
INTRODUCTION

Some of Lake Forest's most valuable assets are plentiful parks, recreational facilities, eucalyptus trees, created lakes, natural open space, and panoramic mountain views. The Recreation and Resources Element focuses on the protection and enhancement of open space and natural resources to ensure a high quality living environment in future years. Parks and facilities for recreational activities are particularly important because of the significant family population living in Lake Forest. Community involvement is a historic tradition. Continued cultivation of human resources in addition to environmental resources will foster community stability and vitality.

PURPOSE OF THE RECREATION AND RESOURCES ELEMENT

The Lake Forest Recreation and Resources Element meets state requirements for the Conservation and Open Space Elements as defined in Sections 65302(d) and 65302(e) of the Government Code. According to these requirements, the Conservation Element must contain goals and policies to protect and maintain state natural resources such as water, soils, wildlife and minerals, and prevent wasteful resource exploitation, degradation and destruction. The Open Space Element must contain goals and policies to manage open space areas, including undeveloped lands and outdoor recreation areas. Specifically, the Open Space Element must address open space that is used for the preservation of natural resources, the managed production of resources, and open space maintained for public health and safety reasons.

The recreation component of the Recreation and Resources Element is not mandated by state planning law. The City elected to include

the recreation component because of the importance of recreational facilities in the community, and the close relationship between parks and open space. The recreation component of the element includes policies to ensure adequate recreational facilities are available to meet the needs of the existing and future population, and a recreation plan that identifies existing and planned park and recreational facilities.

While air quality is not a state-mandated element, the South Coast Air Quality Management Plan (AQMP) requires air quality to be addressed in General Plans. Air quality is included as a sub-element of the Lake Forest Recreation and Resources Element to fulfill AQMP requirements. The purpose of the air quality sub-element is to reduce pollutant levels through stationary source, mobile source, transportation and land use control measures, and energy conservation measures.

SCOPE AND CONTENT OF THE ELEMENT

The Recreation and Resources Element expresses community goals to protect environmental resources and open space while providing opportunities for economic development and growth. Resource issues addressed in the element include parks and other open space, natural resources and features, historic and Archaeological resources, and paleontologic resources. Lake Forest utilizes and affects environmental resources outside its boundaries. As a result, some regional resource issues are addressed in this element including regional air quality and regional landfill capacity. One of the most important resources in Lake Forest is human resources. The element specifically addresses

continued development and enhancement of public involvement in civic activities.

The Recreation and Resources Element is comprised of three sections: (1) Introduction; (2) Issues, Goals, and Policies; and (3) the Recreation and Resources Plan. In the Issues, Goals, and Policies section, community recreation needs and resource management issues are identified, and corresponding goals and policies are established. The goals, which are overall statements of the City desires, are comprised of broad statements of purpose and direction. The policies serve as guides for planning recreational facilities, enhancing the natural amenities of Lake Forest, and minimizing the environmental effects of planned development. The Plan explains how the goals and policies will be achieved and implemented. Specific implementation programs are located in the General Plan Implementation Program.

RELATED PLANS AND PROGRAMS

There are a number of existing plans and programs that directly relate to the Recreation and Resources Element. These plans and programs are enacted through federal, state and local legislation, and administered by agencies or special districts. Federal laws pertaining to the protection of significant resources include the Endangered Species Act of 1973 (as amended in 1978), the Antiquities Act and the National Historic Preservation Act of 1966, and the National Environmental Policy Act. Other related plans and programs are described below.

The Quimby Act

The Quimby Act (State of California Planning and Zoning Law Section 66477) allows the legislative body of a city or county to require by ordinance the dedication of land, the payment of fees in lieu thereof, or a

combination of both for park and recreational purposes as a condition to the approval for a final tract map or parcel map. In cases where such dedications or fees were not obtained for particular lots through a map, they may be imposed when building permits are issued. Among other requirements, the following conditions must be met:

- The ordinance includes definite standards for determining the proportion of a subdivision to be dedicated and the amount of any fee to be paid in lieu thereof
- The legislative body has adopted a General Plan containing a recreation element, and any proposed park or recreational facilities must be consistent with the principles and standards established in the element

American Disabilities Act (ADA)

The American Disabilities Act of 1991 was adopted to make public areas, including parks and play areas, accessible to all persons. Playground equipment, trails and facilities must be usable by adults and children with disabilities under ADA. Designing accessible recreational facilities and retrofitting existing facilities is addressed in the Recreation and Resources Element.

California Environmental Quality Act and Guidelines

The California Environmental Quality Act (CEQA) was adopted by the state legislature in response to a public mandate for thorough environmental analysis of projects impacting the environment. The provisions of the law and environmental review procedure are described in the CEQA Law and Guidelines as amended. CEQA will continue to be instrumental in ensuring that the environmental impacts of

local development projects are appropriately assessed and mitigated.

U.S. Fish and Wildlife and California Fish and Game Regulations

Both the U.S. Fish and Wildlife Service and California Department of Fish and Game have regulations to protect wildlife resources. Special permits are required for the alteration of any lake or stream, dredging or other activities that may affect fish and game habitat. Both agencies also regulate impacts to sensitive plant and animal species. Future development in Lake Forest potentially affecting wildlife habitat will be subject to the regulations of both agencies.

Integrated Waste Management Plan

The California Integrated Waste Management Act (Assembly Bill 939) changed the focus of solid waste management from landfill to diversion strategies such as source reduction, recycling and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995 and 50 percent by 2000. The first reporting year for the City of Lake Forest was 1997-98. That year, the City accomplished a diversion rate of 62% and has achieved a minimum of 62% in every reporting year since. The City has an adopted Source Reduction Recycling Element (SRRE) that is in compliance with the State requirements. (Source: www.ciwmb.ca.gov website, www.ciwmb.ca.gov/LGCentral. Jurisdiction Diversion Rate Summary)

Surface Mining and Reclamation Act (SMARA)

The California Surface and Mining Reclamation Act of 1975 requires local governments to address mineral recovery

activities through the direct regulation of mining operations, and through planning policies balancing state mineral resources needs with environmental quality. SMARA requires cities and counties to adopt ordinances, conforming to state policy, for the review and approval of reclamation plans and permits.

National Pollutant Discharge Elimination System

Under the NPDES Stormwater Permit issued to the County of Orange and the City of Lake Forest as a co-permittee, all development and significant redevelopment must be implemented with run-off pollution control measures known as Best Management Practices (BMPs). Proposed development projects (public and private) within Lake Forest must incorporate structural and non-structural BMPs to preclude significant water quality impacts from non-point source pollutants. The County Drainage Area Master Plan and Local Implementation Plan identify acceptable BMPs and methods to incorporate BMPs into proposed projects.

South Coast Air Quality Management Plan

The South Coast Air Quality Management Plan (AQMP) mandates a variety of measures to reduce traffic congestion and improve air quality. These measures include the Regulation XXII – On-Road Motor Vehicle Mitigation Options, which provides employers of 250 or more persons with a menu of options to reduce mobile sources emissions generated from employee commutes. Air Quality is included as a sub-element of the Recreation and Resources Element of the Lake Forest General Plan to fulfill AQMP requirements.

County of Orange Master Plan of Local Parks

The County of Orange Master Plan of Local Parks provides goals, objectives, policies, and implementation programs for a comprehensive Countywide Park Plan. In conjunction with the County Local Park Code, the Plan provides an adequate supply of usable County parkland. The Master Plan provides a regional park planning context for the Lake Forest Recreation and Resources Element. In turn, the Lake Forest Recreation and Resources Element implements portions of the County Plan.

County of Orange Master Plan of Regional Riding and Hiking Trails

The County of Orange Master Plan of Regional Riding and Hiking Trails provides policies and programs to implement the future development and operation of the County-wide trails system. This County Plan includes an inventory of existing and proposed trails, and standards and criteria for new trails. Lake Forest is served by the County trails system.

County of Orange Recreation Element

The Recreation Element of the County of Orange General Plan provides an inventory of existing and proposed parks and open space, and includes the Local Parks and Trails Master Plans. Several County parks are located in Lake Forest and are subject to the County Recreation Element.

County of Orange General Plan Resources Element

The Resources Element of the County of Orange General Plan includes an inventory of the County-wide resources such as agricultural, mineral, wildlife, energy, water, air, open space, and cultural-historic resources. The element also includes goals, policies, and programs for development, management, preservation, and conservation of the County

resources. This element provides sources of regional information affecting Lake Forest.

Central/Coastal Subregion Natural Communities Conservation Program (NCCP)/Habitat Conservation Plan (HCP)

The purpose of the Central/Coastal Subregion Natural Communities Conservation Program (NCCP) is to protect and perpetuate sensitive plant and animal species (particularly the California gnatcatcher, cactus wren, and orange-throated lizard) in the coastal sage scrub of Orange County. The NCCP Habitat Conservation Plan (HCP) establishes a regional habitat planning and management system while allowing growth and development. The Central/Coastal Subregion NCCP, part of a comprehensive NCCP/HCP for the entire Southern California region, is based on voluntary and collaborative participation among property owners, local governments, state and federal agencies, and environmental organizations. Lake Forest is a participant in the NCCP/HCP.

Planned Communities

Lake Forest has been primarily developed as a series of Planned Communities prior to incorporation. The Planned Communities comprising the incorporated City include Lake Forest, El Toro, Baker Ranch, Pacific Commercentre, Rancho de los Alisos, Rancho Serrano, Serrano Highlands, Foothill Ranch, and Portola Hills. Pursuant to CEQA, Environmental Impact Reports (EIRs) have been prepared for the Planned Communities. The EIRs contain analysis of the potential environmental impacts from development and contain requirements to avoid or reduce the environmental impacts. If future development in Lake Forest proceeds under one of these Planned Communities it will be subject to the mitigation measures of the corresponding EIRs. Future residential development which is

not a part of one of the existing Planned Communities or which involves amendments to Planned Community documents will require additional environmental analysis to determine whether a new EIR is required.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Recreation and Resources Element must be consistent with the other General Plan elements and all elements of the General Plan are interrelated to a degree. Certain goals and policies of each element may also address issues that are the primary subjects of other elements. The integration of overlapping issues throughout the General Plan elements provides a strong basis for the implementation of plans and programs, and achievement of community goals. The Recreation and Resources Element relates most closely to the Land Use, Safety and Noise, Circulation, and Public Facilities/Growth Management Elements.

The Land Use Element provides a planned land use pattern with the following specific designations: Community Park/Open Space, Regional Park/Open Space, and Open Space. The park and open space designations are applied to public and private land that is intended for recreational uses. The designations are also applied to areas with high resource and aesthetic value for preservation purposes. In addition, policy established in the Land Use Element requires City decision makers to minimize the impact of new development on unique topographical, biological, and cultural resources.

Natural resource conditions are also considered in the Safety and Noise Element. Policies in the Safety and Noise Element minimize potential hazards from geologic and floodway conditions. Emergency preparedness requires

public education and involvement, which overlaps with the human resource goals identified in the Recreation and Resources Element.

Air quality, a major regional concern, is specifically addressed in the Recreation and Resources Element. Local efforts to improve air quality will involve improvements to the local street system to maintain efficient traffic flow, increased use of alternative transportation modes, the creation of new jobs in Lake Forest to improve the jobs-to-housing balance, and continued coordination with other jurisdictions to implement regional programs. Policies and plans in the Land Use, Circulation, and Public Facilities/Growth Management Elements support the achievement of these air quality strategies.

ISSUES, GOALS, AND POLICIES

The following six major issues are addressed by the goals, policies and implementation actions of the Recreation and Resources Element: (1) providing opportunities for recreation in Lake Forest; (2) ensuring the preservation and enhancement of the natural resources and features, such as water, lakes, the urban forest, energy, plant and animal habitats, minerals,¹ and soils; (3) ensuring the conservation of important historic, archaeological, and paleontologic resources; (4) utilizing the human resources, such as homeowner associations, community groups, and business groups within Lake Forest; (5) reducing the amounts of solid waste generated by the community through recycling and other methods; and (6) improving air quality. Each issue and the related goals, policies and implementation actions are identified and discussed in the following section.

PARKS AND OPEN SPACE

Lake Forest has many public parks, lakes, urban forests, and a number of the major homeowner associations operate recreational facilities for use by those living within their areas. Physical fitness, athletics, and sports are important active recreational pursuits, while facilities for passive recreational activities are also necessary. Identifying ways to best utilize, improve, and broaden the overall recreational system in the community is an important effort.

GOAL 1.0: Ample recreational and cultural opportunities and facilities.

¹ General Plan Amendment 96-01, dated October 29, 1996

Policy 1.1: Promote the development and maintenance of a balanced system of public and private recreational lands, facilities, and programs to meet the needs of the Lake Forest population.

Policy 1.2: Maximize the utilization of existing parks, recreational facilities, and open space within Lake Forest.

Policy 1.3: Operate and maintain public park and recreational facilities in a manner that ensures safe and convenient access for all members of the community.

Policy 1.4: Require parkland improvements and facilities that are durable and economical to maintain.

Policy 1.5: Promote a high level of public outreach regarding park and recreation opportunities in Lake Forest.

Policy 1.6: Promote the future development of community centers as focal points for local activities.

Policy 1.7: Develop a network of multi-purpose trails to provide convenient, safe access to recreational, residential, and commercial areas.

Policy 1.8: Provide a positive environment to prevent anti-social forms of behavior (gangs, graffiti, juvenile delinquency).

Policy 1.9: Preserve all designated open space areas until sufficient parkland exists in the City to meet the established parkland standard to provide adequate recreational opportunities for the community except any land within the Regional Park/Open Space designation

requiring reconfiguration to create a continuous open space link.²

NATURAL RESOURCES AND FEATURES

Lake Forest contains many important natural resources and features, including its eucalyptus forest and other trees, lakes, creeks, canyons, hillsides, mineral resource areas, and other open lands. These resources add to the value of property, provide visual changes in an urban environment that create interest, and offer important landmarks that communicate a sense of place and location within the community. These important resources can be preserved or enhanced to maintain the natural physical and visual quality of Lake Forest.

GOAL 2.0: Preservation and enhancement of important natural resources and features.

Policy 2.1: Conserve and protect important natural plant and animal communities, such as areas supporting rare and endangered species, riparian areas, wildlife movement corridors, wetlands, and significant tree stands through appropriate site planning and grading techniques, re-vegetation and soil management practices, and other resource management techniques.³

Policy 2.2: Coordinate water quality and supply programs with the responsible water agencies.

Policy 2.3: Encourage the expansion of reclaimed water production and use.

Policy 2.4: Conserve and protect important topographical features, watershed areas, and soils through appropriate site planning and

grading techniques, re-vegetation and soil management practices, and other resource management techniques.

GOAL 3.0: Extraction of mineral resources and reclamation of mined land, while preserving the City's plans for future use as described in the Land Use Element.⁴

Policy 3.1: Provide for the conservation and development of significant identified mineral resource sites within Lake Forest.

Policy 3.2: Provide for the reclamation of mineral resource sites in concert with future use as described in the Land Use Element and required environmental mitigation.

Policy 3.3: Regulate mineral extraction activities to minimize hazards and conflicts with other land uses by the issuance of sand and gravel site permits.

Policy 3.4: Address and mitigate the significant environmental effects of surface mining operations.

Policy 3.5: Promote land use decisions that ensure, to the greatest extent possible, compatibility between mineral resource extraction and adjacent land uses.

HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGIC RESOURCES

Lake Forest contains several important historic, archaeological, and paleontologic resources and potential resource areas that should be conserved to provide a link to the community's history and heritage.

² General Plan Amendment 00-01, dated May 2, 2000

³ General Plan Amendment 00-01, dated May 2, 2000

⁴ General Plan Amendment 96-01, dated October 29, 1996

Conservation of these resources and investigation of potential resource areas represents an important undertaking for connection with the community's past.

GOAL 4.0: Conservation of important historic, archaeological, and paleontologic resources.

Policy 4.1: Protect areas of important historic, archaeological, and paleontologic resources.

Policy 4.2: Identify, designate, and protect buildings or sites of historical significance.

HUMAN RESOURCES

Lake Forest has many homeowner associations, community groups, and business groups, which represent important resources for accomplishing long term community goals. These groups often include volunteer leaders and workers who have a distinct understanding of their neighborhoods and areas. These significant human resources may be used to establish and achieve community goals.

GOAL 5.0: Active citizen involvement to establish and achieve community goals.

Policy 5.1: Solicit citizen participation during the early stages of major public or private development projects and regulatory programs.

Policy 5.2: Utilize homeowner associations, community groups, and business groups as sources of individual volunteers for important appointed positions on City commissions, boards, and task forces.

Policy 5.3: Develop appropriate vehicles, such as newsletters, information brochures, cable television programming and

announcements, and other methods, to communicate important information to the population of Lake Forest.

SOLID WASTE

To maintain the long term quality of life in Lake Forest, the community must manage the generation, use, and disposal of solid waste. Recycling, reuse and reduction of solid waste, including landscaping refuse, can dramatically reduce the amount of material that will otherwise use expensive land fill space.

GOAL 6.0: Reduction of the per capita volume of solid waste produced in the community.

Policy 6.1: Reduce the per capita production of solid waste in Lake Forest in concert with the County of Orange source reduction and recycling plans for reducing solid waste.

AIR QUALITY

Air quality within the South Coast air basin does not presently meet state and federal standards. Cooperation among all agencies in the basin is necessary to achieve desired improvements to air quality. Lake Forest can participate and contribute its share in those efforts by proper planning for land use, transportation and energy use.

GOAL 7.0: Improvement of air quality.

Policy 7.1: Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.

Policy 7.2: Cooperate and participate in regional air quality management planning, programs and enforcement measures.

Policy 7.3: Utilize transportation demand management to influence transportation choices related to mode and time of travel.

Policy 7.4: Implement Citywide traffic flow improvements

Policy 7.5: Implement land use policy aimed at achieving a greater balance between jobs and housing in Lake Forest.

Policy 7.6: Integrate air quality planning with land use and transportation planning.

Policy 7.7: Promote energy conservation and recycling by the public and private sector in Lake Forest.

RELATED GOALS AND POLICIES

The goals and policies described in the Recreation and Resources Element are related to and support subjects included within other General Plan elements. In turn, many goals and policies from the other elements directly or indirectly support the goals and policies of the Recreation and Resources Element. These supporting goals and policies are identified in Table RR-1.

**TABLE RR-1
RECREATION AND RESOURCES
RELATED GOALS AND POLICIES BY ELEMENT**

Recreation and Resource Issue Area	Related Goals and Policies by Element					
	Land Use	Housing	Circulation	Recreation and Resources	Safety and Noise	Public Facilities/ Growth Management
Parks and Open Spaces	1.1, 2.2, 3.3		4.2			6.1
Natural Resources and Features	1.1, 2.2, 3.1, 4.2				1.1, 1.2	4.1
Historic, Archaeological, and Paleontological	1.1, 2.2, 3.1, 4.2					
Human Resources					4.2	
Solid Waste					2.3	
Air Quality		1.6	1.1-1.3, 2.1-2.3, 3.1-3.4, 4.1-4.3, 6.1-6.3			7.1, 8.1, 9.1, 9.2

RECREATION AND RESOURCES PLAN

The combination of unique environmental amenities, rich community heritage, and modern development give Lake Forest a positive, enduring identity. The Recreation and Resources Plan establishes an approach to build on these positive assets by conserving environmental quality and developing new recreational opportunities. The Plan addresses the specific recreation and resource issues identified in the previous section. The related goals and policies serve as the basis of the Plan and are supported by approaches to obtain and develop new parkland, and protect and enhance natural areas, water, air, mineral,⁵ historic remains and present-day human resources. The Recreation and Resources Implementation Program, which is part of the General Plan Implementation Plan, is an extension of this Plan and contains specific programs to achieve recreational and environmental goals.

PARKS AND OPEN SPACE

Parks and open space are an important community amenity. In addition to providing opportunities for recreation and leisure, parks and open space enhance aesthetics and community character. This section of the Recreation and Resources Plan describes the strategy to broaden recreational opportunities in the City. Strategies include developing new parks and a community center, and establishing better trail linkages between recreation areas. Maintenance of existing facilities is also emphasized.

Relation to Planned Land Use

Land for parks and recreational facilities is included in several Open Space designations in

the Land Use Element. The Open Space designations encompass land presently used and planned for parks and recreational facilities. The Community Park/Open Space designation provides for public recreational uses designed to meet the active and passive recreational needs of the community. This designation includes all public parkland, open space, and associated public recreational activities, such as indoor and outdoor sport facilities, museums, theaters, and similar uses.

The Regional Park/Open Space designation provides for public recreational uses designed to meet the active and passive recreational needs of both the community and other nearby areas in the region. This designation includes the Limestone/Whiting Regional Wilderness Park and County open space along Serrano and Aliso Creeks. Land with the Regional Park designation is generally maintained as natural open space with minimal improvements.

The Open Space designation in the Land Use Element is applied to open space that is held under private ownership and includes facilities for active and passive recreational facilities. Uses include sport facilities, lakes, club houses, meeting rooms, outdoor gathering areas, and landscaped areas. The recreation component of this element primarily addresses public open space under the Community Park and Regional Park designations.

Recreation Plan

Lake Forest residents enjoy a variety of parks and trails with different amenities. Table RR-2 summarizes the existing City parks and recreational facilities and identifies the location, acreage, and facilities. Approximately 200 acres of public parkland have been developed. In addition, the County operates

⁵ General Plan Amendment 96-01, dated October 29, 1996

several large regional parks within and around the City. Limestone/Whiting Wilderness Park encompasses 1,101 acres of natural land in the City. Private parks are also distributed throughout the City in various Planned Communities.

To build on the existing parks and trails system and provide new recreational opportunities, the Recreation Plan will be implemented. The Plan, which is illustrated in Figure RR-1, shows both existing and planned open space for parks. The approximate location, acreage, and features of planned parks are summarized in Table RR-3. Approximately 54 acres of new parks and recreational facilities are planned. The configuration of the planned trails system is also identified in the plan and linkage between recreation areas and existing trails is emphasized.

To ensure sufficient recreational opportunities, the City has established a parkland standard of five acres per 1,000 residents. The standard is useful in determining existing parkland deficiencies and predicting the demand from future population growth. Table RR-4 summarizes the parkland requirements for the population from development of planned land uses (as established in the Land Use Element). Based on the parkland standard and existing and planned park facilities, there will be a shortfall of 144 acres in the City.⁶

The deficit in the City will be offset by the recreational opportunities offered by Limestone/Whiting Wilderness Park, other nearby regional parks, private parks, and schools in the Planned Communities.⁷

Due to the existing deficits in improved park and recreational opportunities within the City, all open space identified on the Land Use

Policy Map (Figure LU-1) provides potential recreational opportunities which are necessary to meet the current recreational needs of the residents of the Planning Area. As a result, property designated for open space uses will only be allowed to change to non-open space use if (a) the owners of the property are able to prove that sufficient improved park and recreational opportunities exist within the City to meet the current need for park and recreational opportunities or (b) land within the Regional Park/Open Space designation requires reconfiguration to create a continuous regional open space link, including either minor reductions or increases in acreage⁸ or (c) the project contributes parkland at more than the 5 acres per 1,000 population standard.⁹

⁶ General Plan Amendment 2008-02, dated June 2008

⁷ General Plan Amendment 01-01A, dated July 17, 2001

⁸ General Plan Amendment 01-01A, dated July 17, 2001

⁹ General Plan Amendment 2008-02, dated June 2008

**TABLE RR-2
EXISTING CITY PARKS AND RECREATION FACILITIES**

NAME	LOCATION	ACRES	FACILITIES
Alton Park	Alton Parkway between Bonita Vista and Mallorca	2	Tot lot, half-court basketball
Baker Ranch Community Park	26380 Rancho Parkway South	7.25	Soccer Field with overlay,
Borrego Park	Bake Parkway near Burbank	11	Baseball field, basketball court, play area, restrooms
Borrego Wash	Borrego Wash at City Boundary	14.3 ^a	Class-I Bikeway, respite areas, passive open space.
Cavanaugh Mini Park	23782 Cavanaugh Rd.	0.2	Play apparatus and ½ court basketball
Cherry Park	22651 Cherry Ave.	4.5	Play apparatus, ½ court basketball, open play area, picnic shelter, individual & group picnic tables and barbecue grills
Concourse Park	Saddleback Ranch Road near Ranchwood Way	7.0	A basketball court, tot lots, picnic areas.
Darrin Park	22461 Cherry Ave.	3.1	Play apparatus, ½ court basketball, open play area, individual picnic tables and barbecue grills
El Toro Park	23701 Los Alisos Blvd.	10	Volleyball courts, handball courts (outdoor), and lighted tennis courts
Heroes Park	25420 Jeronimo Rd.	12.4	Lighted Little League fields, lighted soccer fields and restrooms
Ethnies Skate Park of Lake Forest	Lake Forest Drive near Rancho Parkway	3.0	Skate area for all ages, restrooms, picnic tables.
Foothill Ranch Community Park	Pauling near Lake Forest Drive	15	Tennis courts, volleyball court, baseball field
Heritage Hill Historical Park (County Facility)	25151 Serrano Road	4.1 ^b	Open space, historic buildings, educational programs, picnic tables, restrooms and maintenance structure
Lake Forest Park	24000 Serrano Rd.	2.3	Picnic tables, hiking trail and passive open space
Lake Forest Sports Park	28000 Rancho Parkway	86	Multi-purpose facility, lighted ball fields/ soccer fields, multi-purpose court, group picnic areas, restrooms, active play areas
Mountain View Park	4061 Dylan St.	5.3	Softball field, ½ court basketball, play apparatus, volleyball courts, handball courts, lighted tennis courts, open play area, picnic table and barbecue
Montbury Park	21962 Montbury Dr.	3.5	Passive open space
Nature Park	26251 Dimension Drive	4.5	Walking trail, picnic tables, gazebo picnic area
Overlook Park	Viaggio Lane near Tessera Avenue	1.2	Tot lot, picnic area, gazebo
Peachwood Park	Peachwood near Palmwood	2.7	Open space, tot lot, picnic area
Pebble Creek Park	26441 Pebble Creek Rd.	1.9	Play apparatus and passive open space
Pittsford Park	21701 Pittsford Dr.	10	Play apparatus, picnic tables picnic shelter tennis courts, restrooms
Rancho Serrano Park	20842 Paseo Sombra	5.1	Picnic tables and passive open space
Ranchwood Park	22500 Killy St.	1.9	½ court basketball, play apparatus, volleyball court, and open space
Regency Park	21478 Regency Lane	8.5	Large, flat turf area, soccer field overlay; City holding bond for future improvements
Rimgate Park	29772 Rimgate	5	½ court basketball courts, play apparatus, grass volleyball court, tennis court, picnic tables, picnic shelter, and passive open space
Serrano Park	Tamarisk at Peachwood	11.2	Baseball fields, soccer, open play, basketball court, picnic tables
Serrano Creek Park	25101 Serrano Rd.	44	Play apparatus, walking trail, picnic tables, restrooms
Sundowner Park	22041 Sundowner Lane	0.8	Play apparatus, picnic tables, passive open space
Village Pond Park	23102 Ridge Route Dr.	4.7	Picnic tables, pond and passive open space
Vintage Park	21000 Vintage St.	4.8	Basketball courts, play apparatus, parcourse, open play area, picnic tables and barbecues

NAME	LOCATION	ACRES	FACILITIES
<i>Total Acres</i>		<i>293.15</i>	
(a) Final acreage calculation to be determined with Area Plan for adjacent development.			
(b) Acreage is not included in the total acreage calculation because it is a County facility.			

**TABLE RR-2A
EXISTING PRIVATELY-OWNED PARKS AND RECREATION FACILITIES
(OPEN TO PUBLIC UNLESS OTHERWISE NOTED)**

NAME	LOCATION	ACRES	FACILITIES
The Grove ¹	101 Mariposa	2.62	Pool, Recreation Building
Passage Park	101 Wild Rose	.8	Tot Lot, BBQ/Picnic Area, Shade Structure, Half-Court Basketball
Odyssey Park	100 Clover	.93	Tot Lot, BBQ/Picnic Area, Shade Structure, Half-Court Basketball
Arbors ^{1,2}	101 Bellflower	2.2	Tot Lot, BBQ/Picnic Area, Shade Structure, Half-Court Basketball, Pool (Private)
		3.98	
¹ Private Facility – open to residents of Baker Ranch only; acreage only counts for partial credit (.25 of full acreage)			
² Pool is open to residents of Baker Ranch only; pool is 0.8 acres, which only counts for partial credit (.25 of acreage)			

PROVIDE A COMMUNITY CENTER FACILITY CENTRAL TO THE CITY (ALSO A NETWORK OF SMALLER CENTERS). ACQUIRE OPEN SPACE IN THE CENTRAL PORTION OF THE PLANNING AREA (145 ACRES) TO ASSOCIATE SPORTS FIELDS WITH THE COMMUNITY CENTER.

COMPLETE THE SERRANO CREEK TRAIL FROM FTC TO THE EDGESTRAN CENTER. ALSO COMPLETE THE ALISO CREEK TRAIL FROM THE NORTHEAST TO SOUTHERN CITY LIMITS.

UPGRADE EXISTING PARKS TO MEET ADA AND CONSUMER SAFETY STD. AND GENERAL NEEDS (E.G. FENCE TABLES, ECT.)

LINK SERRANO CREEK TRAIL TO ALISO CREEK TRAIL (MINIMUM ONE WITHIN CITY LIMITS INCLUDING SIGNAGE AND MAPS)

ACQUIRE BERRINGO PARK (15 AC. I.D.D. SITE) AND CONSIDER RE-IMPROVING TO PROVIDE ADDITIONAL BALLFIELD AND SOCCER FIELDS.

DEVELOP NICE ROUTE DRIVE AS CENTRAL TRAIL SPINE LINK 1 TO SERRANO CREEK OPEN SPACE CORRIDOR ENHANCE THE SPINE CORRIDOR AND PLANTINGS THAT RELATE TO CITY IDENTITY.

CONSIDER RETROFITTING EXISTING PARKS W/BALLFIELDS FOR ORGANIZED PLAY.

CONSIDER RETROFITTING PARKS W/PRACTICE BALLFIELDS.

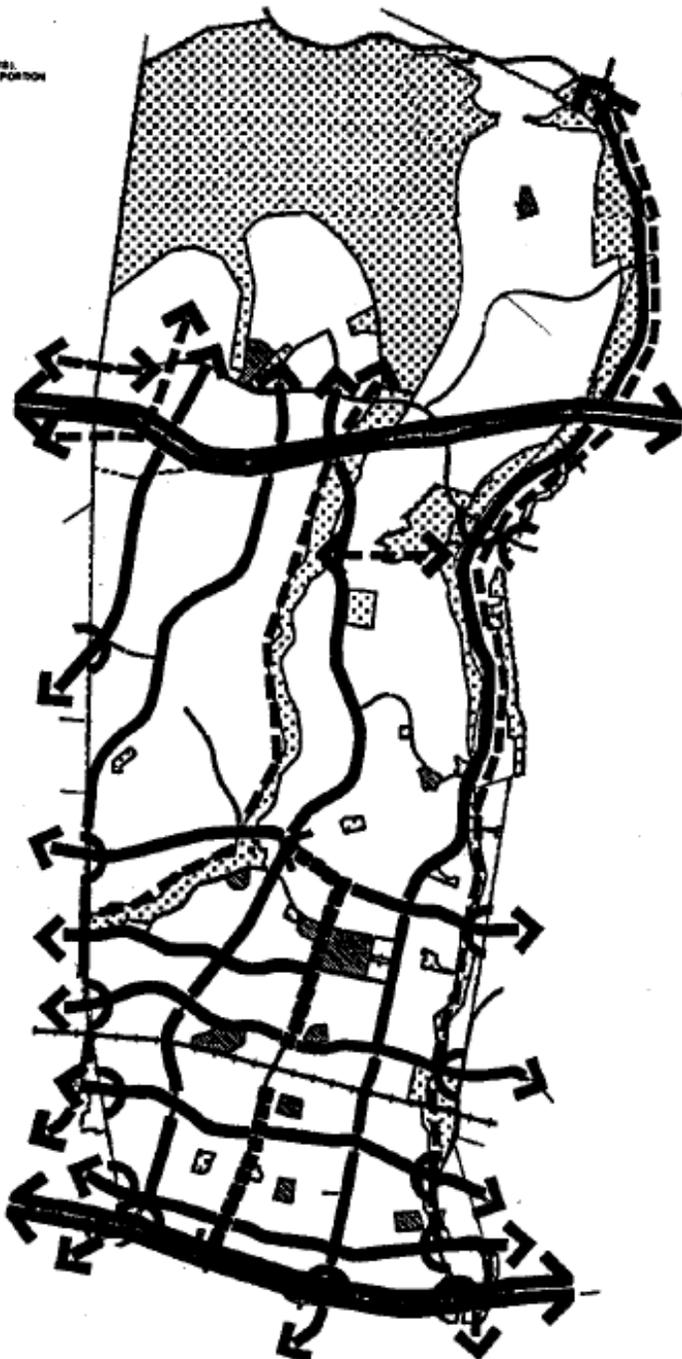
ESTABLISH CITY IDENTITY AT SEVERAL GATEWAYS TO THE CITY.

PROVIDE PUBLIC SAFETY ORIENTED RECREATION PROGRAMS.

PROVIDE PROGRAMS FOR SENIOR CITIZENS CIVILICURAL, COMMUNITY RECREATIONAL AND EDUCATIONAL PURPOSES.

LEGEND

-  Arterials Providing Pedestrian Access
-  Trail Links
(Multi-Purpose Trail Between Serrano Creek and Aliso Creek; Riding/Hiking Trail along Foothill Transportation Corridor. Serrano Creek and Aliso Creek: Class II along Portola, Class I along Aliso, Class I along Borrego Canyon Wash)
-  Freeways - No Pedestrian Access Provided
-  Proposed North/South Spine Trail Corridor
-  Gateway Opportunities
-  Community Park/
Open Space
Regional Park/
Open Space
-  Schools
-  OCTA Railroad




NORTH
no scale



General Plan

SOURCE: RJM Design Group, Inc.

Figure RR-1
Recreation Plan

**TABLE RR-3
PROPOSED PARKS AND RECREATION FACILITIES**

Site	Net New Acreage	Location	Proposed Features (examples only)
Canada East	2 acres	Canada Road near Orchard Rim	
Canada West	4.1 acres	Canada Road near Skybird Lane	
Normandale Park	10.7	Regency Lane	Sports fields, play areas
Opportunities Study—Shea-Baker	17.2	Various within the Baker Ranch Planned Community	Multiple Mini and Neighborhood Park sites to meet parkland dedication requirements for new residential development ^c
Opportunities Study—Portola Center	8 ^b	C	Multiple Mini and Neighborhood Park sites to meet parkland dedication requirements for new residential development ^c
Opportunities Study—IRWD	6 ^b	No specific site(s)	Mini and Neighborhood Park sites to meet parkland dedication requirements for new residential development ^c
Whispering Hills	6.4	Lake Forest Drive	
Total Acres	54.4		
(a) (b) Estimate based on 3 acres per 1,000 population neighborhood park requirement pursuant to the Opportunities Study Area Development Agreement, which has a maximum unit count of 2,815 units.			
(c) In accordance with Opportunities Study Development Agreement.			

**TABLE RR-4
PARK ACREAGE NEEDS**

Population ^a	Park Acreage Required ^b	Available Acreage from Existing and Planned Parkland ^c	Surplus/(Shortfall) of Acreage
97,261	486.3 acres	354.1 acres	(132.2 acres)
(a) From Table LU-3			
(b) 5 acres per 1,000 persons			
(c) Existing Parkland per Table RR-2 / Planned Parkland per Table RR-3. County and Regional Parks are not used to meet this standard.			

The facilities comprising the Recreation Plan are described in the following sections, and standards and criteria for developing new park sites are established. Implementing the

Recreation Plan is discussed after the description of facilities.

Mini-Parks

Mini-parks are small, passive, local parks, generally less than one acre in size. Most mini-parks are established in higher density areas as a substitute for backyards. Size and location are usually determined by the availability of vacant land. These parks serve various age groups depending on the characteristics of the neighborhood and typically feature play apparatus, a paved area for wheeled toys, benches, and landscape treatment. Additional facilities sometimes include children's play areas, quiet game areas, and some sports activities such as multi-purpose courts, if space allows. Some mini-parks are sometimes established to safeguard identified natural resources or serve as viewpoints and could include linear parks with trails and other recreational amenities. Mini-parks are often maintained by homeowners associations. The maintenance costs of proposed mini-parks require consideration prior to acceptance of dedication.

Neighborhood Parks

Many of the facilities located within neighborhood parks are associated with active recreation. Neighborhood parks should contain consolidated parcels with appropriate area devoted to active recreation such as ball fields, recreation centers, multi-purpose fields and open turf, game courts, tot lots, picnic facilities, and on-site parking and may include linear parks that incorporate trails and other recreational amenities. The standard minimum size for neighborhood parks is three acres.

Neighborhood parks should be located near the center of neighborhoods. Easy access should be provided to pedestrians, bicyclists, and maintenance and public safety vehicles. Neighborhood parks should not be separated from its user population by major highways, railroads, or other non-traversable obstacles. A neighborhood park should be situated adjacent to or near schools, greenbelts, open space

linkages, or other community open space/recreational facilities to facilitate an integrated open space system. Although neighborhood parks are designed to attract from a smaller service radius, they will also be utilized by residents who may live outside of the immediate neighborhood. This may be particularly true where there are limited recreational facilities, such as in Lake Forest.

Community Parks

Community parks are intended to have a service radius of approximately two to three miles and offer both active and passive recreational pursuits. No specific shape is required and unique physical features such as a ridge line or canyon are typical natural amenities. Community parks should encompass a minimum of ten acres. Pedestrian and bicycle paths and natural open space should be offered by community parks.

Community parks contribute to the open space system by connecting to neighborhood parks through open space linkages. For maximum public access and use, such parks should be located at or near the intersection of an arterial near the center of their service area. Community parks should contain space for active recreational facilities such as game fields, game courts, and play areas as well as community centers, on-site parking, restrooms, and picnic areas. Due to the limited number of park sites that exist within the City, uses and facilities typically found in community parks may also be located in neighborhood parks.

While the City has adequate mini- and neighborhood parks, the distribution of community parks is inadequate to meet the needs of the population. Future park development efforts will consequently focus on community parks.

Special Use Facilities

Special Use Facilities are designed to meet the requirements of specific recreational, social, and cultural activities. Examples of special use facilities include community centers, libraries, and senior centers. The function of these facilities goes beyond the primary purpose of serving a single neighborhood.

Because the demographic makeup of the City will change over time, the City shall conduct continuous research and assessment to ensure that those facilities provided are adequate. The City shall also develop Special Use Facilities and programs that can be adapted to the changing recreational needs of the population. The number of Special Use Facilities shall adjust to accommodate the recreational demands of the community. Through the Special Use Facilities, in addition to recreational programs, the senior citizen program of comprehensive, coordinated programs will be maintained and strengthened to meet community needs.

A centralized community center is greatly desired by the community. In the early 1900s, a community center was constructed for the enjoyment of town residents and the farmers in the back country. The center served as the focus of all social activities including dances, weddings, club meetings, and holiday celebrations. With time, the building deteriorated and was removed for safety reasons in the 1980s. The City intends to construct a new community center in conjunction with a large park and sport facilities. The center will promote the historic tradition of community involvement and socializing. A network of smaller recreation centers may also be located in the City.

The City opened an interim Community Center in 2004 at the interim City Hall site. In addition, community rooms at the El Toro and Foothill Ranch libraries serve as gathering places for the community.

Regional Parks

The County of Orange owns and maintains many regional recreational parks. Local County parks include Limestone/Whiting Wilderness Park, Heritage Hill Historical Park, and O'Neill Regional Park. Cleveland National Forest, located east of the City, offers additional recreational opportunities. Policy for the development, maintenance, and improvement of these parks is provided by the Orange County Recreation Element, which includes a Master Plan for regional recreational facilities in the County.

School Playgrounds / Joint-Use Agreements

Public school playgrounds, under the jurisdiction of the Saddleback Valley Unified School District (SVUSD), are open to the public after school hours. Organized sports leagues such as those for baseball, soccer, and football utilize ball fields through a permit process with the (SVUSD). The City will use some school recreational facilities to meet the park goal of five acres per 1,000 population. Up to 50 percent of the school facilities can be used, provided the school facilities are open to the public.

Opportunities exist to maintain and enhance joint use agreements with the Saddleback Valley Unified School District. Whenever feasible, the City will enter into a joint use and maintenance programs.

Trails

The City's trail system includes pedestrian and bike trails within open space corridors and along regional trails. The County maintains a coordinated system of trails, including bikeways, equestrian trails and hiking trails within the City.

Bikeways comprise the most extensive part of the City's trail network. The biking network in

Lake Forest connects with other trails and paths in adjacent communities and throughout Orange County. There are three categories of bikeways:

- Class I: a paved path that is separate from any motor vehicle travel lane;
- Class II: a restricted lane within the right-of-way of a paved roadway for the exclusive or semi-exclusive use of bicycles; and
- Class III: a bikeway that shares the street with motor vehicles or the sidewalk with pedestrians.

A number of policies included in the Recreation and Resources Element are concerned with the expansion of the Citywide system of hiking and biking trails. The planned trail system will serve recreational and commuting purposes. Specific development standards for the various types of trails are difficult to establish since trail width and gradient will depend on topography, surface features, and availability of an easement. One off-street bike trail is proposed for the City connecting Aliso Creek Trail with Serrano Creek in the northern portion of the City and Foothill Transportation Corridor. One riding and hiking trail is proposed following the Borrego Wash.¹⁰ Bikeways located along the street system are addressed in the Circulation Element.

Proposed riding and hiking trail improvements include a connection between the Aliso Creek Trail and the Serrano Creek Trail. The County will provide has provided a continuous improved riding and hiking trail from the Serrano Creek Equestrian Center to Limestone/Whiting Wilderness Park. Portions of Aliso

Creek Riding and Hiking Trail also require realignment by the County for safe passage. Conditions of existing trails will be improved. New raised push buttons for signalized trail crossings should be provided at Trabuco Road and the Equestrian Center, and sections of the Serrano Creek trail that impede use should be improved by the County.

Private Facilities

In addition to parks and trails, Lake Forest has many private recreational facilities. While some private facilities (such as private parks, tennis courts, and swimming pools) are available only to local residents, others are available to the public for a fee such as Serrano Creek Equestrian Center and Lake Forest Golf and Practice Center. The City encourages the inclusion of such facilities in private development, especially those open to the public.

Facility Development

Several approaches will be employed to implement the Recreation Plan. The City will encourage and, where appropriate, require the inclusion of recreational facilities and trails within future development pursuant to the Quimby Act. Development proposals within Planned Communities will be reviewed for consistency with park requirements of established development agreements. Other alternative methods to develop parkland will be pursued including open space easements, leaseholds, land donations, community facility districts, and gift annuities. Funding for new parks will also be secured from the City General Fund.

The City will also focus on maintaining existing parks and recreational facilities to maximize use and community benefit. These facilities will be used to create a positive environment in Lake Forest to reduce

¹⁰ General Plan Amendment 01-01A, dated July 17, 2001

incidences of antisocial behavior. Facilities will be considered for retrofitting according to the Americans with Disabilities Act (ADA) to provide access for all Lake Forest residents. New facilities will be constructed according to ADA requirements.

NATURAL RESOURCES AND FEATURES

Biological Resources

Much of the incorporated City is developed and most of the natural habitat remaining is located in the eastern portion of the City. Southern sycamore alder riparian woodland occurs along Serrano and Aliso Creeks. The eastern portion of the City contains large areas of natural habitat including southern sycamore alder riparian woodland and coastal sage scrub. Several sensitive species such as the California gnatcatcher have been observed in the City.¹¹

The General Plan Land Use Element establishes an open space system for both recreational and preservation purposes. The open space designations are defined as follows:

Community Park/Open Space: The Community Park/Open Space designation provides for public recreational uses designed to meet the active and passive recreational needs of the community. This designation includes all public parkland, open space, and associated public recreational activities, such as indoor and outdoor sports/athletic facilities, museums, theaters and similar uses.

Regional Park/Open Space: The Regional Park/Open Space designation provides for public recreational uses designed to meet the active and passive recreational needs of the

community and nearby areas in the region. This designation includes the Limestone/Whiting Wilderness Park and other County of Orange open space along portions of Serrano Creek and Aliso Creek. This designation applies to land that is generally maintained as natural open space with minimal improvements.

Open Space: The Open Space designation provides for private open space designed to meet the active and passive recreational needs of the community. This designation includes open space that is held under private ownership, and includes facilities for active and passive recreational activities. Open space activities include indoor and outdoor sports/athletic facilities, lakes, club houses, meeting rooms, outdoor gathering areas and similar uses, as well as ornamentally landscaped and natural landscaped open areas.

Figure RR-3 shows the extent of the open space system in the City. The riparian areas along the creeks are encompassed by the open space system and substantial acreage of undisturbed wildlife habitat in the eastern portion of the City is preserved. Limestone/Whiting Wilderness Park, which contains approximately 1,101 acres of continuous natural habitat, and other open space in the City total approximately 3,220 acres.¹² While some of the open space is dedicated for active recreational uses, much of the open space will be left in a natural state to support habitat for plant and animal species.

Development proposals will be reviewed for potential biological resource impacts according to CEQA and applicable state and federal wildlife regulation. Where significant impacts are identified, the City will require modifications to the project to avoid the impact, or require mitigation measures to

¹¹ General Plan Amendment 01-01A, dated July 17, 2001

¹² General Plan Amendment 99-01, dated May 2, 2000

reduce the impact. The focus of the impact assessment will include the following resources:

- Riparian and wetland habitat;
- Coastal sage scrub habitat;
- Rare and endangered plant and animal species;
- Wildlife movement corridors;
- Habitat fragmentation; and
- Significant tree stands.

The City will also work to perpetuate the viability of regional biological systems. Continued participation in the Central/Coastal Subregion Natural Communities Conservation Program with the County, local jurisdictions, state and federal agencies, environmental organizations and property owners is expected.

Water Resources

Both local and regional water sources are important to the City. Five surface water streams traverse the City: Aliso Creek, Serrano Creek, Borrego Canyon Wash and two smaller un-named creeks.¹³ The City is divided into three watersheds that contribute water, sediments and dissolved materials to the creeks. Figure RR-3 shows the relationship of the water courses and watershed boundaries.

Two general planning issues are associated with these hydrologic patterns: water quality and flooding. The City's water quality plan is identified below while flood prevention is addressed in the Safety and Noise Element.

Surface streams in urban areas are subject to pollutants and sediment carried in runoff. The pollutants in urban runoff include landscape pesticides and fertilizers, automobile products, and degreasers. Urban pollutants degrade

water quality and impact wildlife and plants dependent on aquatic habitat. The City is a permittee with the County of Orange in the National Pollution System Discharge Elimination System (NPDES) program, which is designed to reduce pollutants in runoff. According to the NPDES permit, all new development projects and substantial rehabilitation projects will be required to incorporate Best Management Practices (BMPs) as identified in the County Drainage Area Master Plan (DAMP) and Local Implementation Program (LIP). Implementation of BMPs in Lake Forest will enhance water quality in the surface streams.

Urban activity in Lake Forest affects regional water resources as well as local sources. The water districts serving the City purchase imported water for distribution. The supply of imported water is limited and conservation efforts are needed to ensure adequate emergency storage and future supply. Water conservation will be encouraged throughout the City in the following ways:

- Encouraging the local water districts serving the City to expand the production of reclaimed water and working with the districts to develop new uses for reclaimed water;
- Encouraging the use of drought resistant plant species in landscaping for private and public areas, including parks;
- Coordinating with the local water districts and major users to establish water conservation education programs; and
- Requiring the incorporation of water conservation devices, including low-flush toilets, flow restriction devices, and water conserving appliances, in

¹³ General Plan Amendment 01-01A, dated July 17, 2001

new development, public projects and rehabilitation projects.

The City will continue to coordinate with the water districts responsible for monitoring water quality and constructing needed infrastructure improvements.

Topographic Features

Lake Forest is a transition point between the coastal flood plain and the Santa Ana Mountains. The western portion of the City is nearly sea level while the northeastern portion becomes progressively higher and steeper, reaching elevations of up to 1,500 feet. Views of the rugged mountains are enjoyed from the western portion and views of the Saddleback Valley floor and the Pacific Ocean are available from the higher elevations in the eastern portion. Five surface streams cut the landscape and provide additional topographic relief.¹⁴

Preserving the unique topographic character of the City is important for visual quality and geologic stability. Development proposals will be assessed for potential impacts to important geologic features according to CEQA requirements. Where significant impacts are identified, mitigation measures will be required such as sensitive site planning and grading, re-vegetation and open space dedication.

Natural Resource Protection in Planned Communities

Lake Forest has been primarily developed as a series of Planned Communities prior to incorporation. The Planned Communities comprising the City include Lake Forest, El Toro, Baker Ranch, Pacific Commercentre,

Rancho de los Alisos, Rancho Serrano, Serrano Highlands, Foothill Ranch, and Portola Hills. Pursuant to CEQA, EIRs have been prepared for the Planned Communities. The EIRs analyze potential environmental impacts from development and contain requirements to avoid or reduce those impacts.

The City will ensure that important natural resources within Planned Communities are protected as development proceeds. To this end, all development proposals within Planned Communities will be reviewed to (1) confirm that the proposals are consistent with the established development plans and agreements, and (2) confirm that all required mitigation measures from applicable environmental documents are properly implemented and monitored. Additionally, when amendments to development plans are proposed within Planned Communities, environmental impacts will be appropriately assessed according to CEQA requirements.

¹⁴ General Plan Amendment 01-01A, dated July 17, 2001

NOTE: Biological surveys have been conducted in the Federal Transportation Corridor right-of-way by the Transportation Corridor Agencies. The survey results indicate that the California gnatcatcher and cactus wren are not present in the right of way.

-  Southern Sycamore Alder Riparian Woodland
-  Southern Cottonwood Willow Riparian Forest
-  San Diego Horned Lizard
-  Orange Throated Whitetail
-  Coastal Cactus Wren
-  California Gnatcatcher
-  Western Spadefoot
-  City Boundary

NORTH
0' 3000'

Lake Forest



General Plan

SOURCE: State of California, Department of Fish and Game, National University Data Base - San Juan Capistrano, El Toro and Santiago Peak, February 1994.

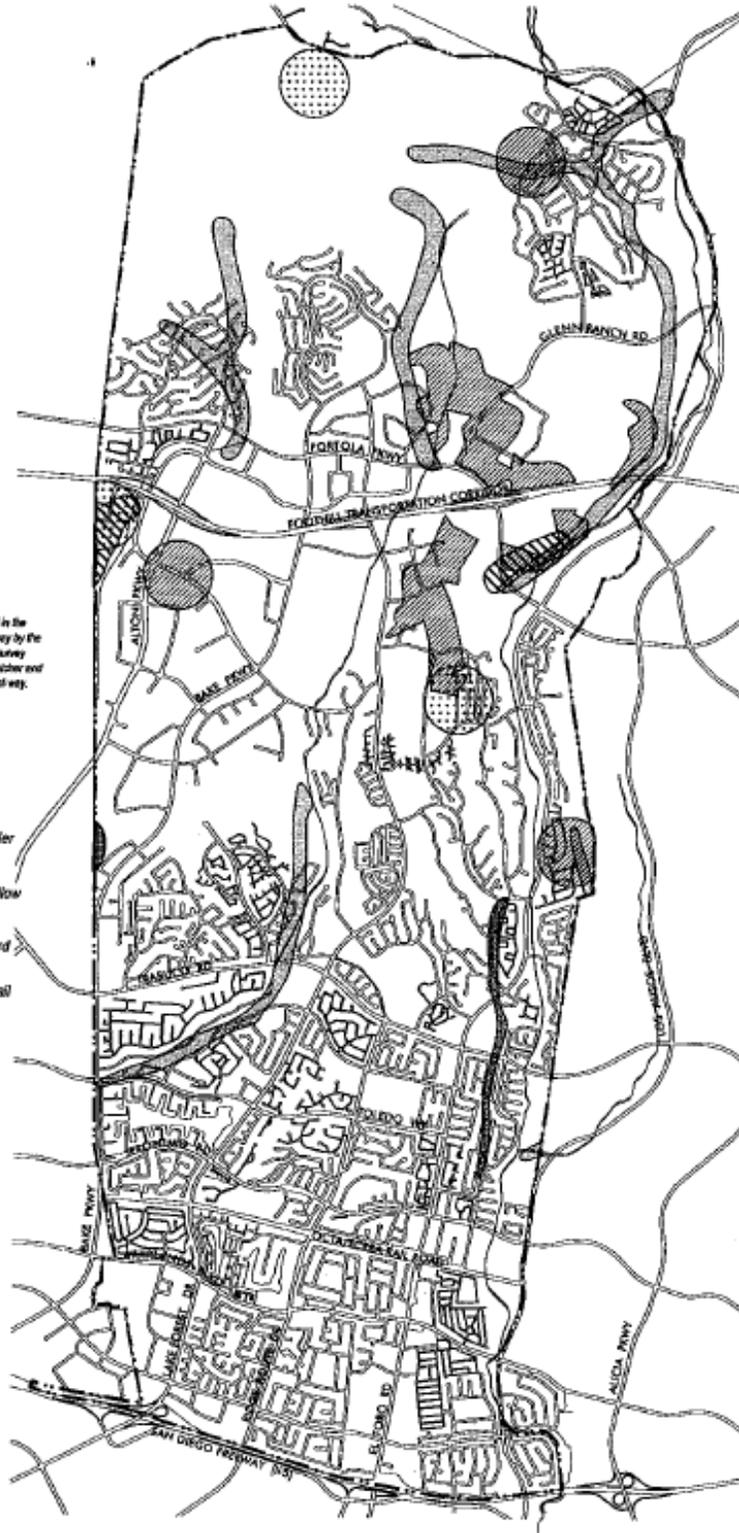
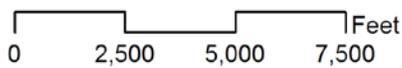


Figure RR-2
Sensitive Biological Resources

-  PUBLIC FACILITY
-  COMMUNITY PARK/OPEN SPACE
-  REGIONAL PARK/OPEN SPACE
-  City Limit

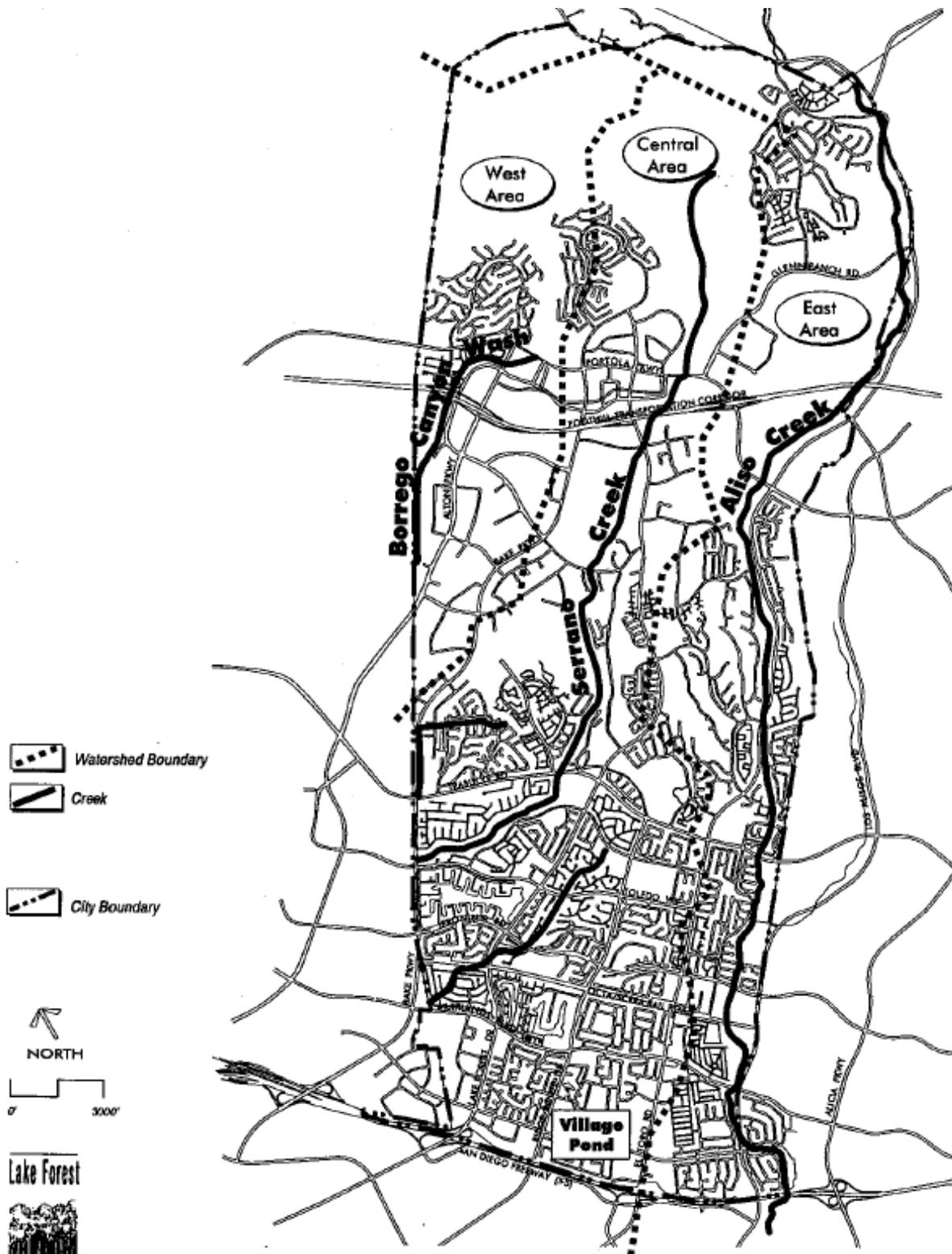


Lake Forest



General Plan

Figure RR-3
Open Space System



SOURCE: San Diego Creek Flood Control Master Plan,
 April 1989; Cotton/Beland/Associates,
 City of Lake Forest

Figure RR-4
Creeks and Watershed Boundaries

Mineral Resources¹⁵

The Mineral Resources Section of the Recreation and Resources Element is intended to provide appropriate policies for conserving and utilizing the City's mineral resources for current and future development, and to insure that adverse environmental effects on the environment and surrounding land uses resulting from surface mining operations are minimized.

Chapter 9.30 of the Lake Forest Municipal Code contains regulations that provide for surface mining, quarrying, and processing of mineral resources in a manner which is both environmentally sensitive and compatible with existing and future land uses. The regulations are intended to implement the State Surface Mining and Reclamation Act of 1975 (SMARA) and ensure that sites are excavated in a safe and reasonable manner with progressive reclamation to a natural appearing or otherwise useable condition compatible with adjacent areas.

Under the City's ordinance, every site zoned SG "Sand and Gravel Extraction" has a single comprehensive SG Site Permit which delineates all of the uses permitted on that particular site. An SG site permit consists of the plan of operations, the drainage and erosion control plan, the vehicular access plan, the reclamation plan, and financial assurances.

HISTORIC, ARCHAEOLOGICAL, AND PALEONTOLOGIC RESOURCES

Historic and Archaeological Resources

¹⁵ General Plan Amendment 96-01, dated October 29, 1996

Lake Forest has a rich historic past. The area was originally inhabited by the Acjachemem who subsisted simply on acorn products and hunted animals. Spanish explorers arrived during the 1500s and the Acjachemem were displaced by local mission operations. Lake Forest lands were later encompassed by José Serrano's Rancho Cañada de Los Alisos. The rancho lifestyle was dominated by cattle grazing and traditional fiestas to break up days of hard labor.

The rancho system fell after the United States took control of California and Dwight Whiting purchased substantial land holdings that included Lake Forest. Whiting introduced dry farming, fruit farming, and later citrus production, and a small town called El Toro developed as a shipping, commerce, and social center. Eucalyptus groves, a prominent feature of the Lake Forest landscape, were planted by Whiting for construction wood. The town did not grow substantially until imported water was available to the area in the 1960s. During the 1970s a number of Planned Communities were developed under County jurisdiction with several created lakes. The City of Lake Forest incorporated in 1991.

Several historic structures from the rancho and agricultural eras have been preserved and are presently located in Heritage Hill Historical Park in Lake Forest. The Park includes the Serrano Adobe (circa 1863), El Toro Grammar School (1890), St. George's Episcopal Mission (1891), and the Bennet Ranch House (1908). Several other residential structures from the agricultural era exist outside of the Park but are not known to have any historical or architectural significance.

Historic structures will continue to be protected to give Lake Forest residents a sense of community heritage and historical values. To maximize the preservation of important historic remains, the City will assess development proposals for potential historic resource impacts according to CEQA requirements. If a significant historic resource occurs on the project site and the proposed development will impact the resource, the City will either require that the project be modified to avoid impacting the resource or require measures to reduce the significance of the impact.

Subsurface Archaeological evidence of the Acjachemem culture potentially occurred throughout the City. Figure RR-6 shows the original distribution of potential sensitive Archaeological resources. Much of the terrain has been modified by agricultural activities and development, which could have disturbed subsurface Archaeological resources. Development proposals will be assessed for potential impacts to Archaeological resources according to the CEQA requirements. The City will require that significant impacts will either be avoided or mitigated which may involve Archaeological investigation and resource recovery.

Paleontologic Resources

Many of the geologic formations underlying Orange County contain important paleontologic resources, (fossil evidence of life from previous geologic periods). Paleontologic resources potentially occur throughout most of the City, (see Figure RR-6). Surveys within the City have revealed crocodile, bony fish, and

shark fossils. Most fossil discoveries have occurred at the El Toro materials sand and gravel operation. Grading has most likely disturbed some of the paleontologic resources that were once present.

Protection of remaining paleontologic resources within the City for scientific study is important. Development proposals will be assessed for potential impacts to significant paleontologic resources according to CEQA requirements. Surveys will be conducted for projects involving earth work to determine potential impacts and identify appropriate measures to avoid or reduce impacts.

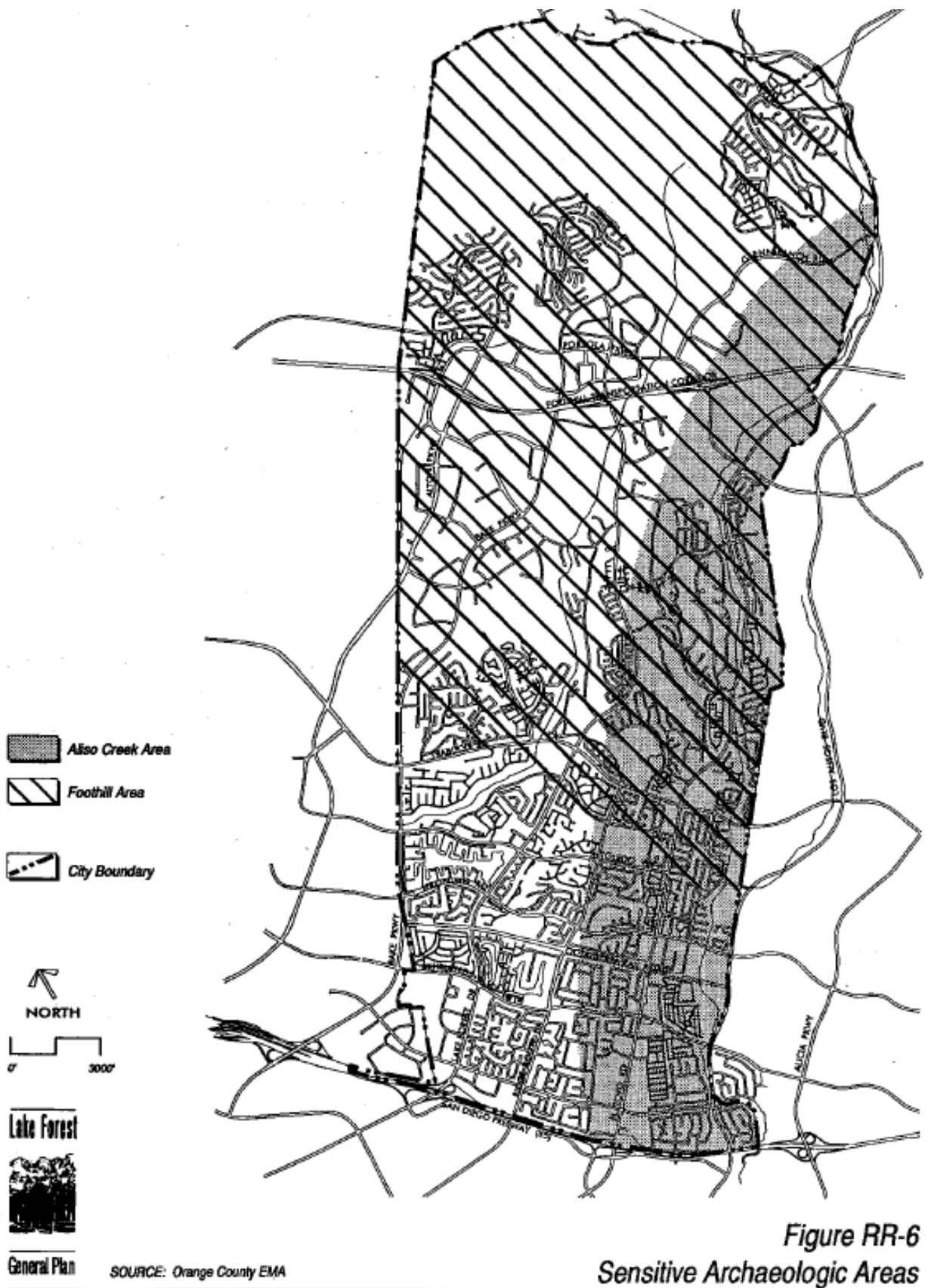
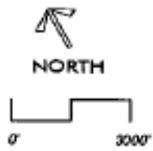


Figure RR-6
Sensitive Archaeologic Areas

 Area of Paleontological Sensitivity

 City Boundary



General Plan

SOURCE: Orange County EMA

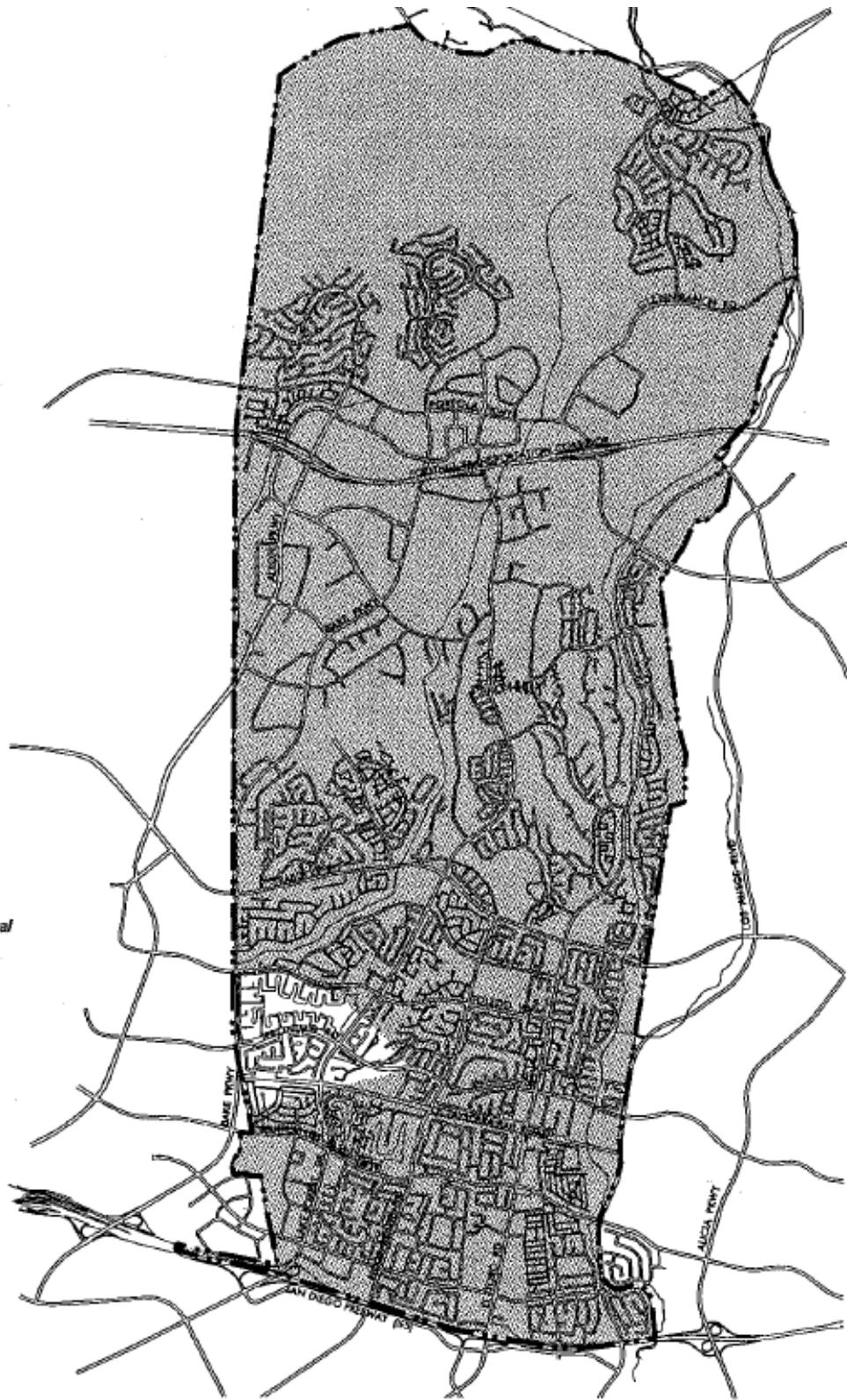


Figure RR-7
Sensitive Paleontologic Areas

HUMAN RESOURCES

The history of the Lake Forest community is marked by active public involvement and concern for civic issues. The City considers human resources a valuable asset to be enhanced and continually cultivated. Making information accessible to all groups within the community will support public involvement and stimulate community interest. Various media approaches include newsletters, information brochures, cable television programming, radio and newspaper announcements, websites, and presentations to community groups. Citizen input will be actively solicited during the early stages of major public or private development projects and regulatory programs.

In addition, the potential of the Lake Forest volunteer sector will be increased. Homeowner associations, community groups, business groups, and interested individuals will be utilized as sources for appointees on City commissions, boards, and tasks forces.

SOLID WASTE

Solid waste management has become an important resource issue in recent years due to dwindling landfill space and advances in recycling technology. Many landfills in southern California are reaching capacity and siting new landfills is increasingly difficult due to environmental, economic, and political considerations. As required by the Integrated Waste Management Act (AB 939), the City has adopted a Source Reduction and Recycling Element (SRRE).

Adoption and implementation of the SRRE will reduce the amount of solid waste entering landfills. AB 939 calls for a 25 percent reduction in the solid waste stream by 1995 and a 50 percent reduction by 2000. These

reductions have been achieved through recycling and composting solid waste and reducing the total amount of waste produced. Implementation of the SRRE results in other environmental benefits in addition to reducing landfill capacity impacts. For example, recycling reduces the amount of raw resources and energy used to construct new containers.

Anticipated regional growth will require the future expansion and construction of landfills even with full implementation of AB 939. The City will support regional efforts to study expansion of existing landfills and find sites for new landfills. The environmental and economic impacts of landfill recommendations will substantially constrain the availability of waste disposal sites.

AIR QUALITY

Lake Forest, with Orange County, Los Angeles County, and portions of San Bernardino County and Riverside County are within the South Coast Air Basin (SCAB). Due to bowl-shaped topography and level of urban development, SCAB experiences some of the poorest air quality in the country. Federal and state air quality standards are regularly exceeded. Because air quality has become a critical regional issue, the Southern California Association of Governments (SCAG) requires local jurisdictions to address air quality in their General Plans. Air quality goals and policies are established earlier in this element and the City's plan to improve air quality conditions is discussed below. Specific action programs are located in the General Plan Implementation Plan.

Interjurisdictional Coordination

Air pollutants disregard jurisdictional boundaries and disperse broadly throughout the region. As a result, improving air quality

requires regional management. SCAB air quality is under the authority of the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) also administers air quality programs. The success of SCAQMD and SCAG programs depends on coordinated participation among all affected jurisdictions including Lake Forest. The City will work towards improving regional air quality and fully participate in SCAQMD and SCAG programs. The City will coordinate with other local jurisdictions to make the transportation system more efficient and promote alternative transportation modes such as carpooling, bus transportation, commercial rail, and bicycling. In addition, the City will participate in future amendments and updates of the SCAQMD Air Quality Management Plan to ensure that new measures can be practically enforced in the Foothill subregion.

Trip Reduction

Intense automobile activity is one of the primary causes of regional air quality problems. Many of the SCAQMD and SCAG strategies to improve air quality require reducing automobile trips. One of the primary tools to reduce trips is the Transportation Demand Management (TDM) ordinance, which implements various provisions of the 1991 Air Quality Management Plan. The City has adopted a TDM ordinance that includes various methods to reduce trips and influence travel modes such as the following:

- Trip reduction programs for the City as an employer;
- Van pool programs for private employers;
- Employee incentives for public transit use;
- Formation of Transportation Management Associations;

- Trip reduction programs for major commercial centers; and
- Alternative transportation modes for major events.

Trip reduction can also be accomplished by improving the local balance between jobs and housing. Lake Forest is located in a region with more job-generating business, industrial and commercial development than residential development. As a result, workers must commute from long distances including from other parts of the County, and even outside of the County, for employment. Besides contributing to substantial traffic, the long commutes often preclude use of alternative transportation modes.

To reduce commuting trips, the City will work to improve the balance between jobs and housing. In the Land Use Element, considerable undeveloped land has been re-designated from commercial, light industrial and business centers to residential and mixed use (GPA 2008-02). Additional residential development will provide a variety of housing opportunities adjacent to the jobs-rich areas of Lake Forest and Irvine. Improving the balance of jobs and housing in Lake Forest will reduce long commutes, and may allow residents to use alternative transportation modes to travel to work, consequently improving regional air quality conditions.

Transportation System and Facility Improvements

Poor air quality conditions are exacerbated by traffic congestion. Cars generate excess emissions when not moving efficiently. The Air Quality Management Plan calls for increasing the efficiency of the transportation system to avoid congestion and reduce emission generation.

The Circulation and Public Facilities/Growth Management Elements contains policies and programs for system management and facility improvements. Transportation system management refers to maximizing the efficiency of the circulation system to minimize delays and congestion. Facility improvements refer to physical improvements to increase system capacity such as adding travel and turn lanes. Service standards and phasing plans are provided to ensure that the capacity of the circulation system can accommodate traffic from new development. Implementation of the Circulation and Public Facilities/Growth Management Elements will increase the efficiency of the City transportation system and consequently improve air quality.

Reduce Impact of New Development

Planned growth and development will contribute to pollutant levels, but the City will minimize air quality impacts of new development. Development proposals will be reviewed for potential air quality impacts according to CEQA and the South Coast Air Quality Management District CEQA Air Quality Handbook. Where potential significant air quality impacts are identified, land use and planning techniques will be required to reduce trips and promote alternative transportation modes. Techniques to reduce air quality impacts may include the following:

- Incorporation of a public transit stops;
- Pedestrian and bicycle linkage to commercial centers, employment centers, schools and parks;
- Preferential parking for car pools;
- Traffic flow improvements; and

- Employer trip reduction programs.

Construction activities can generate significant amounts of dust and particle matter. The City will reduce dust generation during construction by restricting outdoor storage of fine particulate matter, requiring liners and covers for trucks transporting fine matter, and controlling vehicle operations in unpaved areas under City jurisdiction.

Energy Conservation

Energy conservation is another strategy for improving regional air quality. Pollutants are generated by the combustion of fossil fuels to produce electricity, and by the combustion of natural gas. Reducing energy usage decreases the amount of pollutants generated. Energy requirements can be diminished through innovative architectural design, building construction, structural orientation and landscaping.

The City will promote energy conservation by implementing state Title 24 energy performance requirements through City building codes. In addition, the relationship between project design and future energy requirements will be considered when reviewing proposals for new development. Promotion of utility company incentive programs to retrofit existing development with energy efficient lighting, air conditioning and heating systems can be beneficial. Energy will be conserved in public buildings through innovative designs for new buildings and retrofit programs for existing buildings.