O. Box 2390
Sacramento, California 95811

Re: Preliminary General Plan, Chino Hills State Park

Dear Mr. Doyle:

4 [The Fish and Wildlife Service (FWS) has briefly reviewed the above referenced plan for Chino Hills State Park. The document provides a discussion of proposed resource management policies for the park, identification of potential uses and facilities consistent with these policies, and an environmental impact element.

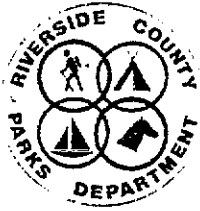
Time constraints do not permit us to provide you with a detailed review of this document. However, we wish to commend your agency on a plan which appears to be highly sensitive to the wildlife resources of the Chino Hills. Our interest in this area continues, and we would like to review more specific plans for implementation of the proposed facilities.

If you have any questions regarding our comments, please contact Mary Jo Elpers or me at (714) 643-4270.

Sincerely yours,

Nancy M. Kaufman
Project Leader

COMMENTS RECEIVED AFTER CLOSE OF REVIEW



COUNTY OF RIVERSIDE
PARKS DEPARTMENT

4600 Crestmore Road, P.O. Box 3507, Riverside, CA 92519 • (714) 787-2551

PAUL D. ROMERO
Director

March 19, 1986

Mr. James M. Doyle, Supervisor
Environmental Review Section
State of California
Department of Parks and Recreation
Post Office Box 2390
Sacramento, CA 95811

Dear Mr. Doyle:

General Plan, Chino Hills State Park

Riverside County Parks Department welcomes the opportunity to work with you and your staff in the preparation of the Chino Hills State Park General Plan. In that endeavor, we would like to offer the following for your consideration in preparation of the plan.

Recreation Trails

The Parks Department has existing recreational trails along the Santa Ana River and Prado Basin area that are currently being revised and incorporated into the Comprehensive General Plan of Riverside County. These trails will provide a vital link between San Bernardino, Riverside and Orange counties. As your study progresses, we would like you to consider the following concerns in these areas.

1. The County Parks Department has planned trails north of Prado Dam in the areas shown in Exhibit "A." The Rincon Trail, a spur of the Santa Ana River Trails, runs south on the eastern side of the Corona Expressway (71 freeway) and then passes under the highway via a future undercrossing as proposed by Caltrans. On the western side of the highway, the Parks Department would like to see this trail extended and interconnected with the Chino Hills State Park trail system. The proposed trail addition and approximate alignment is shown on Exhibit "A".
2. Sections of the Santa Ana River trail in Riverside and San Bernardino counties currently have National Recreation Trail Status. Future plans call for the entire Santa Ana River trail system to be eligible for national status. This would include the proposed section of trail running through the Santa Ana River flat area. The Parks Department would like state parks to apply for National Recreation Trail Status for the portion of the Santa Ana River trail located in the park after the park and trail have been established.

Riverside County Parks Department Property

The Riverside County Parks Department owns a 26-acre parcel of land adjacent to Chino Hills State Park. This parcel is located within the proposed Santa Ana River flat area of Chino Hills State Park (as shown on Exhibit B). The proposed facilities map (sheet 8) of the Chino Hills State Park General Plan indicates a proposed access road and picnic area on this property. In an effort to enhance agency management in the Santa Ana River flat area, the Parks Department would consider conveyance of the 26-acre parcel to the Chino Hills State Park. The addition of this property to Chino Hills State Park would give the park additional access to the Santa Ana River Area.

Additional information related to trail routes and development standards can be obtained from this department. We are looking forward to working within this area, as we do have many concerns. Please feel free to contact this department if you have any questions on the aforementioned.

Sincerely,



Sam W. Ford
Chief Park Planner

SWF/MAK:sm/mg

Enclosure

c: Melba Dunlap, Supervisor, District II

GENERAL PLAN



CHINO HILLS STATE PARK



SCALE IN FEET



LEGEND

CURRENT STATE PARK OWNERSHIP

PROPOSED BOUNDARY

DESIGNED
DRAWN
CHECKED
DATE
REVISIONS

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION
APPROVED
DATE

CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES/KEY MAP

DRAWING NO.
20977
SHEET NO.
10

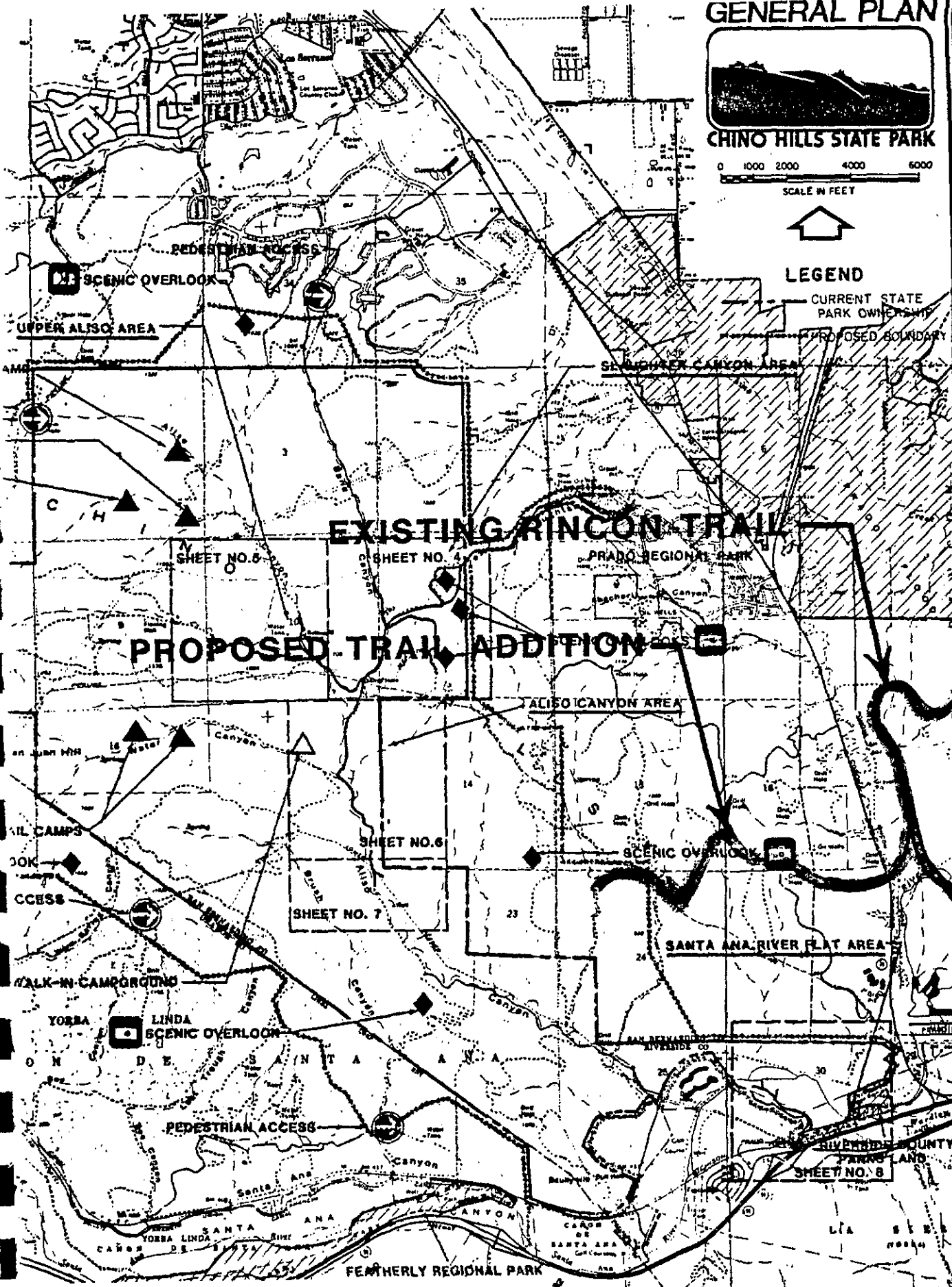


EXHIBIT A

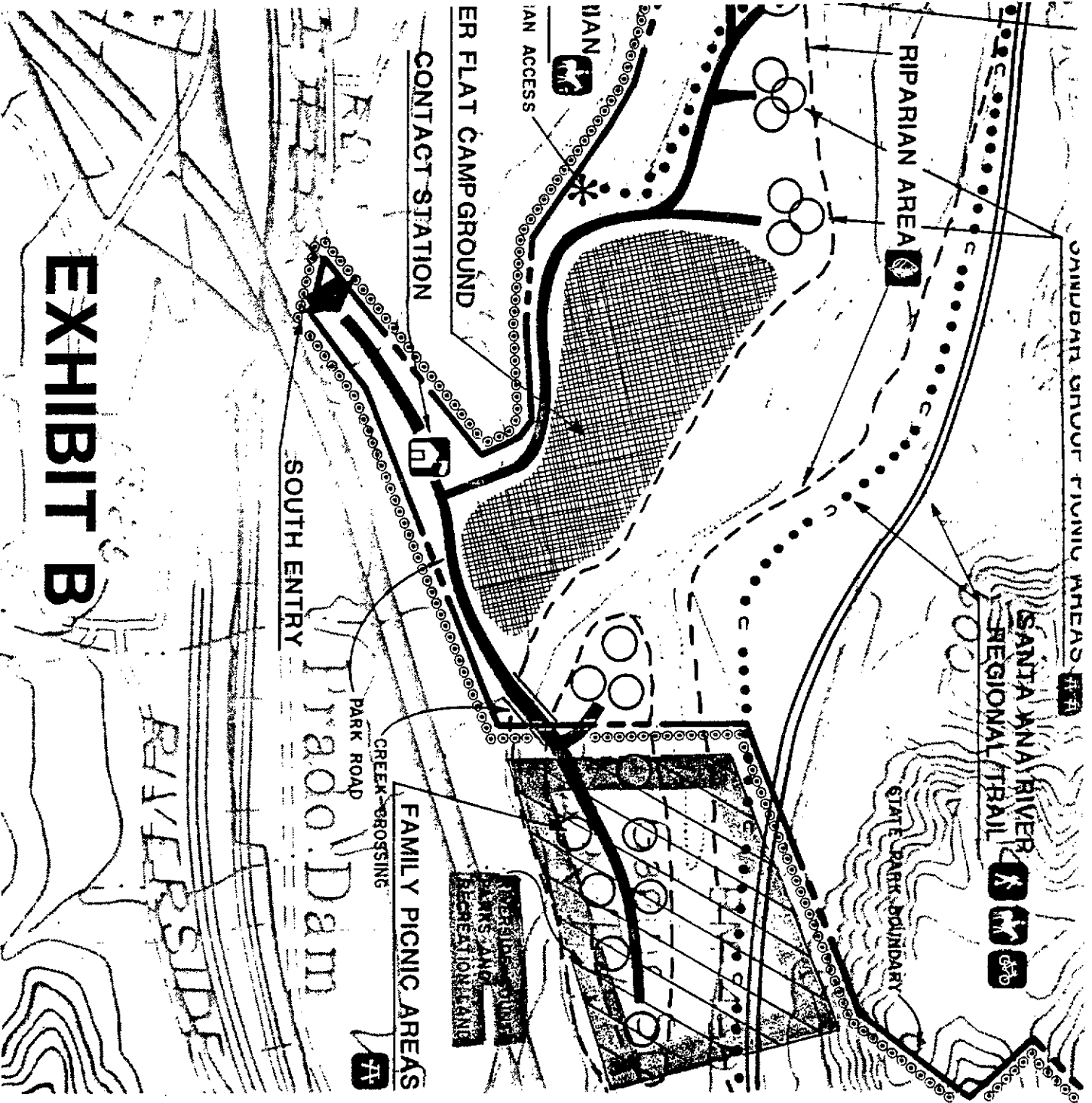


EXHIBIT B

GENERAL PLAN

- Park Road from Prado Road
- CONTACT STATION
- Small structure, entry gates,
- FAMILY PICNIC ARE.
- 20-30 units
- RIVER FLAT CAMPG
- 100-200 units
- SANDBAR GROUP PI
- 2 units
- RIVERSIDE EQUESTF
- Parking (15 vehicles and tra
- tables, refuse collection point
- water supply point, interpretiv
- SANTA ANA RIVER T
- Parking (10-25 vehicles), 5 picn
- point, water supply point, inter
- map.
- RIPARIAN AREA
- Remove exotic vegetation, an
- condition.
- SANTA ANA RIVER R
- Provide link to regional trail a
- adjacent to river.



OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

916/445-0613

March 24, 1986

James M. Doyle
Department of Parks and Recreation
1416 9th Street
Sacramento, CA. 95814Subject: General Plan - Chino Hills State Park
SCH# 85070306

Dear Mr. Doyle:

The enclosed comments on your draft environmental documents were received by the State Clearinghouse after the end of the state review period. We are forwarding these comments to you because they provide information or raise issues which may assist you in project review.

To ensure the adequacy of the final document you may wish to incorporate these additional comments into the preparation of your final environmental document.

Please contact Peggy Osborn at 916/445-0613 if you have any questions concerning the review process. When you contact the Clearinghouse in this matter, please use the eight digit State Clearinghouse number so that we may respond promptly.

Sincerely,

A handwritten signature in cursive script, appearing to read "John B. Ohanian".

John B. Ohanian
Chief Deputy Director

Enclosure

cc: Resources Agency

Memorandum

To : Gordon F. Snow
Assistant Secretary for Resources

Date : MAR 14 1986

James M. Doyle
Department of Parks and Recreation
1416 Ninth Street
Sacramento, CA 95814

Subject: SCH 85070306
Draft EIR for the Chino Hills
State Park General Plan

From : Department of Conservation—Division of Administration

The Department of Conservation's Division of Oil and Gas has reviewed the Draft EIR for the Chino Hills State Park General Plan and submits the following comments for consideration.

In a letter dated August 6, 1985, the Department submitted comments and recommendations on the NOP for the proposed project. The Draft EIR largely ignores, and inadequately addresses these concerns, comments, and recommendations.

The following reiterates and amends our previous comments in the Department of Conservation's August 6, 1985 letter to the Department of Parks and Recreation.

The DEIR states that there is "no record of commercial (oil and gas) production in the park". The statement should be clarified. While there is no oil or gas production within the present park boundary, there are 43 active producing oil and gas wells within the proposed park expansion boundaries. Also, there are active water flood wells, two active tank farms, and an oil sump. All these facilities should be mapped in the Final EIR.

The proposed park expansion will lie within five producing oil fields. They are; the Mahala, Yorba Linda, Brea-Olinda, Chino-Soquel, and Esperanza oil fields. The report states that development and operation of the proposed park should not interfere with oil and gas extraction in the area, however, it appears that new development of petroleum resources will not be allowed. The Division strongly recommends that the expansion of the park into an area of active oil production should not be allowed unless assurances are given that the petroleum resources will be allowed to be produced to their fullest potential.

The Final EIR should discuss the potential loss of petroleum resources, as well as measures available to mitigate the loss. The possibility exists that large known petroleum accumulations in California will not be produced as available land is removed through encroachment by development onto oil fields. This is not only a waste of resources, but also a detriment to the people of California who receive benefits from oil revenues collected by the State.

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MAR 21 1986
State Clearinghouse

If known reserves cannot be produced in areas where production is already occurring, the oil companies will have no choice than to look for other possible petroleum reserves such as in federal tracts offshore California. There is no guarantee that revenues collected by the Federal Government off our coastline will be returned to the State.

If park expansion occurs, the Division recommends that all wells, associated facilities, and oil sumps be secured from entry by the use of secure fences. The fences should be around the perimeter of each well or facility so that entry by unauthorized persons and animals is prevented. Also, climbable landscaping should be prohibited around any oil facility, as this would defeat the purpose of walls and fences. These mitigations should be discussed in the Final EIR.

The project area also encompasses many previously abandoned wells. If any structure is to be located over or near any of these abandoned wells, there is the possibility that reabandonment may be necessary. Section 3208.1 of the Public Resources Code (PRC) authorizes the State Oil and Gas Supervisor to order the reabandonment of any previously abandoned well when construction of any structure over or in the proximity of the well could result in a hazard. The cost of reabandonment operations will be the responsibility of the owner of the property upon which the structure is to be located. Also, an attempt should be made to avoid building over any abandoned oil wells.

If any previously abandoned or unrecorded wells are uncovered or damaged during any excavation or grading, remedial cementing operations may be required. The Division's district office should be contacted for the purpose of obtaining information on the requirements and approval to perform remedial cementing operations.

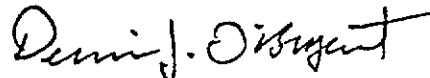
There are several natural oil and gas seeps in the area of the proposed park, and in view of recent occurrences of methane gas migration in the Los Angeles area, it is believed that a similar occurrence of methane gas migrating into shallow sands within the proposed park is a possibility.

Also, in undeveloped areas, a careless cigarette or match could ignite seeping methane and set off a brush fire. Therefore, it may be necessary to commence a study of the area to determine the likelihood of this type of hazard. If the study indicates that gas accumulation is a possibility, it may be necessary to drill some shallow, pressure-relief wells. Also, gas detectors and venting systems may be necessary in areas where ignition of methane gas could occur. The Final EIR should include methane gas seeps under Risk of Upset.

Dr. Gordon Snow
Page 3

In conclusion, the Department of Parks and Recreation should actively work with the Division of Oil and Gas and oil operators before the park is developed. A cooperative spirit of all parties will better the environment, and allow both park development and oil operations to coexist in a safe environment.

If you have any questions, please feel free to contact Ken Carlson at the Division district office in Long Beach. The address is 245 West Broadway, Suite 475, Long Beach, 90802, phone 213-590-5311.



Dennis J. O'Bryant
Environmental Program Coordinator

cc: Ken Carlson, Long Beach
Bob Reid, Sacramento

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CIVIC CULTURAL CENTER
 Number One Civic Center Circle
 Brea, California 92621
 Telephone (714) 990-7600

[Signature]
 Directors Office
 0713
 MAR 5 1986

DEPT. PARKS & RECREATION

March 26, 1986

State of California
 Department of Parks and Recreation
 P.O. Box 2390
 Sacramento, California 95811

SUBJECT: CHINO HILLS STATE PARK DOCUMENT

The City of Brea has completed its review of the above referenced document. We commend the planning efforts done to date.

However, we do have some concerns relative to the document in the following manner. Relative to transportation and circulation, we feel there may be problems in the future, given the large number of vehicles and/or horse trailers being used to access the equestrian facility noted in the park planning document. We feel there may be a problem with on-site parking to provide sufficient space for the vehicles and trailers and feel this needs to be further addressed.

We also point out that the Carbon Canyon Specific Plan has noted, along with the County of Orange Master Plan, the need for Soquel Canyon and the Valleyview extension for regional transportation systems. We realize this must be done consistently with the state park purposes and will be happy to meet and discuss this matter with you.

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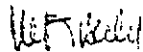
APR 1 1986

Development Division

State of California
Page two
March 26, 1986

We feel these are important issues that need further discussion and will be happy to meet with you as the plan progresses towards adoption. If you have any questions, please feel free to contact me.

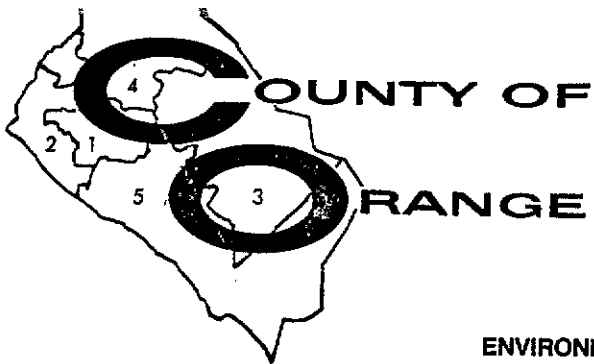
Sincerely,



William R. Kelly
Director of Development Services

WRK:alv.19

cc: E.G. Wohlenberg - City Manager
J. DeStefano - City Planner
S.W. Peterson - City Engineer
M. Akaba - Assistant City Engineer



MURRAY STORM
DIRECTOR, EMA

12 CIVIC CENTER PLAZA
SANTA ANA, CALIFORNIA

MAILING ADDRESS:
P.O. BOX 4048
SANTA ANA, CA 92702-4048

TELEPHONE:
(714) 834-2306

ENVIRONMENTAL MANAGEMENT AGENCY

March 31, 1986

FILE NCL 4139

Mr. James M. Doyle, Supervisor
Environmental Review Section
Department of Parks and Recreation
P.O. Box 2390
Sacramento, CA 95811

SUBJECT: Chino Hills State Park - Preliminary General Plan and Draft
Environmental Element

Dear Mr. Doyle:

Thank you for providing this agency the opportunity to review the above referenced document. As you know, the County of Orange has substantial regional interests in the Chino Hills State Park area. We are particularly concerned with the compatibility of the General Plan with the Brea-Olinda landfill; transportation/circulation planning and County parks system planning. It is our desire that the General Plan and Environmental Element address these issues in a comprehensive manner.

Because of the County's role as a responsible agency, it is essential that this Agency have the opportunity to actively participate in the development of the General Plan document. Therefore, in accordance with Section 15082 (c) of the California Environmental Quality Act (CEQA) Guidelines, we respectfully request that the California Department of Parks and Recreation establish a formal consultation meeting with County staff within 30 days to discuss our comments and establish an inter-agency working group. Our initial comments are attached. We believe a formal consultation meeting would promote a better working relationship between the State and County on this project.

We would appreciate your consideration of the above request at your earliest convenience. Should you or your staff have any questions regarding our request, or wish assistance on arranging a meeting, please do not hesitate to contact Mr. Michael Ruane, EMA/Environmental and Special Projects Division, at (714) 834-5550.

Very truly yours,



M. Storm, Director

BRS:sm(043)
3-26-86

Attachment

cc: Supervisor Bruce Nestande, District 3
William S. Briner, Director, State Parks and Recreation
R. A. Scott, Director, General Services Agency
H. J. Krizan, Director, EMA/Parks and Recreation
Frank Bowerman, Manager, GSA/Waste Management Program
J. E. Bennett, Manager, EMA/Transportation Planning Division
B. G. Speegle, Manager, EMA/Advance Planning

Chino Hills State Park - Preliminary General Plan
INITIAL COUNTY OF ORANGE COMMENTS
March 26, 1986

Page 45, paragraph 1. The second sentence which refers to a County proposed highway in Telegraph Canyon is incorrect. Telegraph Canyon Road was deleted from the County Master Plan of Arterial Highways, November 13, 1985, as part of Transportation Element Amendment 85-3.

Page 62 (Unresolved Issue Number 2). County staff supports the proposal that the Chino Hills State Park entrance through Carbon Canyon Regional Park be maintained and operated by the County of Orange Parks and Recreation Department. However, formal details regarding associated operating costs have not as yet been resolved. Any questions regarding this matter should be addressed to Grace Secketa, EMA/Parks and Recreation/Program Planning/Special Districts, at (714) 834-3070.

Page 63 (Unresolved Issue Number 4). As the Lakeview/Valley View Extension moves into more detailed stages of engineering and the Chino Hills State Park General Plan evolves into more detailed planning, it will be appropriate to develop a detailed mutual understanding on the proposed mitigation measures.

Page 64 (Unresolved Issue Number 5). Before either the implementation timeframe or the mitigation measures for Soquel Canyon Road can be meaningfully addressed, a full route location study of the road needs to be undertaken. Like Lakeview/Valley View, it will be important and useful for the park and road planning for each to proceed in concert with the other.

Page 64 (Unresolved Issue Number 6). Discussions between County GSA/Waste Management Program and State Parks staff are needed to ensure the document adequately addresses this item.

Site Planning Issues: Project will entail many site planning issues which will be addressed at subsequent, more detailed, stages of the project. We are very concerned that items such as parking layout, access intersection geometrics, traffic channelization design, trail configuration, and so on, be addressed jointly by the State Parks Department, the City of Brea, and the Counties of San Bernardino and Orange so the road planning can be properly integrated during the site planning process. To accomplish this, we propose that an inter-agency technical working group be established to meet periodically and review interim products with representatives of the other agencies involved. This, in fact, is our customary practice and it has usually proven very successful in the past.

BRS:sm(045)
3-26-86

RESPONSE TO COMMENTS

Comments received during the review period provided under the California Environmental Quality Act have received the responses below. The numbers of each response correspond to the indicated numbered sections in the comment letters. Included for information purposes are letters received after the close of the review.

1. A brief traffic study has been provided. The determination of no significant impacts was based on the projected traffic level assuming 100% occupancy and maximum visitor turnover of day use and overnight facilities (a low probability occurrence), and the recognition that peak recreational use and its traffic generally occur at times other than peak traffic use (i.e., rush hour during weekdays). The cumulative impacts of the state park development and residential and commercial development outside the unit boundaries can create significant increase in traffic volumes on the peripheral road system. However, as can be seen by the brief and worst-case projections, the traffic volume contributed by the state park will be relatively non-significant.
2. The Department of Parks and Recreation has been working with Orange County in the development of access for the state park and the selection of an appropriate alignment and design for the proposed Soquel Canyon Road to reduce the impacts on the state park.
3. No response necessary.
4. No response necessary.

TRAFFIC STUDY
CHINO HILLS STATE PARK
GENERAL PLAN

INITIAL DEVELOPMENT (to be completed 1989)

ACCESS POINTS	VEHICLE SPACES		TRIPS PER DAY* (Weekends)	
	Day Use	Overnight	Spring/Fall	Summer/Winter**
Slaughter Canyon	31-72	60-100	93-216 90-150	56-130 54-90
Total	31-72	60-100	183-366	110-210

FULL DEVELOPMENT (projected to be completed by 2004)

ACCESS POINTS	VEHICLE SPACES		TRIPS PER DAY	
	Day Use	Overnight	Spring/Fall	Summer/Winter**
Slaughter Canyon	98-196	210-350	294-588 315-525	176-353 189-315
Santa Ana River Flat	65-130	100-200	195-390 150-300	117-234 90-180
Telegraph Canyon	25-40		75-120	45-72
Total	188-366	310-550	1029-1923	617-1154

*Trips per day based on the following:

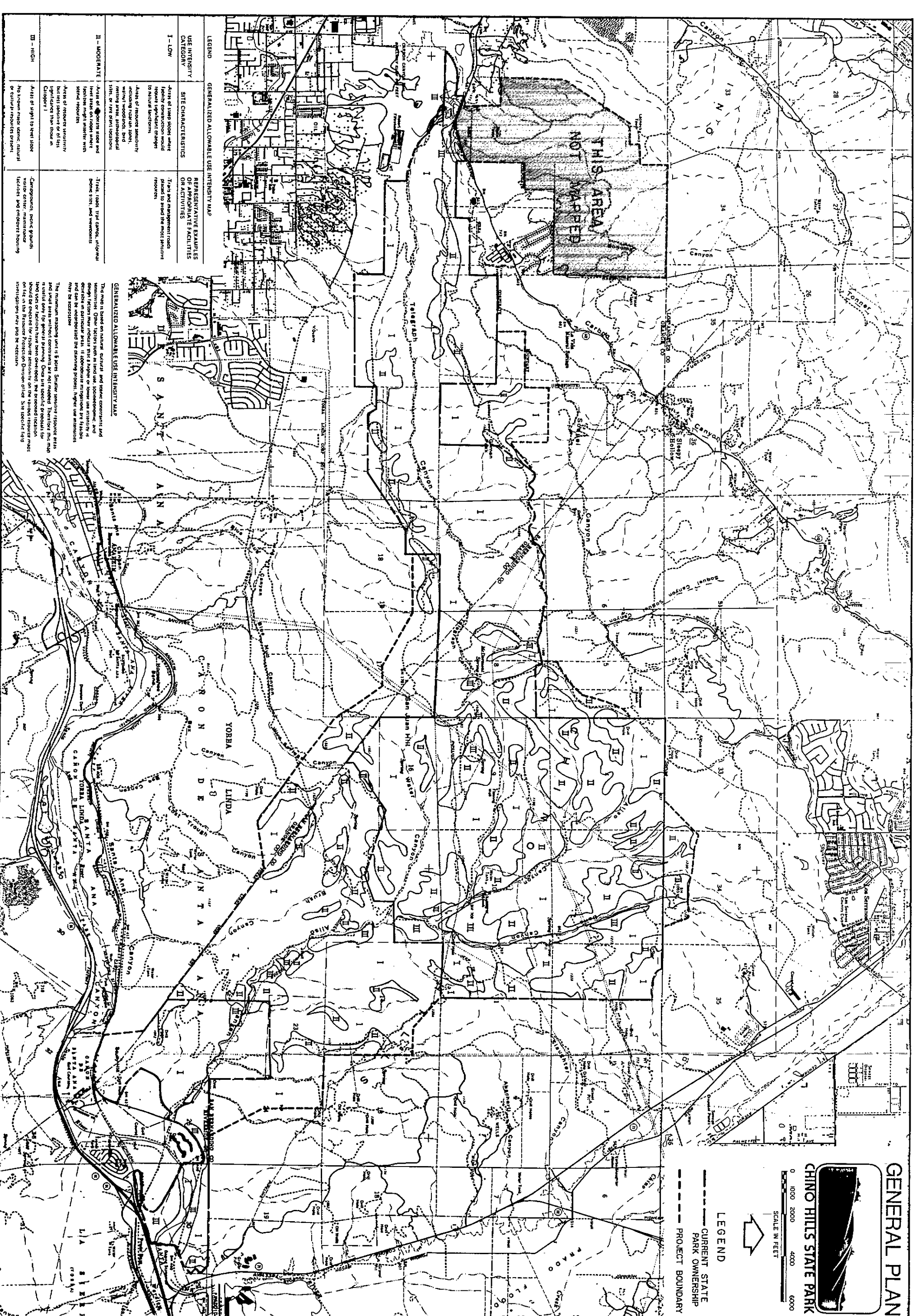
Day Use: 50% turnover rate = 3 trips x number of spaces
Overnight: 28% leave and return each day = 1.5 trips x number of spaces

A trip is defined as one-way travel over the entry road either entering or leaving.

**Summer/Winter rates equal 60% of Spring/Fall rates.

All rates based on 100% occupancy of available spaces. The number of spaces developed will be dependent on need and funding.

MAPS



LEGEND
GENERALIZED ALLOWABLE USE INTENSITY MAP

USE INTENSITY CATEGORY	SITE CHARACTERISTICS	REPRESENTATIVE EXAMPLES OF APPROPRIATE FACILITIES OR ACTIVITIES
I - LOW	Areas of steep slopes where erosion control measures are required to protect riparian resources to natural functions.	Trails and management roads planned to avoid the most sensitive riparian resources.
II - MODERATE	Areas of moderate slopes and high trees on rocky slopes which might interfere with scenic resources.	Trails, roads, trail camps, interpretive picnic sites, and viewpoints.
III - HIGH	Areas of moderate slopes but less sensitive of high significance than those in Category I.	Campgrounds, picnic grounds, visitor center, restroom, facilities and conductive housing.

GENERALIZED ALLOWABLE USE INTENSITY MAP

The map is based on natural, cultural, and scenic resources and environmental characteristics such as land use, soil, vegetation, and geology. It is intended to provide a general guide for land use and facility development. It does not constitute a final plan and should be subject to further study and investigation. The map is intended to provide a general guide for land use and facility development. It does not constitute a final plan and should be subject to further study and investigation.

GENERAL PLAN

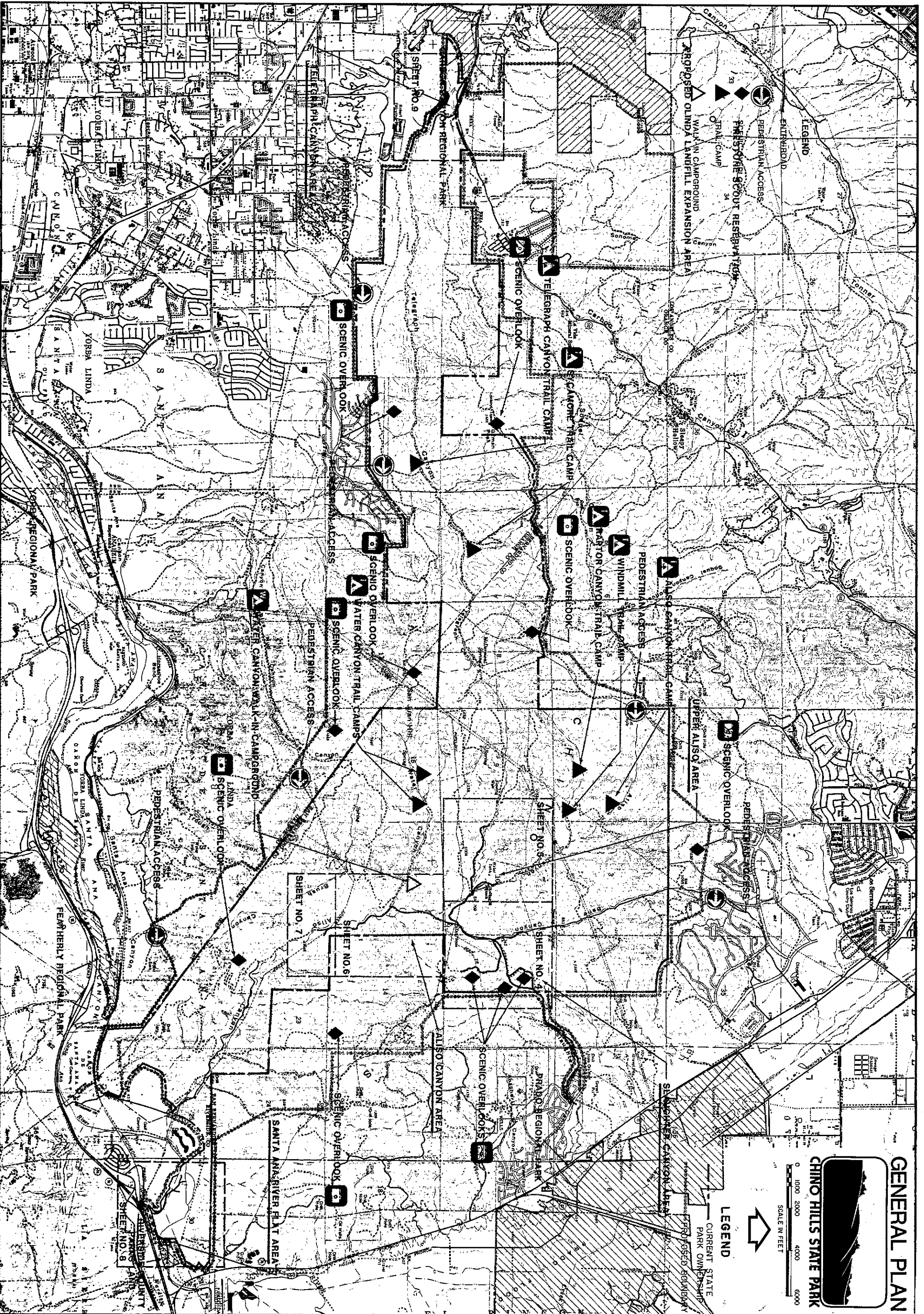
CHINO HILLS STATE PARK

SCALE IN FEET
0 1000 2000 4000 6000

LEGEND

- CURRENT STATE PARK OWNERSHIP
- - - PROJECT BOUNDARY

DRAWING NO. 20977	SHEET NO. 2 of 10	CHINO HILLS STATE PARK GENERAL PLAN ALLOWABLE USE INTENSITY		RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION	REVISIONS	DATE	DESIGNED
		APPROVED	DATE			DRAWN	CHECKED



LEGEND

- PEDESTRIAN ACCESS
- WALK-IN CAMPGROUND
- PROPOSED OLINDA LANDFILL EXPANSION AREA
- TRAIL CAMP
- SCOUT RESERVATION

GENERAL PLAN

CHINO HILLS STATE PARK

SCALE IN FEET

0 1000 2000 4000 6000

LEGEND

- CURRENT STATE PARK OWNERSHIP
- PROPOSED BOUNDARY

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CHINO HILLS STATE PARK

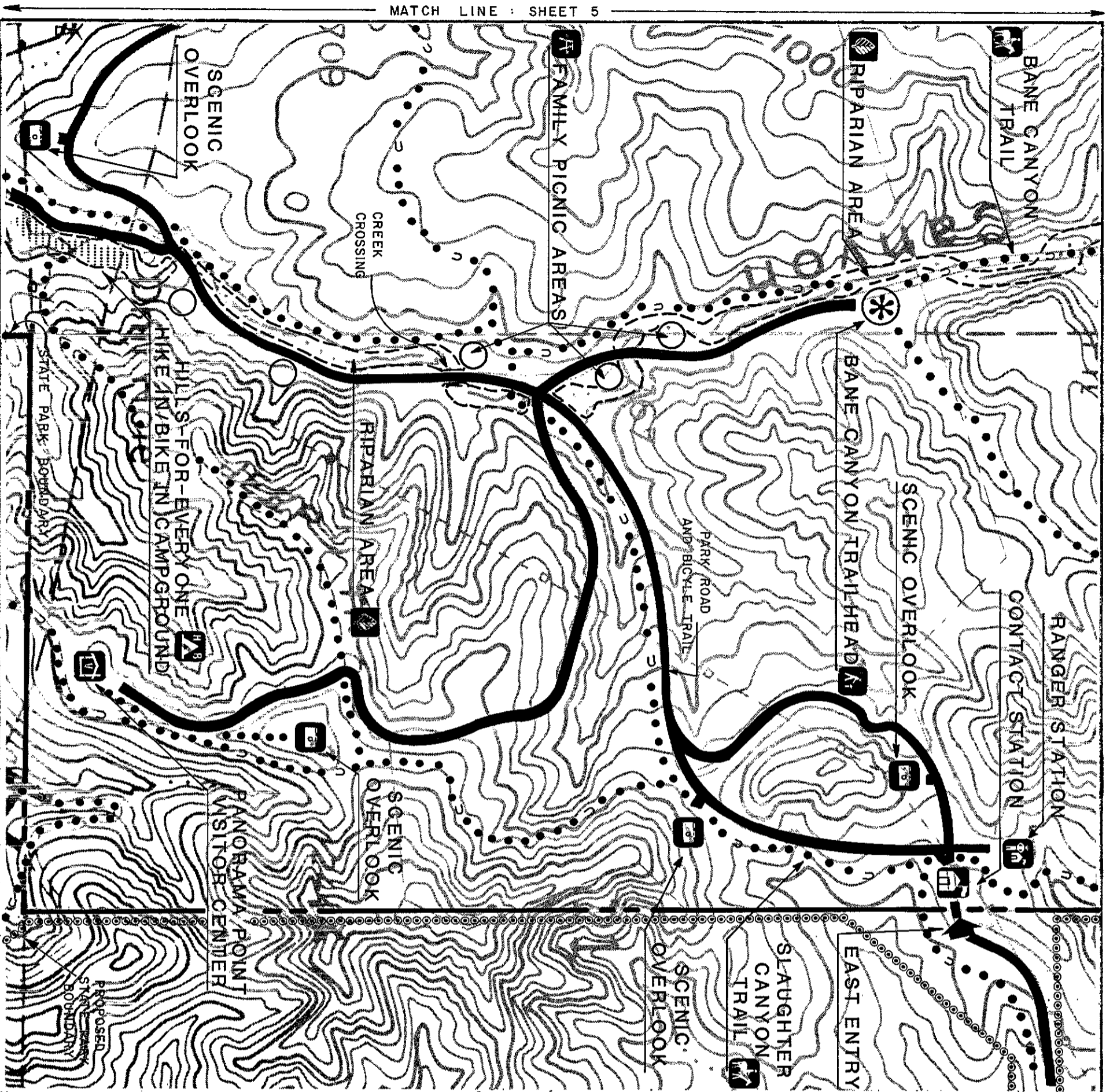
GENERAL PLAN

PROPOSED FACILITIES/KEY MAP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

APPROVED _____ DATE _____

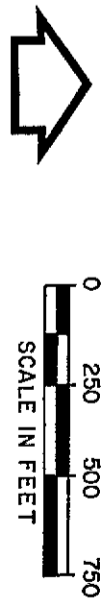
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MATCH LINE : SHEET 6

SLAUGHTER CANYON AREA

- EAST ENTRY**
 - Park road and bicycle trail thru Slaughter Canyon corridor from proposed Euclid Avenue extension.
- CONTACT STATION**
 - Small structure, entry gates, park information display.
- RANGER STATION**
 - Structure for office, staff meeting area, park information display, dispatch radio, public telephone, restroom, staff shower, parking (15-15 vehicles).
 - Structure(s) for maintenance shop, equipment and material storage.
 - 2-5 trailer pads(s) for employee housing.
- SLAUGHTER CANYON TRAIL**
 - Trail to Prado Regional Park
- BANE CANYON TRAILHEAD**
 - Parking (15-15 vehicles), restroom, 3 picnic tables, refuse collection point, water supply point, interpretive display and locator map.
- BANE CANYON TRAIL**
 - Trail to proposed Sequel Canyon Road.
- FAMILY PICNIC AREAS**
 - 10-15 units
- PANORAMA POINT VISITOR CENTER**
 - Structure for collections, displays, meeting area, theater, library, shop, docent headquarters restrooms, parking (20-40 vehicles).
- HILLS-FOR-EVERYONE HIKE IN/BIKE IN CAMPGROUND**
 - 3-6 units
- SCENIC OVERLOOKS**
 - 3 units with parking (3-5 vehicles)
 - 1 unit without parking
- RIPARIAN AREA**
 - Remove exotic vegetation, and rehabilitate to natural condition.



GENERAL PLAN



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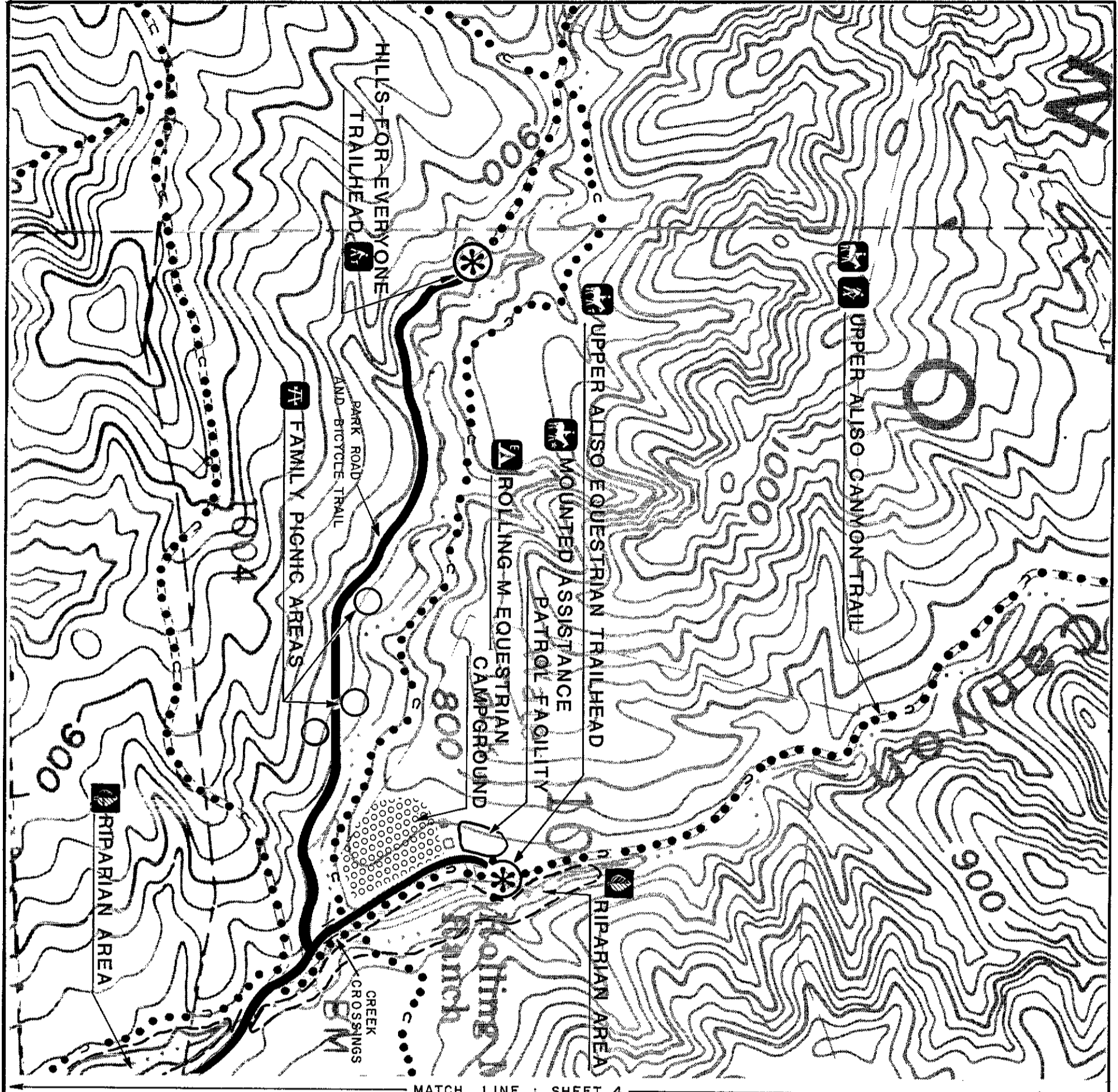
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CHINO HILLS STATE PARK
GENERAL PLAN
 PROPOSED FACILITIES

DRAWING No. **20977**

SHEET No. **4** of **10**



MATCH LINE : SHEET 4

UPPER ALISO AREA

UPPER ALISO CANYON TRAIL

- Separate hiking and equestrian trails where terrain and vegetation allow, and a combined trail through narrow and/or sensitive areas of the canyon.
- 3 trail camps (one unit each)

UPPER ALISO EQUESTRIAN TRAILHEAD

- Parking (10-15 vehicles and trailers), restroom, 3-5 picnic tables, refuse collection point, manure collection point, water supply point, interpretive display and locator map.

RIPARIAN AREA

- Remove structures and exotic vegetation, and rehabilitate to natural condition.

ROLLING M EQUESTRIAN CAMPGROUND

- 30-50 units
- Rehabilitate barn and corrals for public use.

FAMILY PICNIC AREAS

- 6-9 units

HILLS-FOR-EVERYONE TRAILHEAD

- Parking (10-25 vehicles), restroom, 3-5 picnic tables, refuse collection point, water supply point, interpretive display and locator map.

MOUNTED ASSISTANCE PATROL FACILITY

- Parking (2 vehicles and trailers), corrals, shade ramada, feeders, waters.



GENERAL PLAN



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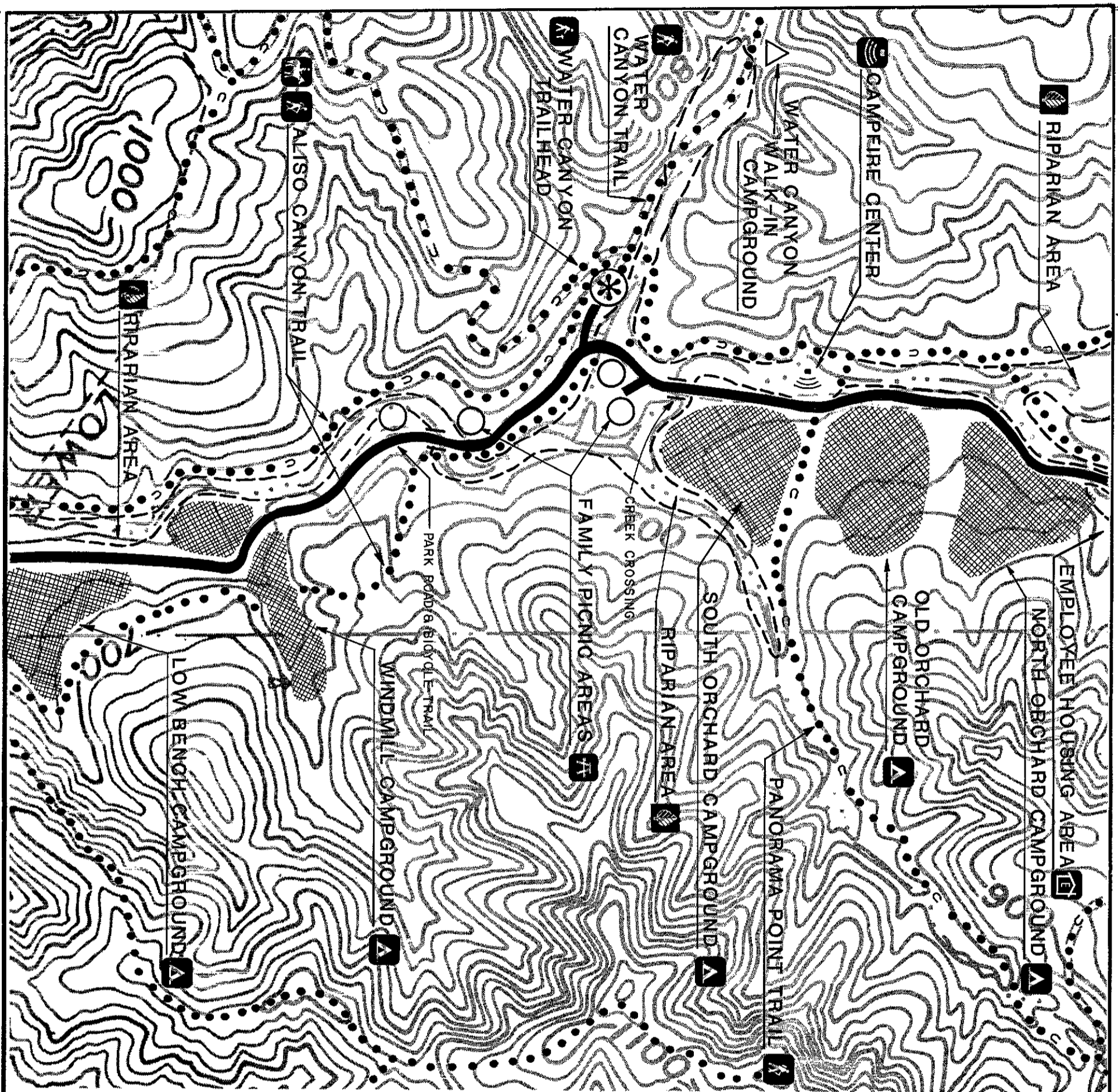
REVISIONS

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DEPARTMENT OF PARKS AND RECREATION
APPROVED _____ DATE _____

CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES

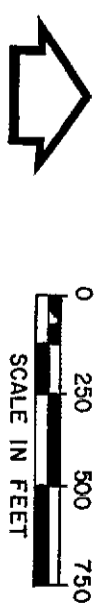
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5 OF **10**



ALISO CANYON AREA

- NORTH ORCHARD CAMPGROUND
 - 30-50 units
- OLD ORCHARD CAMPGROUND
 - 30-50 units
- CAMPFIRE CENTER
- PANORAMA POINT TRAIL
 - Trail to visitor center
- SOUTH ORCHARD CAMPGROUND
 - 30-50 units
- FAMILY PICNIC AREAS
 - 8-12 units
- WATER CANYON TRAILHEAD
 - Parking (15-25 vehicles), restroom, refuse collection point, water supply point, interpretive display and locator map.
- WATER CANYON TRAIL
 - 2 trail camps (one unit each)
 - 1 walk-in campground (2-5 units)
- ALISO CANYON TRAIL
 - Separate hiking and equestrian trails
- WINDMILL CAMPGROUND
 - 30-50 units
- LOW BENCH CAMPGROUND
 - 30-50 units
- RIPARIAN AREA
 - Remove exotic vegetation, and rehabilitate to natural condition.



GENERAL PLAN



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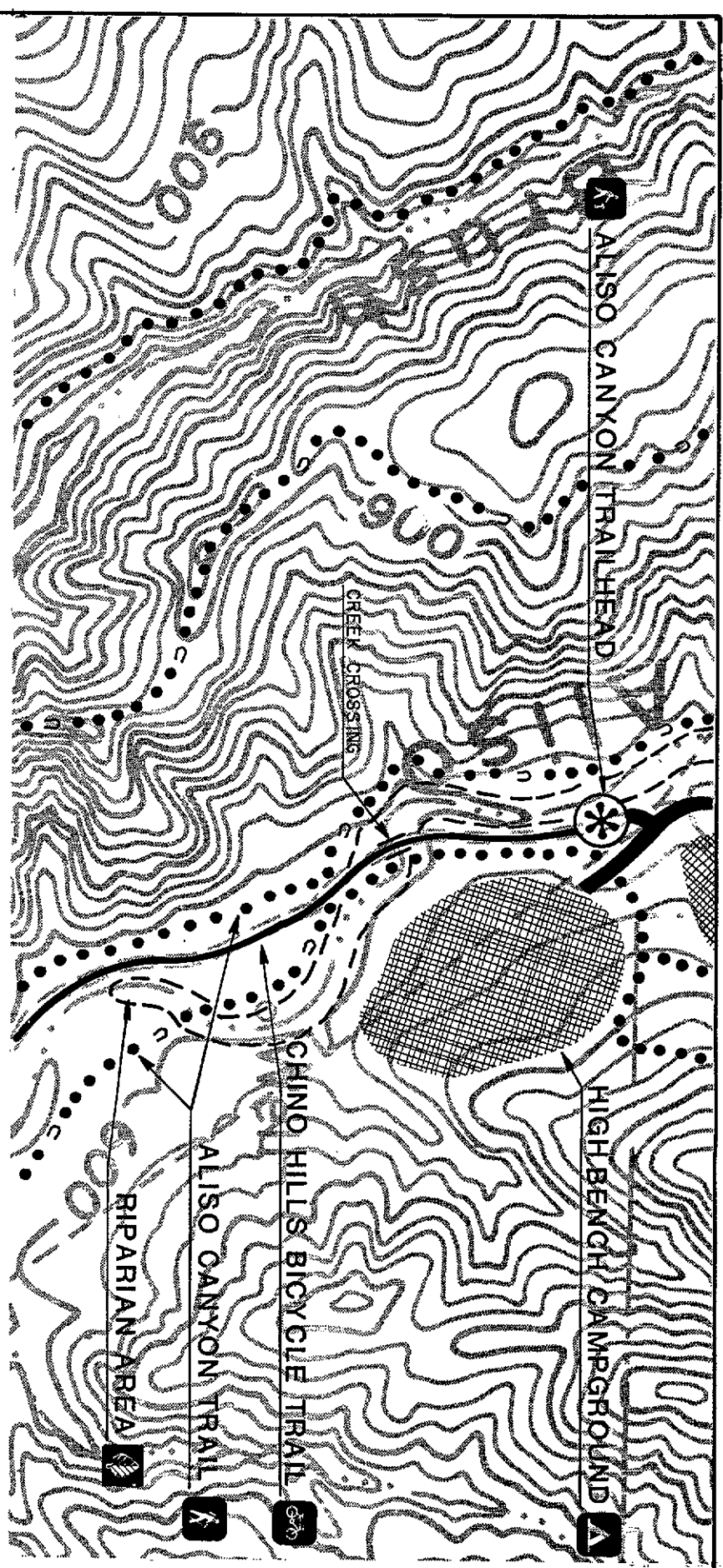
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CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES

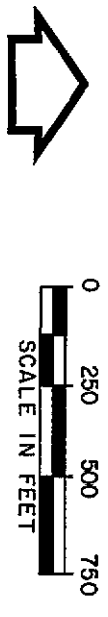
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ALISO CANYON AREA (CONTINUED)

-  **HIGH BENCH CAMPGROUND**
 - 30-50 units
-  **ALISO CANYON TRAIL HEAD**
 - Parking (10-25 vehicles), restroom, refuse collection point, water supply point, interpretive display and locator map.
-  **CHINO HILLS BICYCLE TRAIL**
 - Trail to regional trail, Santa Ana River
-  **ALISO CANYON TRAIL**
 - Separate hiking and equestrian trails
-  **RIPARIAN AREA**
 - Remove exotic vegetation, and rehabilitate to natural condition.



GENERAL PLAN



CHINO HILLS STATE PARK

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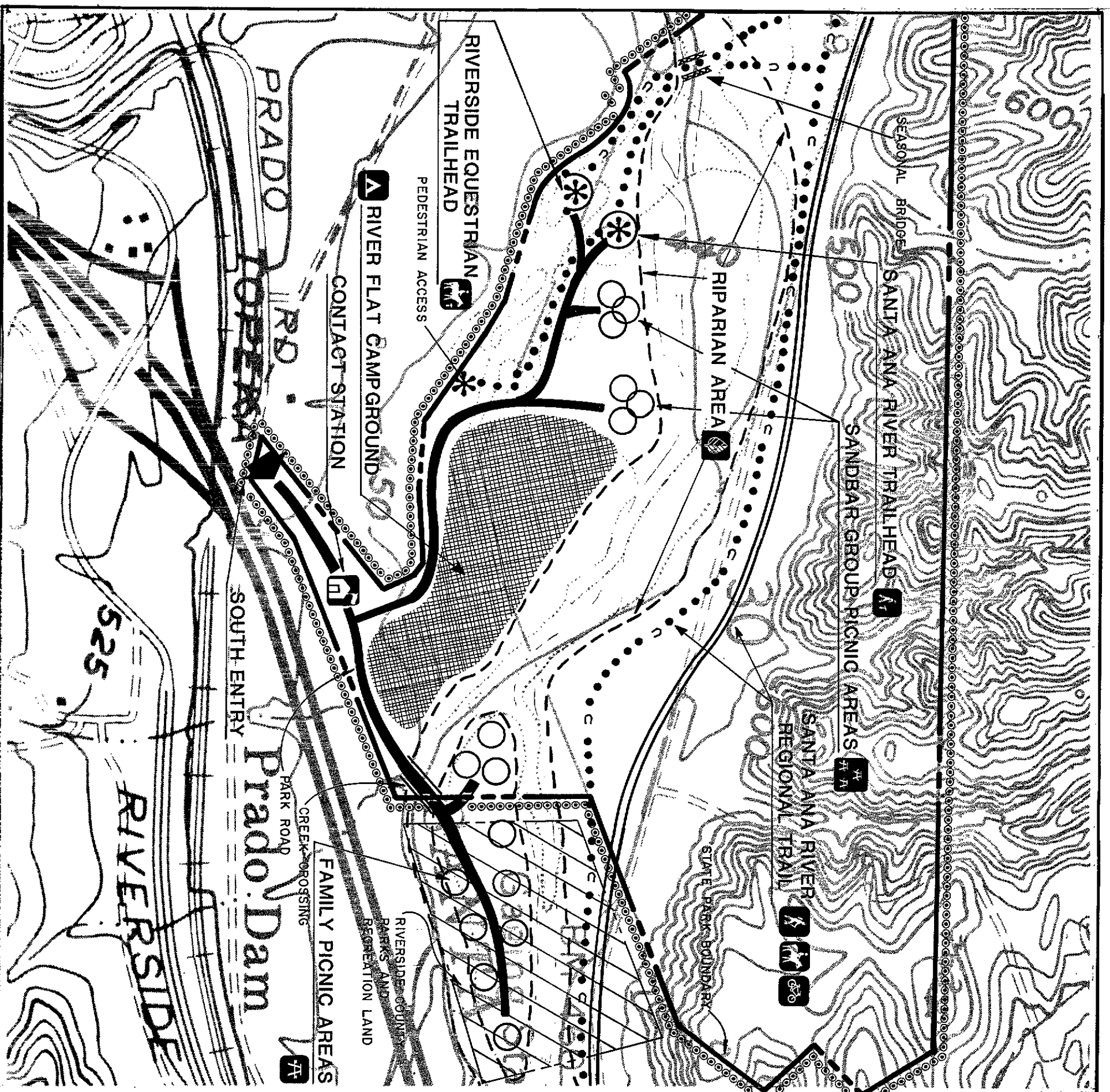
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CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION

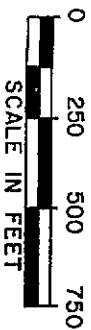
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SANTA ANA RIVER FLAT AREA

- SOUTH ENTRY
 - Park Road from Prado Road
- CONTACT STATION
 - Small structure, entry gates, park information display.
- FAMILY PICNIC AREAS
 - 20-30 units
- RIVER FLAT CAMPGROUND
 - 100-200 units
- SANDBAR GROUP PICNIC AREAS
 - 2 units
- RIVERSIDE EQUESTRIAN TRAILHEAD
 - Parking (15 vehicles and trailers), restrooms, 5 picnic tables, refuse collection point, manure collection point, water supply point, interpretive display and locator map.
- SANTA ANA RIVER TRAILHEAD
 - Parking (10-25 vehicles), 5 picnic tables, refuse collection point, water supply point, interpretive display and locator map.
- RIPARIAN AREA
 - Remove exotic vegetation, and rehabilitate to natural condition.
- SANTA ANA RIVER REGIONAL TRAIL
 - Provide link to regional trail at east and west boundaries adjacent to river.



GENERAL PLAN



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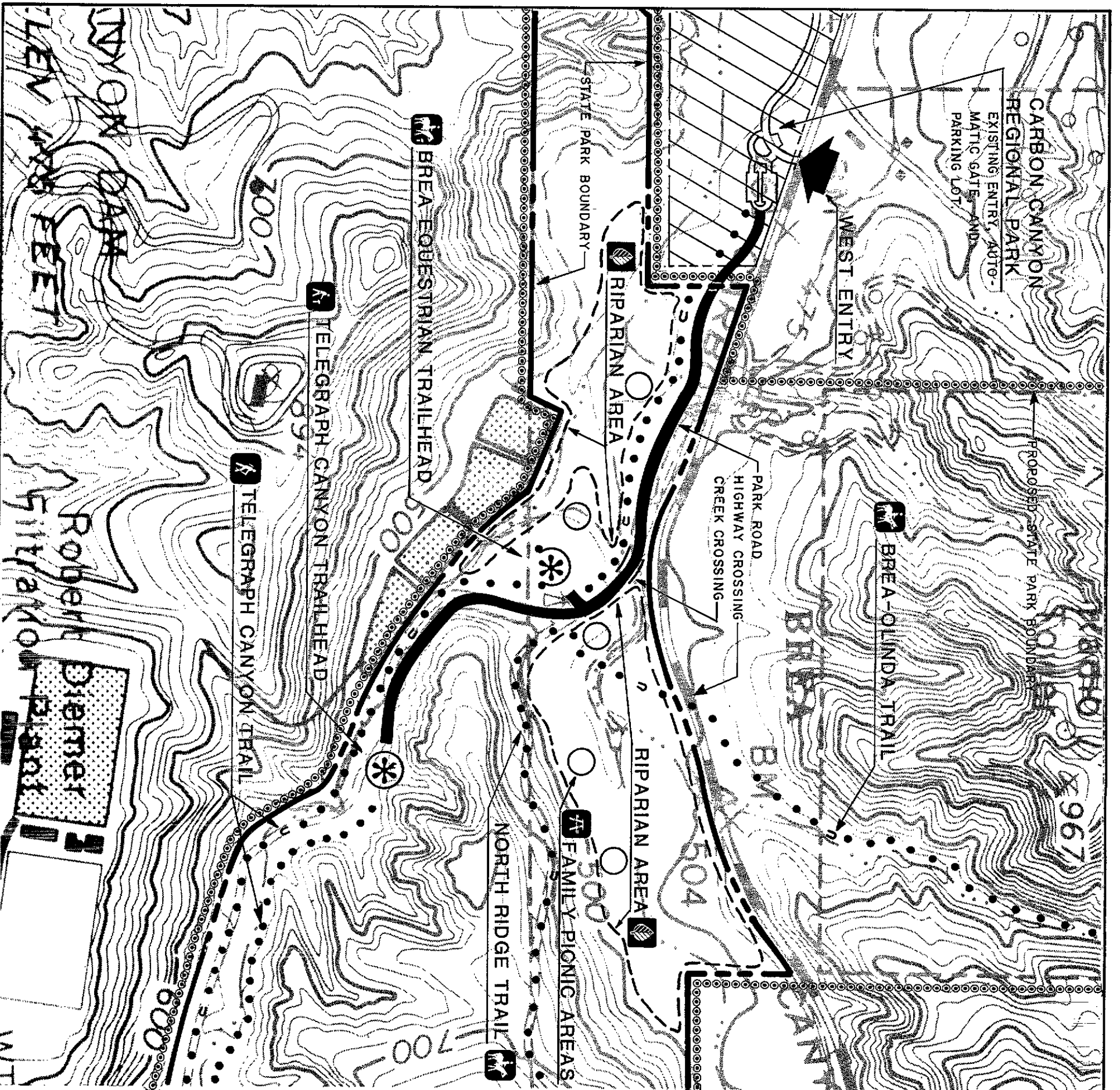
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CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES

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TELEGRAPH CANYON AREA

- WEST ENTRY
 - Enter through regional park.
 - Park road and creek crossing.
- RIPARIAN AREA
 - Remove exotic vegetation, and rehabilitate to natural condition.
- BREA-OLINDA TRAIL
 - Trail to future county park and Boy Scout reservation.
- BREA EQUESTRIAN TRAILHEAD
 - Parking (15 vehicles and trailers), restroom, 5 picnic tables, refuse collection point, manure collection point, water supply point, interpretive display and locator map.
- NORTH RIDGE TRAIL
 - Existing trail.
- TELEGRAPH CANYON TRAILHEAD
 - Parking (10-25 vehicles), restroom, 5 picnic tables, refuse collection point, water supply point, interpretive display and locator map.
- TELEGRAPH CANYON TRAIL
 - Separate hiking and equestrian trails where terrain and vegetation allow, and a combined trail through narrow and/or sensitive areas of the canyon.
 - 2 trail camps (one unit each)
- FAMILY PICNIC AREAS
 - 10-15 units



GENERAL PLAN



CHINO HILLS STATE PARK

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CHINO HILLS STATE PARK
GENERAL PLAN
PROPOSED FACILITIES

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SHEET NO. 9 OF 10

THE DEPARTMENT GRATEFULLY ACKNOWLEDGES THE ASSISTANCE OF:

The
Chino Hills State Park
Citizens Advisory Committee

Claire Schlotterbeck, Chairperson
Michael Beverage
Lars Carpelan
Margi Evans
Jackie Harrison
Norma Hicks
Gregory Myers
Gary Patton
Dona Silva
Louis Tavaglione

The many citizens who contributed time
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federal agencies who cooperated with the authors.

Written By:

Development Division

Doug Healey, Project Manager and Landscape Architect

Resource Protection Division

Ken Gray, Resource Ecologist

Nancy Evans, Archeologist

Pamela McGuire, Historian

Rob Ueltzen, Park and Recreation Specialist

Office of Interpretive Services

Marvin Brienens, Interpreter

Office of Economic & Fiscal Affairs

Grant Jensen, Landscape Architect

Operations - Region IV

A. Alan Ulm, Manager V