

CHAPTER 3 COMMUNITY RESOURCES ELEMENT

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CHAPTER 3 COMMUNITY RESOURCES ELEMENT

INTRODUCTION

“Education, Diversity, and Enrichment have been identified as a strategic priority in order to recognize the contribution of Torrance’s diverse population and to encourage their participation in meaningful activities that contribute to personal and community well-being.”

- City of Torrance Strategic Plan, 2008

The goals, objectives, and polices in this Community Resources Element focus on the enhancement of community qualities that distinguish Torrance. These resources contribute tremendously to the quality of life in Torrance and allow residents to enjoy and experience features not found in many urban environments. The open space resources, wide variety of community facilities and activities, superior educational and cultural facilities, and historic resources such as those found in Torrance are the pride of the community. Maintaining, preserving, and enhancing these resources are a priority for the City and the General Plan.

The Community Resources Element combines three elements that were included as separate elements in the previous General Plan: the Conservation, Open Space, and Parks and Recreation Elements. Many of the topics covered in the three elements have similar threads, such as the provision and conservation of community and natural resources. The Community Resources Element sets forth goals, objectives and policies that build on current recreation, social services, and resource conservation programs. Policies focus on the preservation and management of open space, providing parks, recreation, and community facilities for all residents, historic preservation, natural resource conservation, preservation of scenic resources, managing energy resources,

reducing greenhouse gas emissions, and promoting sustainable building practices.

SCOPE AND CONTENT OF THE COMMUNITY RESOURCES ELEMENT

State General Plan law requires every jurisdiction to address preservation of open space and conservation of natural resources. In response, communities often prepare elements that emphasize physical open spaces and natural resources. However, social resources of a community are also important assets. Given that Torrance is largely urbanized, the Community Resources Element provides a more flexible consideration of community resources that combines the City's physical assets with the community's educational, cultural, and social offerings.

State General Plan law requires every jurisdiction to address preservation of open space and conservation of natural resources. Torrance also recognizes social resources as important community assets.

Torrance has made a strong commitment to providing the highest quality and variety of cultural, recreational, educational, informational, and social programs to respond to residents' needs. Given the City's longstanding policy of providing quality community services, this element broadly defines Torrance's resources to include:

- **Open Space.** The preservation, acquisition, and maintenance of open space are inherent in the goal of community resources conservation. Open space promotes the well being of the residents and the City by enhancing the overall character of the community and creating opportunities for outdoor recreation, enjoyment, personal development, and healthy lifestyles.
- **Parks, Recreation, Cultural, and Community Facilities.** The provision of park space and quality cultural, recreational, educational, informational, and social programs are City priorities. Quality education and children and youth services at facilities promote quality of life.
- **Resource Conservation.** Programs that promote good air and water quality and that encourage recycling, energy conservation, and prudent water use are required to comply with State and federal laws; the benefits include a healthy community and environment. Creating opportunities for sustainable building practices will further preserve the community's resources. Protecting the City's historical resources will help preserve the City's link to its past.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Community Resources Element most closely relates to the Land Use Element and the Circulation and Infrastructure Element. The Land Use Element identifies desired future uses for all lands within the City, including public and privately owned open spaces, parks, and recreational, cultural, and educational facilities to meet the needs of future generations. The goals and policies of the Circulation and Infrastructure Element encourage the use of alternative forms of transportation, which will contribute improved air quality.

I. OPEN SPACE

Open space, as used in the General Plan, refers to any parcel or area of land or water which is essentially unimproved and devoted to the preservation or managed production of natural resources, outdoor recreation, or public health and safety. Although Torrance is highly urbanized, open space exists in many forms. Even landscaped road medians represent important open spaces that provide visual relief from urban streetscapes.

The overarching goal regarding open space is to preserve and create a diversity of open space resources that meet the City's recreation and resource conservation needs.

GOAL: Superior open space resources that meet the City's recreation and resource conservation needs

I.1 THE ROLE OF OPEN SPACE IN THE URBAN ENVIRONMENT

Open space serves many functions in Torrance. Public parks and private recreation areas allow residents and employees of local businesses to engage in healthful exercise or to sit quietly in the shade with a book or picnic lunch. Open space areas along bluffs or hillsides guard against slope erosion. Landscaped areas between buildings and the street represent private open spaces that provide greenery and visual enhancement. In natural areas, open spaces can provide habitat for wildlife species. Figure CR-1 displays open space resources in Torrance and opportunity areas for additional open space.



Park at Torrance Beach: Open space contributes to the health and well-being of local residents.

1.1.1 OPEN SPACE THAT ENRICHES

Open space for outdoor recreation includes regional, community, and neighborhood parks; public school grounds; golf courses; and public trails for walking and biking. Private open space in residential neighborhoods or industrial-commercial areas serves more limited purposes and people. However, both public and private open space recreation areas contribute to the health and well-being of residents. Because many of these facilities provide community services functions, the Parks, Recreation, and Community Facilities section of this Element addresses recreational open space.

1.1.2 OPEN SPACE THAT PROTECTS

Open space for public health and safety refers to lands restricted from development via easements, dedication, or other regulatory control due to hazardous conditions or important flood control functions. Drainage channels and retention and detention basins protect people and property from flood hazards. Open space buffers along fault zones or at the tops or toes of slopes or on otherwise geologically unstable lands prevent development from occurring in these potentially unsafe areas. Expected effects of global climate change include an increase in wildfires, flooding, and drought. The Safety Element identifies areas where these conditions occur.

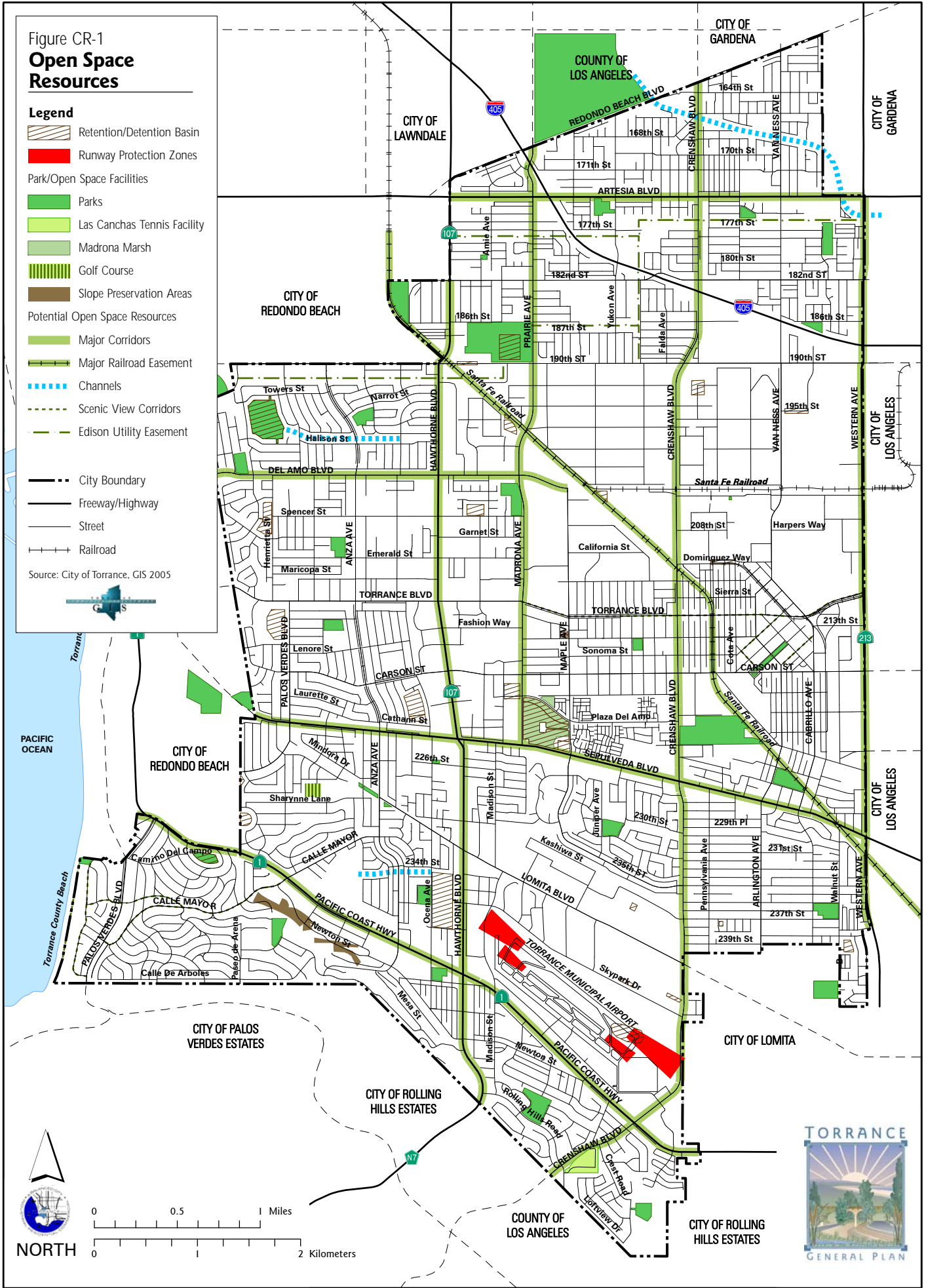
1.1.3 OPEN SPACE THAT BEAUTIFIES

As part of any development project or City building initiative, open space can be used as a visual amenity. Landscaped medians and street edges make travel along local arterial roads a more pleasing experience. Open space areas in Torrance that contribute to City character and add welcome green space and visual interest include hillsides, properties that contain significant stands of trees or other predominant vegetation, open landscaped malls, large landscaped expanses around industrial and commercial developments, and street corridors.

Figure CR-1
Open Space Resources

Legend

-  Retention/Detention Basin
 -  Runway Protection Zones
 - Park/Open Space Facilities**
 -  Parks
 -  Las Canchas Tennis Facility
 -  Madrona Marsh
 -  Golf Course
 -  Slope Preservation Areas
 - Potential Open Space Resources**
 -  Major Corridors
 -  Major Railroad Easement
 -  Channels
 -  Scenic View Corridors
 -  Edison Utility Easement
 -  City Boundary
 -  Freeway/Highway
 -  Street
 -  Railroad
- Source: City of Torrance, GIS 2005



0 0.5 1 Miles
 0 1 2 Kilometers



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1.1.4 OPEN SPACE THAT PRESERVES

Natural systems require protected open space areas to ensure that species can survive and thrive. Scarce or unique vegetation and wildlife communities that cannot tolerate the intrusion of urban development require buffers and areas sized to support populations. Such open space areas help preserve ecological diversity and create opportunities for scientific study. Research has indicated that one of the most effective ways to address global climate change is to increase vegetative groundcover and natural plant species. Moreover, natural, protected open space preserves irreplaceable resources such as coastal beaches for enjoyment by present and future generations.

Natural wildlife habitats still exist within Torrance. The City has recognized the value of a natural place in our environment through the preservation of the Madrona Marsh. Local residents may willingly travel several hours on crowded highways to view wildlife in State and federal reserves; they may now experience similar associations with nature in our own community. Madrona Marsh is one of the few vernal marshes remaining in Southern California. This 42-acre site, located in central Torrance, is surrounded by residential and commercial uses and lies within one of the most impacted locations in the Los Angeles basin. This rich natural area was privately owned until November of 1986 when the Torrance Investment Company and the Santa Fe Land Improvement Company deeded the lands to the City of Torrance. This event had been preceded by over 13 years of local efforts to save the marsh from extinction.

The existence of the marsh within the City preserves a critical habitat and provides outstanding opportunities for research, education, and enjoyment. Seldom are urban residents, particularly children, able to observe and study wildlife in their natural habitat.

1.2 Increasing Open Space in Torrance

Because Torrance is largely built out, limited opportunities are available to develop new parks or similar open spaces. Thus, the City's efforts are focused on creating pockets of green space and areas where people can relax and engage in community activities. For all new development, the Municipal Code requires that open space be an integral part of a development plan. Importantly, the open space must be functional and accessible. Open space can serve dual functions, such as a flood detention or retention basin providing passive, accessible recreational green space. In particular, the Ocean and Bishop Retention Basins have the potential for conversion into park land. Also, small pockets of land within residential areas can be used for tot lots and neighborhood gathering places.

1.3 OPEN SPACE OBJECTIVES AND POLICIES

OBJECTIVE CR.1:	To utilize open space as a means of achieving desirable growth patterns
Policy CR.1.1:	Continue to evaluate the environmental impact of public and private projects on properties that have significant open space value.
Policy CR.1.2:	Require the provision of on-site open space in new developments.
Policy CR.1.3:	Require that development projects involving modifications or additions include plans to upgrade or add open space and landscaping.
OBJECTIVE CR.2:	To preserve natural resource lands that contribute to the environmental quality of the City
Policy CR.2.1:	Assign open space designations and apply preservation policies to significant natural habitat areas.
OBJECTIVE CR.3:	To develop and maintain open space for recreational use
Policy CR.3.1:	Maximize open space for active and passive recreational uses at strategic and convenient locations throughout the City.
Policy CR.3.2:	Cooperate with neighboring communities and County agencies to preserve open space resources, including trails that may lie outside the City’s jurisdiction but which are important to meet the needs of Torrance residents.
Policy CR.3.3:	Pursue grants and loans to fund acquisition and preservation of recreational open space.
Policy CR.3.4:	Zone publicly and privately owned outdoor recreational open space in a manner that preserves such properties for open space use.
Policy CR.3.5:	Encourage the multiple use of open space land for recreational purposes.
Policy CR.3.6:	Require greater creativity and flexibility in the design of residential developments to encourage the provision of more usable on-site open space.
Policy CR.3.7:	Accommodate the conversion of marginal lands, such as retention and detention basins, to uses such as passive open space, recreational facilities, and habitat protection.
Policy CR.3.8:	Look for opportunities to create neighborhood pocket parks and similarly scaled recreation and cultural facilities that complement larger active park areas.

OBJECTIVE CR.4:	To create and maintain open space as an aesthetic enhancement within the urban environment
Policy CR.4.1:	Use landscaping as an open space feature along City arterial and collector roadways, where sufficient right-of-way is available.
Policy CR.4.2:	Require that developers and property owners improve their properties by providing landscaping and similar aesthetic treatments along roadways.
Policy CR.4.3:	Encourage planting of new trees, and preserve existing street trees in residential neighborhoods.

OBJECTIVE CR.5:	To preserve open space necessary to protect the health, safety, and well-being of City residents
Policy CR.5.1:	Maintain open space features that are critical components of the City's flood control system.
Policy CR.5.2:	Preserve open space as required for airport clear zones consistent with the Torrance Airport Comprehensive Land Use Plan.
Policy CR.5.3:	Protect and enhance the City's coastal bluffs by prohibiting development that contributes to geological instability or that substantially alters natural landforms.
Policy CR.5.4:	Establish setback buffers along identified active fault zones consistent with State regulations and as recommended by site-specific geotechnical studies.

2. PARKS, RECREATION, CULTURAL, AND COMMUNITY ENRICHMENT

The quality of parks, recreation, and community facilities in a city reflects the importance that city leaders place on the health, happiness, and enrichment of residents. These resources also contribute to the attractiveness of a city and the overall quality of life. In Torrance, this is truly the case. The City's Community Services Department operates and manages over 40 parks and recreation facilities, libraries, and open spaces for residents of Torrance and the South Bay. Through the provision of quality park facilities, a diversity and quantity of community facilities and programs, and excellent educational and cultural institutions, Torrance distinguishes itself and sets a model other cities look to achieve. These resources form a critical component of a balanced city.

This commitment to community enrichment dates to the early days of the City. The provision of parks and recreation facilities in Torrance has its roots in a plan for the City developed by John and Fredrick Law Olmsted Jr., sons of the famous landscape architect Fredrick Law Olmsted. Their original town plan provided for several parks, including El Prado Park. This park was planned to be the focal point and geographic center of Torrance, and the Olmsteds envisioned it as the location for major civic buildings. Many of the plan's features have had enduring influence, including the importance of common open recreational spaces and aesthetic considerations in the development process.

These objectives and policies identify the City's continuing commitment to provide high-quality and readily accessible parks, recreation, and community facilities for all Torrance residents.

GOAL: Provide high-quality and readily accessible parks, recreation, and community facilities for all Torrance residents

2.1 PARK AND RECREATION FACILITIES

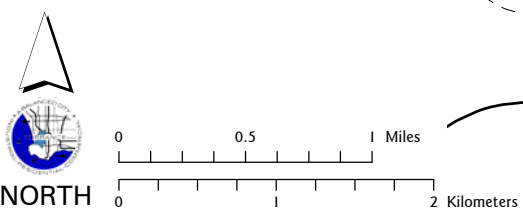
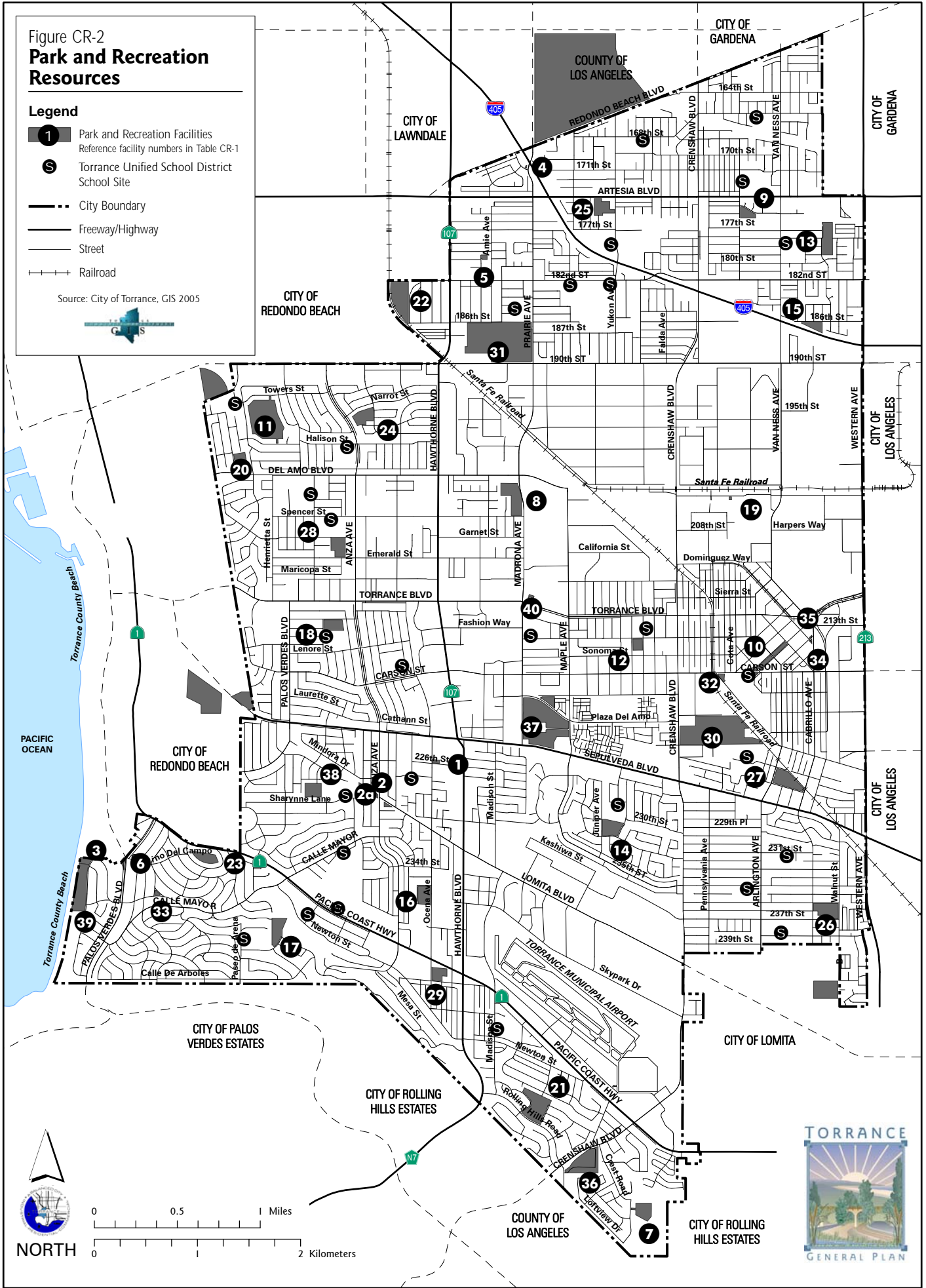
Torrance is fortunate to have many different types and sizes of parks distributed throughout the community. Figure CR-2 shows park and recreation resources in Torrance. Parks provide residents areas for recreation, cultural, leisure, and social time with family and friends; they also enhance the beauty and character of Torrance. Demands on parks increase with a younger population, and in Torrance in particular, the rise in organized sports activities has created greater competition for available field space. Providing parks and open spaces that address changing demands and use is a challenge. This Element sets forth the City's commitment to maintain established park and recreation facilities, and to find new ways to expand resources as demographic changes continually refocus the demand for and function of these facilities.

Figure CR-2
Park and Recreation Resources

Legend

- 1** Park and Recreation Facilities
 Reference facility numbers in Table CR-1
- S** Torrance Unified School District
 School Site
- - -** City Boundary
- ==** Freeway/Highway
- Street
- +** Railroad

Source: City of Torrance, GIS 2005



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2.1.1 PARK FACILITIES

Parks in Torrance range in size from the 0.1-acre John F. Kennedy and Keller Memorial Squares to 52-acre Columbia Park. Depending on size, each park offers differing levels of recreation use, from purely passive recreation to heavily programmed use. The two largest parks in Torrance are Columbia Park (52 acres) and Wilson Park (44 acres). Figure CR-2 shows the locations of these parks and facilities, and Table CR-1 summarizes parks and recreation facilities.



Wilson Park: Parks in Torrance provide a refuge from urban life and are an important health resource for residents

The City classifies its parks as follows:

- **Mini Parks** may be as large as one acre although they typically occupy infill parcels. These parks are used to address limited recreation needs and generally offer targeted amenities.
- **Neighborhood Parks** are the basic unit of the City's park system. Neighborhood parks range in size from one to 10 acres and generally accommodate informal activities and passive recreation.

**Table CR-1
Park Properties and Facilities**

	Handicapped Access	Meeting Rooms	Kitchen	Picnic Area	Barbecues	Softball Diamond	Soccer Field	Basketball Court	Tennis Court	Children's Play Equipment	Exercise Path	Restrooms	Acres
Mini Parks													
1. Discovery Park 226th Street and Ocean Avenue	✓			✓	✓					✓			0.4
2. La Paloma Park Lomita Boulevard (between Anza and Ladeene Avenue)				✓	✓					✓			0.4
2A. Lomita Park (planned)	✓									✓			1.2
3. Miramar Park 201 Paseo de la Playa	✓												1.1
4. Osage Park 17008 Osage Avenue	✓			✓						✓			0.2
5. Pequeno Park Regina Avenue & 180th Street	✓			✓	✓					✓			0.7
6. Riviera Park Bounded by Catalina & Palos Verdes Drive													0.3
Total Acreage of Mini Parks													4.3
Neighborhood Park													
7. Alta Loma Park 26126 Delos Drive	✓	✓	✓	✓	✓			✓		✓		✓	5.5
8. Delthorne Park 3401 Spencer Street	✓			✓	✓			✓		✓	✓	✓	9.7
9. Descanso Park 2500 Descanso Way	✓			✓	✓	✓				✓	✓		3.0
10. El Prado Park El Prado Ave. south of Cravens Ave.													3.4
11. Entradero Park 5500 Towers Street	✓			✓	✓	✓		✓		✓		✓	26.5
12. Greenwood Park 1520 Greenwood Avenue	✓	✓	✓			✓		✓		✓		✓	3.4
13. Guenser Park 17800 Gramercy Place	✓			✓	✓	✓		✓		✓	✓	✓	7.8
14. Hickory Park 2850 232nd Street	✓			✓	✓				◆	✓		✓	5.8
15. La Carretera Park	✓			✓	✓	✓		✓		✓			3.1

**Table CR-1
Park Properties and Facilities**

	Handicapped Access	Meeting Rooms	Kitchen	Picnic Area	Barbecues	Softball Diamond	Soccer Field	Basketball Court	Tennis Court	Children's Play Equipment	Exercise Path	Restrooms	Acres
2040 186th Street													
16. Lago Seco Park 3920 235th Street	✓			✓	✓	✓		◆		✓	✓	✓	14.7
17. Los Arboles/ Rocketship Park 5101 Calle de Ricardo	✓			✓						✓			6.3
18. Paradise Park 5006 Lee Street	✓			✓	✓				◆	✓		✓	4.7
19. Pueblo Recreation Center & Park 2252 Del Amo Boulevard			✓	✓	✓			◆		✓		✓	0.96
20. Sunny Glen Park 5525 Del Amo Boulevard	✓			✓	✓	✓		✓		✓	✓		5.5
Total Acreage of Neighborhood Parks													100.36
Community Park													
21. DePortola Park 25615 Lazy Meadow Drive	✓			✓	✓	✓		✓		✓		✓	12.5
22. El Nido Park 18301 Kingsdale Avenue	✓	✓		✓	✓	◆	✓	✓		✓		✓	12.3
23. El Retiro Park 126 Vista del Parque	✓	✓	✓	✓	✓			✓	◆	✓		✓	4.8
24. La Romeria Park 19501 Inglewood Avenue	✓	✓	✓	✓	✓	✓		◆	◆	✓		✓	6.6
25. McMaster Park 3624 Artesia Boulevard	✓	✓	✓	✓		◆	✓	◆		✓		✓	5.5
26. Sur La Brea Park 23610 Cabrillo Avenue		✓		✓	✓	✓		✓	◆	✓	✓	✓	7.4
27. Torrance Park 2001 Santa Fe Avenue	✓			✓	✓	◆	✓	✓		✓		✓	10.2
28. Victor Park 4727 Emerald Street	✓			✓	✓	✓	✓	✓		✓	✓	✓	6.6
29. Walteria Park 3855 242nd Street	✓	✓	✓	✓	✓	◆	✓	◆	◆	✓		✓	4.5
Total Acreage of Community Parks													70.4
Regional Park													

**Table CR-1
Park Properties and Facilities**

	Handicapped Access	Meeting Rooms	Kitchen	Picnic Area	Barbecues	Softball Diamond	Soccer Field	Basketball Court	Tennis Court	Children's Play Equipment	Exercise Path	Restrooms	Acres
30. Charles H. Wilson Park 2200 Crenshaw Blvd.	✓			✓	✓	◆		✓	◆	✓	✓	✓	44.1
31. Columbia Park 4045 190th Street	✓			✓	✓	◆	◆			✓	✓	✓	52.0
Total Acreage of Regional Parks													96.1
Special Use Properties/Facilities													
32. ATTIC Teen Center 2320 West Carson Street	✓	✓	✓					✓				✓	0.7
33. Estrellita Triangle Calle Miramar & Via Estrellita													0.4
34. John F. Kennedy Square South side of Marcelina Ave. & Sartori Ave.	✓												0.1
35. Keller Memorial Square North side of Marcelina Ave. & Sartori Ave.	✓												0.1
36. Las Canchas Tennis Facility 25924 Rolling Hills Road	✓								◆			✓	12.8
37. Madrona Marsh Nature Center & Preserve 3201 Plaza del Amo	✓	✓										✓	44.0
38. Sea-Aire Park & Golf Course 22730 Lupine Dr	✓	✓	✓							✓		✓	5.2
39. Torrance Beach 387 Paseo de la Playa												✓	20.3
40. Victor E. Benstead Plunge 3331 Torrance Boulevard	✓		✓									✓	0.4
Total Acreage of Special Use Facilities													84.0
TOTAL ACREAGE ALL FACILITIES													355.16

◆ indicates that lighting is available

Source: City of Torrance Community Services Department

- **Community Parks** serve a broader purpose than Neighborhood Parks. Community Parks meet the City's recreation needs for more formal and highly programmed activities. Amenities include lighted sports fields, gymnasiums, art venues, and community meeting facilities.
- **Regional Parks** serve an area larger than the community in which they are located and are usually over 40 acres in size. Amenities at Regional Parks are similar to those at Community Parks, but at a larger scale that attract users from a wider area.
- **Special Use Properties/Facilities** provide more specific park and recreation facilities such as tennis courts and pools.

Park classification is based both on the size of the park and the available amenities. For example, the Pueblo Recreation Center, at 0.96 acres, is the size of a Mini Park. However, because of the Center's many recreation activities, the City considers it a Neighborhood Park.

Several park facilities in adjacent jurisdictions are also available for use by Torrance residents, including parks in the cities of Lomita, Redondo Beach, Rolling Hills Estates, Palos Verdes Estates, Los Angeles, and the County of Los Angeles. Torrance Beach is managed by the Los Angeles County Department of Beaches and Harbors. Beach area improvements include public restrooms, a snack bar, sand volleyball courts, and bike paths.

To enhance the appearance, character and quality of the City's parks, the Community Services Department offers Adopt-a-Park and City Beautification programs. These programs encourage businesses, community groups and individuals to become involved in city-wide beautification and maintenance projects. Once a site is adopted, sponsors participate in litter pick-up efforts, plantings, and community service projects.

PARK FACILITY STANDARD AND SERVICE AREA

At the national level, professional park planners have not adopted a parkland acreage goal or standard for urban areas. As a rule of thumb, many cities throughout California use 3.0 to 5.0 acres of parkland per 1,000 residents as a benchmark for sufficient park space. Recognizing that parks are not the only recreation resources in the City, recreation and special use facilities are also used to quantify the provision of open space and park resources to Torrance residents. As of 2009, Torrance residents enjoyed access to approximately 355.2 acres of park and recreation facilities (Table CR-1), with an additional 12.7 acres available at community centers, senior citizen centers, libraries, and the Torrance Cultural Arts Center. Based on a 2009 population estimate of 149,111 persons (California Department of Finance), Torrance provided 2.47 acres of recreation area per 1,000 residents. The 1992 General Plan set a goal of

10 acres of public recreation land per 1,000 residents. Achieving this ratio would require adding almost 1,200 acres of public recreation land. Part of this goal is achieved through ongoing joint-use arrangements with Torrance Unified School District, as described in Section 2.1.3. The combined resources of the City and Torrance Unified School District yield 618 acres of active green space and recreation facilities, which improves the ratio to 4.14 acres per 1,000 residents, still far short of the City's goal.

The objectives and policies in this section encourage the development of commercial recreational facilities and the multiple use of utility easements and the conversion of abandoned or out-of-service railroad rights-of way to augment the City's recreational offerings. These objectives will help increase the City's open space resources while improving environmental objectives related to global warming by providing open space linkages between neighborhoods, schools, and other public facilities and potentially reducing the need for automobile use for short trips.

Access to park facilities is also an important gauge of quality parks. While recognizing the importance of acres per population park facility standards as a gauge of physical park space provision, the City's commitment to a high level of public services is more accurately demonstrated through the large quantity and variety of programs and activities offered at City facilities, and the ease of access to parks for most residents in Torrance.

Service area standards recommended by the National Recreation and Parks Association (NRPA) indicate that a park typically should cover a one-half- to one-quarter mile service area radius, depending on the size and function of the park. Based on these standards, only a few residential areas in Torrance are underserved (Figure CR-3). The NRPA standards diagrammed in Figure CR-3 are applied only to park facilities listed in Table CR-2, exclusive of special use facilities.

While neighborhoods north of Artesia Boulevard have parks within one-half mile, access to these parks is not convenient; residents have to cross major roadways to access them. Neighborhoods without ready access to parks (Figure CR-3) include one south of I-405 and north of 190th Street, several immediately south of Sepulveda Boulevard, and those in the southwesternmost tip of the City.







2.1.2 RECREATION AND SPECIAL USE FACILITIES

Torrance's Community Services Department manages a comprehensive range of community facilities and programs available to Torrance residents free of charge or for a nominal fee.

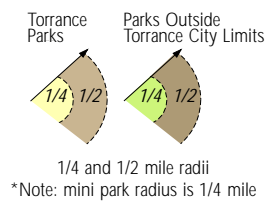
Figure CR-3

Park Facility Service Area

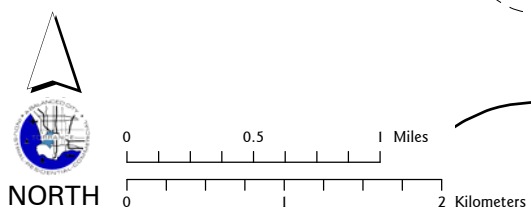
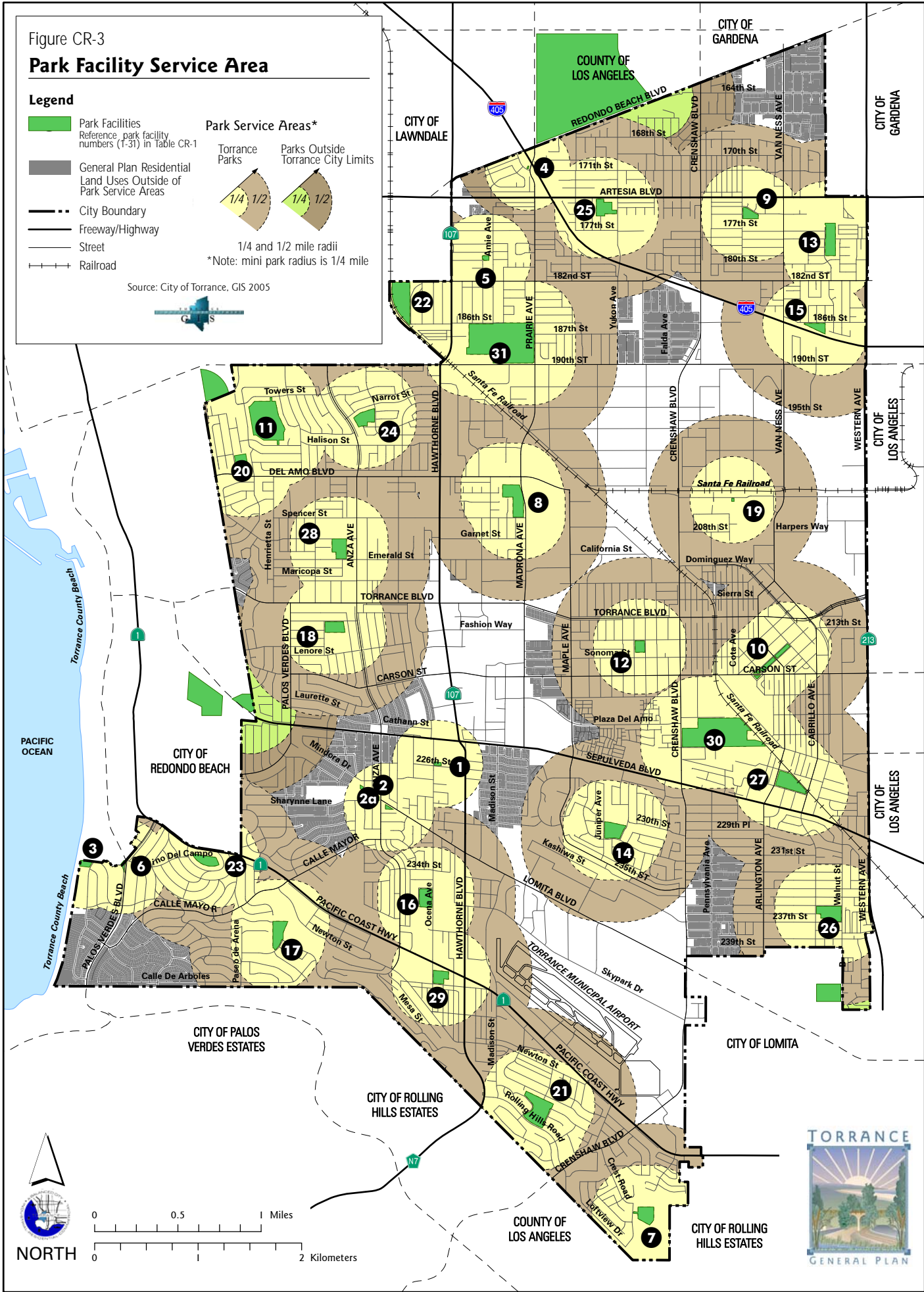
Legend

-  Park Facilities
Reference park facility numbers (1-31) in Table CR-1
-  General Plan Residential Land Uses Outside of Park Service Areas
-  City Boundary
-  Freeway/Highway
-  Street
-  Railroad

Park Service Areas*



Source: City of Torrance, GIS 2005



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In addition to its parks, Torrance offers residents recreation and education at the ATTIC Teen Center, the Madrona Marsh Nature Preserve and Center, the Las Canchas Tennis Facility, the Sea Aire Park & Golf Course, the Victor E. Benstead Plunge, and Torrance Beach (Figure CR-2).

YOUTH FACILITIES

The City is committed to providing services, activities, and resources for Torrance youth. These resources include a youth-oriented community center, a number of after-school and summer programs, recreational areas and activities, and supportive services.

The ATTIC Teen Center is a public center for 9th through 12th grade students. The ATTIC provides a meeting room and offices that house the *Options* program. This program consists of peer counseling, life session training, post-graduate decision making, health education, academic tutoring, job training, classes, sports, tournaments, and access to several online computers. The main focus of the *Options* program is to offer self-help resources and access to human service professionals.



The ATTIC Teen Center: The ATTIC Teen Center is home to the Options program, which offers self-help resources and access to human service professionals.

MADRONA MARSH NATURE CENTER/PRESERVE

The Madrona Marsh is one of the last remaining vernal marshes in Southern California. The preserve encompasses elements of four associations/habitats of plants and animals. The Nature Center offers education programs and guided walks. The Madrona Marsh is discussed in detail in the Resources Conservation section of this Element.

OUTDOOR RECREATION FACILITIES

To add to the offerings at City parks and community centers, the City maintains a tennis facility, public golf course, and public pool. The Las Canchas Tennis Facility, a privately managed, public club, has eight fully lighted courts, a pro shop, snack bar, and locker rooms. Classes are available for players of all skill levels.

The Sea-Aire Golf Course is a nine-hole, three-par, pitch-and-putt course. The golf course offers reduced rates for youth and senior residents and is open year-round. Recreational swim and swim lessons for all ages are offered at Victor E. Benstead Plunge, which is also open throughout the year.

TORRANCE CERTIFIED FARMERS MARKET

The City hosts a year-round farmers market at Charles H. Wilson Park every Tuesday and Saturday to provide the community with access to fresh, local produce, baked goods, eggs, nuts, flowers, and other items. Farmers markets help keep local farms viable, thereby sustaining regional open space. They also provide access to fresh and healthy food sources. The Torrance Certified Farmers Market is just one way the City promotes sustainable practices in the community. Sections 3.12-13 describe additional sustainable practices in Torrance.

2.1.3 JOINT-USE FACILITIES

Public school facilities in Torrance offer additional places where residents can enjoy outdoor recreation. Joint use of facilities by cities and school districts can reduce costs, maximize the usage of physical facilities, and provide better services to the community. The City of Torrance and the Torrance Unified School District (TUSD) have a reciprocal use agreement. The agreement allows the City to use TUSD facilities for community recreation activities and in turn, TUSD uses City facilities that may not be available on school campuses. School grounds in the City encompass over 250 acres of recreational land. The City and TUSD have worked cooperatively for many years to expand the program to benefit both entities and the community as a whole. Comprehensive agreements that apply to more facilities throughout Torrance will help the City work toward its open space goals and assist TUSD in its efforts to fund improvements and minimize investment in new school facilities where perhaps City facilities might meet such needs.

2.2 COMMUNITY FACILITIES

Whereas recreational open space provides Torrance residents with opportunities to pursue physical health goals, cultural and community centers can provide the community places to nourish cultural and social health, as well as personal development and lifelong learning. While these issues are not directly related to open space and conservation, the City recognizes its role in enhancing the community's cultural and social environment.

The Community Services Department organizes and runs comprehensive recreational activities and human service programs to meet the educational, informational, social and recreational needs of individuals and families, youth and seniors. Senior centers, youth centers, cultural centers, art museums,

multi-purpose community centers, and neighborhood branch libraries offer educational and recreational activities and services for all ages. The City also has several facilities that can be rented to the public or community groups for parties, business meetings, seminars, lectures, receptions, trade shows, family gatherings, and other activities.

2.2.1 COMMUNITY CENTERS

The North Torrance Community Center is located at McMaster Park and includes the North Torrance Branch Library, Herma Tillim Senior Citizen Center, meeting rooms, park buildings, and a police community center. The Torrance Police Department staffs four community centers to provide general information, conference centers for community groups, safety information, and related literature at the following locations:

- Del Amo Police Community Center, #73 Del Amo Fashion Square
- Downtown Torrance Police Community Center, 1215 El Prado Avenue
- North Torrance Police Community Center, 3624 Artesia Boulevard
- South Torrance Police Community Center, WALTERIA PARK, 3855 242nd Street

2.2.2 SENIOR SERVICES AND FACILITIES

Several centers focus on meeting the health, education, and social needs of Torrance's older residents. The principal senior citizen center is the Bartlett Center, with more limited programs provided at the Herma Tillim Center, Ken Miller Recreation Center, and WALTERIA PARK. Seniors can engage in special interest classes, weekday hot lunches, exercise and dance classes, card playing, shuffleboard, bingo, billiards, and singing groups. Featured speakers on diverse topics are scheduled regularly. Information on legal and financial issues, social services (including Medicare, Medi-Cal, and Social Security), transportation, and other needs is also available. Focal Point, a volunteer-run program sponsored by the City, also provides information and referrals to seniors and their families and caregivers. The program publishes a local directory for service providers and disseminates program and resources information at health fairs and workshops.

2.2.3 TORRANCE CULTURAL ARTS CENTER/TORRANCE ART MUSEUM AT THE JOSLYN CENTER

The Joslyn Recreation Center was dedicated on April 11, 1964. At the time, the Center offered adult craft classes and special events for senior citizens. When the Senior Citizens Association grew too large for the Joslyn Recreation Center, the City found other facilities to house senior programs, freeing the Joslyn Recreation Center to become a fully dedicated facility for the arts. In 1991, responding to the need for arts in the community, the City opened the Torrance Cultural Arts Center (TCAC). Conceived as a "town square" for Torrance

residents, the TCAC is now home to the Torrance Art Museum, the Ken Miller Recreation Center, arts classrooms and dance studios, the 500-seat James R. Armstrong Theatre, the George Nakano Theater, the Torino Festival Plaza, the Toyota Community Meeting Hall, and the Pine Wind Japanese Garden. The TCAC also houses a theater and arts education program.



The Torrance Cultural Arts Center: TCAC is home to a variety of educational and culturally enriching program for residents.

The George Nakano Theatre is a flexible performing arts venue for live theater, music, and performing arts education programs seating up to 200 people. The Learning Center for Arts Excellence is an arts education program designed to engage the public in a wide variety of arts education, performance, and exhibition activities.

In 2004-2005, the 9,200-square-foot Joslyn Center building was subject to a major renovation, creating the Torrance Art Museum. The facility is operated by the Cultural Services Division of the Community Services Department, with oversight from the Cultural Arts Commission.

2.3 ENHANCING PARK AND RECREATION RESOURCES

The City's commitment to accessible and high-quality park and recreation facilities will be demonstrated through creative approaches to expanding park, cultural, and recreation resources. The City has and will continue to use the Park and Recreation Facilities Fund established for the planning, acquisition, improvement and expansion of public parks, playgrounds, and recreation facilities. An approximate fee of \$1,800¹ is collected per building permit for construction of new residences. The fee is split between the Recreation Fund and the Open Space Fund.

The City will also continue to pursue other sources of funding, such as State and federal outdoor recreation and open space grants. In this respect, the City

¹ As of August 2006.

will support enactment of State and federal legislation that would establish park and open space acquisition funds that could benefit the Torrance residents. The dedication of land for recreational purposes will also be required in areas which are demonstrated to be made deficient in parkland by virtue of the project. In addition, compulsory dedication of park and open space land, as a condition for approval of final subdivision maps, is permitted by the Subdivision Map Act.

Creative use of land for recreation use will also be explored through methods such as:

- Developing mini-parks on small, otherwise marginally usable parcels
- Reuse of abandoned railroad right-of-way and utility easements
- Use of vacant industrial and commercial land for seasonal recreation activities
- Reclaiming any flood control features that can either serve a dual purpose or are not longer needed for flood control
- Explore the use of detention and retention basins (sumps) for possible use as open space or recreation
- Expanding joint use arrangements with the Torrance Unified School District

2.4 PARKS AND RECREATION OBJECTIVES AND POLICIES

The City of Torrance has and will continue to prioritize community enrichment by providing superior parks and community facilities.

OBJECTIVE CR.6	To provide superior park and recreation facilities consistent with established City standards
Policy CR.6.1	Provide public recreational open space at a ratio of 10 acres per 1,000 residents.
Policy CR.6.2	Encourage the development of commercial recreational facilities and the dedication of properties to supplement public facilities.
Policy CR.6.3	Require developers to dedicate land or pay sufficient in-lieu fees to meet established public recreational open space standards.
Policy CR.6.4	Expand joint-use and joint-development of recreational and cultural facilities on Torrance Unified School District properties.

OBJECTIVE CR.7	To ensure residents have easy access to park, recreation, and community facilities
Policy CR.7.1	Strive to provide some type of park, recreation, or community facility within a 1/2-mile service area of all residential neighborhoods.

Policy CR.7.2	Encourage the multiple use of public utility easements and the conversion of abandoned or out of service railroad right-of-ways for compatible recreational purposes such as trails, bikeways, greenbelts, and linear parks.
Policy CR.7.3	Develop a local bikeway system to provide access to the beach and other recreational and community facilities.
Policy CR.7.4	Encourage use of City-sponsored transportation, ride-sharing, and the Torrance Transit System by community residents for transportation to local recreational and community facilities.
Policy CR.7.5	Explore creative ways to provide recreational and open space resources outside park settings such as abandoned railroad right-of-way, utility easements, covered aqueducts, and vacant private property.
Policy CR.7.6	Make Torrance's parks, recreation, and community facilities compliant with the Americans with Disabilities Act (ADA) standards for accessibility to better serve senior and disabled populations.
Policy CR.7.7	Identify areas within the City that are currently underserved by open space/parks and community facilities, and develop programs to purchase land and build park and community amenities according to City standards.

OBJECTIVE CR.8	To develop and maintain parks, recreational, and cultural facilities that reflect the broadest range of interests, and that meet the needs, desires, and interests of the Torrance community
Policy CR.8.1	Establish priorities for the development of community facilities.
Policy CR.8.2	Maintain, promote, and enhance programs that provide recreational, educational, cultural, and community services for families and residents of all ages.
Policy CR.8.3	Provide additional public indoor recreational facilities, such as swimming pools and gymnasiums, and lighted outdoor sports fields.
Policy CR.8.4	Maximize use of community facilities — such as the Cultural Arts Center, Art Museum, Madrona Marsh Nature Center/Preserve, and city libraries—for culturally enriching and educational programs.

OBJECTIVE CR.9	To maintain and enhance City-sponsored programs and to support community-based agencies and organizations which provide community services to Torrance residents
Policy CR.9.1	Provide coordinated community-wide youth services that are available to and reach all youth.

Policy CR.9.2	Support diverse youth programs to develop responsibility, ethics, values, and civic involvement.
Policy CR.9.3	Provide technologically current and advanced communications ports at libraries and other public facilities.
Policy CR.9.4	Support fundraising activities for non-profit organizations and youth athletic programs.
Policy CR.9.5	Continue to support senior service agencies in their effort to develop recreational, educational, and supportive programs.
Policy CR.9.6	Continue to support adult and family service agencies in their effort to develop classes, programs, activities, and excursions for adults and families.
Policy CR.9.7	Continue to support community access to fresh and local food items and other goods at the farmers market.

2.5 EDUCATIONAL RESOURCES

A community that values and promotes education and learning benefits its residents and businesses. An educated community contributes to economic success, and keeps youth and adults engaged in productive activities. High-quality schools and libraries provide a positive learning environment for youth, as well as job training opportunities for adults.

2.5.1 TORRANCE UNIFIED SCHOOL DISTRICT

The Torrance Unified School District functions independently from the City. However, TUSD’s programs and facilities supplement the recreation and community services resources available to Torrance residents. TUSD encompasses all properties within Torrance and includes 17 elementary schools, eight middle schools, five high schools (one of which is a continuation school), three adult education centers, and a child development center. The TUSD mission statement states that the District “... strives to ensure that each and every student is educated and prepared to succeed in life. We are dedicated to maximizing individual potential and developing lifelong learners who will be contributing members in a global society.”



South High School: In 2005/06, South High School had a student body population of over 2,200 students.

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Table CR-2 lists schools in the Torrance Unified School District. For the 2005-2006 school year, the District's total K-12 enrollment was close to 25,400 students, with an overall average class size of 26.5 students, slightly below the County and State averages of 27.9 and 27.3 students, respectively.

**Table CR-2
Torrance Unified School District Facilities**

Schools	Address	Grade	Average Classroom Size	Enrollment (2005/06)
Elementary Schools				
Adams Elementary	2121 238th St.	K-5	21.9	408
Anza Elementary	21400 Ellinwood Dr.	K-5	22.2	573
Arlington Elementary	17800 Van Ness Ave.	K-5	23.5	588
Arnold Elementary	4100 227th St.	K-5	23.6	644
Carr Elementary	3404 West 168th St.	K-5	21.9	491
Edison Elementary	3800 182nd St.	K-5	22.6	613
Fern Elementary	1314 Fern Ave.	K-5	22.3	582
Hickory Elementary	2800 West 227th St.	K-5	22.7	832
Lincoln Elementary	2418 West 166th St.	K-5	23.7	523
Riviera Elementary	365 Paseo De Arena	K-5	23.3	627
Seaside Elementary	4651 Sharynne Ln.	K-5	22.7	711
Torrance Elementary	2125 Lincoln Ave.	K-5	22.2	533
Towers Elementary	5600 Towers St.	K-5	23.0	598
Victor Elementary	4820 Spencer St.	K-5	23.3	1083
Walteria Elementary	24456 Madison St.	K-5	22.1	640
Wood Elementary	2250 West 235th St.	K-5	21.8	391
Yukon Elementary	17815 Yukon Ave.	K-5	22.4	409
Elementary School Total				10,246
Middle Schools				
Calle Mayor Middle	4800 Calle Mayor	6-8	26.8	842
Casimir Middle	17220 Casimir Ave.	6-8	29.5	712
Hull Middle	2080 West 231st St.	6-8	29.4	789
Jefferson Middle	21717 Talisman St.	6-8	31.1	658
Lynn Middle	5038 Halison St.	6-8	31.7	761
Madrona Middle	21364 Madrona Ave.	6-8	32.0	762
Magruder Middle	4100 West 185th St.	6-8	33.2	866
Richardson Middle	23751 Nancy Lee Ln.	6-8	30.8	695
Middle School Total				6,085
High Schools				
North High	4100 West 185th St.	9-12	26.4	2260
Shery High (Continuation)	2600 Vine St.	10-12	12.8	127
South High	4801 Pacific Coast Hwy.	9-12	24.4	2203
Torrance High	2200 Carson St.	9-12	26.7	2246
West High	20401 Victor St.	9-12	25.7	2231
High School Total				9,067
TOTAL				25,398

Every year, student populations at individual schools fluctuate, and TUSD seeks to relieve overcrowding at specific locations by providing opportunities for students to attend schools other than their neighborhood schools. Also, when enrollment falls below capacities, the District can accept inter-district transfers from families in adjacent communities or for students whose parents work in Torrance.

A key concern is the impact of new residential development on schools. The District's 2004 Fee Justification Study indicated that new, single-family detached development has a school facility cost impact of \$7,484, while multi-family residential development has a school facility cost impact of \$4,371².

State law allows school districts to collect fees from new development projects to offset the costs of providing new school facilities. In 2006, school fees included in building permits were as follows:

- Residential Construction \$ 2.63 per sq. ft.
- Commercial/Industrial \$ 0.42 per sq. ft.
- Motels/Hotels \$ 0.359 per sq. ft.

School fees assessed for new development are periodically re-evaluated and adjusted by TUSD.

ADDITIONAL EDUCATIONAL RESOURCES

To supplement K-12 education in the City, the Southern California Regional Occupational Center (SCROC) provides entry-level and advanced job training and employment assistance for high school students 16 years of age and older, as well as for adults in the South Bay and surrounding communities. SCROC is located in Torrance, and as part of a Joint Powers Agreement, the SCROC serves the Torrance Unified School District and six other local school districts.

Torrance Adult School is also part of the Torrance Unified School District. Torrance Adult School classes are open to all adult residents and residents in surrounding communities. Classes include computer and vocational training, English as a Second Language, citizenship, GED, parent education, exercise and fitness, home decorative arts, cultural programs, arts, communications, and languages. Adult school classes are offered at:

- Hamilton Adult Center, 2606 W. 182nd Street
- Levy Adults School, 3420 W. 229th Street
- Griffith Adult Educational Center, 2291 Washington Avenue

² 2004 Fee Justification Study, TUSD

To assist students and their families, several Torrance elementary and middle schools host the After School Club, a City-sponsored, supervised location for school children to learn and socialize after school. The club offers structured homework time, cooperative games, arts/crafts, field trips, and projects. With the increase in the number of families with two working parents, after-school programs will continue to be an important resource for families in Torrance.

In addition to public schools, Torrance is home to many private and parochial schools including St. James Academy, St. Catherine Laboure, and Bishop Montgomery High School, one of the largest private high schools in the South Bay.

Supporting quality educational facilities and programs is a priority for the City, as they reflect the value the community places on education. The City will encourage and foster increased coordination and communication with Torrance Unified School District to enhance and maintain a high quality of educational resources for residents.

2.5.2 LIBRARY SERVICES AND FACILITIES

Established as a City department in 1967, the Torrance Public Library includes six library branches located throughout the City:

- Katy Geissert Civic Center Library, 3301 Torrance Boulevard
- El Retiro Branch Library 126 Vista del Parque (Redondo Beach mailing address)
- Henderson Branch Library, 4805 Emerald Street
- North Torrance Branch Library, 3604 West Artesia Boulevard
- Southeast Branch Library, 23115 South Arlington Avenue
- Walteria Branch Library, 3815 West 242nd Street

In 2005, the Library and Parks and Recreation Departments were consolidated to form the City of Torrance Community Services Department. The Torrance Public Library now operates as a division of the larger multi-function department.



Katy Geissert Civic Center Library: The City's library system offers residents a wide variety of educational, cultural, and entertainment options.

Library resources include over 400,000 books and approximately 900 periodical subscriptions. The Library also provides materials in a variety of formats such as DVDs, videocassettes, music, and books on compact disc, books-on-tape, Braille talking books, large print books, and government documents. Assistive technology for individuals with disabilities, including fully adjustable computer workstations with text to speech and magnification software, closed-circuit television for individuals with sight disabilities, and mobility devices such as a scooter, walkers, and a wheelchair are available at the Katy Geissert Civic Center Library. The Katy Geissert Civic Center Library also provides free wireless access to the internet and contains a large meeting room that, for a fee, may be reserved by public agencies and organizations, as well as residents. Through community partnerships with the South Bay Cities Genealogical Society and the South Bay Literacy Council, the Library is able to offer special collections such as the Genealogical Society's research library and services such as reading instruction for adult new readers.

The Library offers a mix of electronic and print services and databases, many of which are full text, and can be accessed through the internet from a home or office computer.

The Library sponsors many adult and juvenile programs, including book discussion groups, educational lectures and informational presentations, exhibits and displays, and cultural events. A home delivery program entitled "Words on Wheels" allows residents who are unable to visit the library due to illness or disability to borrow library materials. Specialized programs target Torrance's younger residents through toddler and pre-school storytime, story/craft programs, Homework Help, Reading Partners, science and art programs, teen game nights, and youth book discussion groups. The El Retiro, Henderson, Southeast, and WALTERIA libraries have formed Teen Advisory Boards to help the libraries plan activities and provide input on collections, services, and programs.

A school relations program fosters cooperation between the Library and the Torrance Unified School District, as well as other educational institutions in the

City. Classroom visits to all library locations are scheduled throughout the year, and librarians make outreach visits to schools to promote literacy, special reading programs, and provide orientation and instruction on how to use the library and its resources.

The City of Torrance and the TUSD joined together to obtain a grant to build a new North Torrance Library and Community Services Center at McMaster Park. Although bond measures to provide matching funds for library construction have failed to pass, the City continues to work towards construction of the new North Torrance Library and Community Services Center at McMaster Park.

2.5.3 TELECOMMUNICATIONS CENTER

The Stanley E. Remelmeyer Telecommunications Center provides 15,000 square feet for Torrance's Office of Cable and Community Relations. CitiCable broadcasts local programming 24 hours a day, seven days a week to local subscribers from the center. It features regular coverage of public meetings, both live and taped, as well as local news, entertainment, sports, events, cooking, arts and crafts, business profiles, and health and safety information. CitiCable also provides live and taped emergency information as needed. The Telecommunications Center features two studios, eight edit suites, classroom area, conference rooms, viewing rooms and administrative offices.

2.6 EDUCATIONAL FACILITIES OBJECTIVES AND POLICIES

The City will maintain and enhance library facilities and services as vital educational and cultural resources for Torrance residents.

OBJECTIVE CR.10:	A library system that provides a superior level of educational, informational, and cultural services for the Torrance community
Policy CR.10.1:	Maintain, enhance, and promote the Library as an important central resource for informational materials, lifelong learning, and personal development.
Policy CR.10.2:	Provide up-to-date business information in the library system, and ensure the system serves as a municipal reference service, a depository for items of local historical importance, and an educational resource for residents of all ages and backgrounds.

OBJECTIVE CR.11:	To provide educational programs and facilities that meet the needs of the Torrance community
Policy CR.11.1:	Maintain places in the libraries where the public can meet to further their educational and cultural objectives.
Policy CR.11.2:	Enhance educational opportunities through cooperation with the Torrance Unified School District.
Policy CR.11.3:	Partner with the Torrance Unified School District to optimize the joint use of school facilities for community educational use.

3. RESOURCES CONSERVATION

Effective conservation practices allow for protection of the natural and human environments, and efficient use of nonrenewable resources. This Resources Conservation section addresses the historic, aesthetic, and natural resources that distinguish Torrance and contribute to community vitality and health.

GOAL: The careful conservation and managed use of resources to ensure a quality environment for Torrance residents

3.1 HISTORIC PRESERVATION

The identity of a community is, in part, derived from its past. By preserving historic structures, places, and landmarks in Torrance, we show our respect for and pride in the literal foundations of our City.

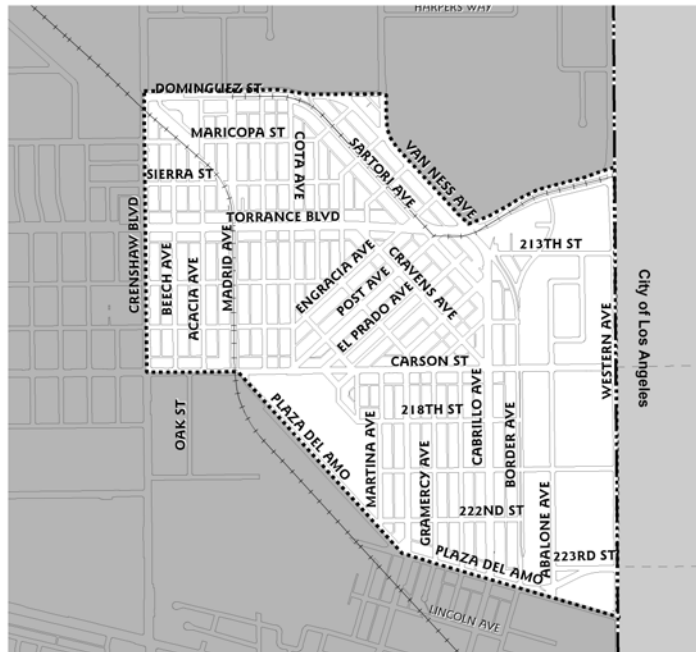
3.1.1 TORRANCE HISTORY

In 1911, Jared Sidney Torrance, a Pasadena real estate promoter, purchased approximately 3,000 acres of the Rancho San Pedro from the Dominguez family. His plan was to create a new city, a garden environment with parks, fine schools, and wide tree-lined streets. To develop his vision of a planned garden-industrial community, he hired the Olmsted Brothers, Frederick Law Olmsted Jr. and Charles Olmsted, of Brookline, Massachusetts, sons of Frederick Law Olmsted, the celebrated landscape architect whose work included Central Park in New York City and the original Stanford University campus.

The Olmsted Brothers included in their plan a landscaped common that ran down the center of El Prado Avenue from Carson Street to Cravens Avenue. From Cravens Avenue, El Prado Avenue was a paved street that continued to the Pacific Electric Railway Depot on Cabrillo Avenue. El Prado Avenue was aligned to frame a vista of Mt. Baldy and the San Gabriel Mountains 50 miles to the northeast. The original city plan was designed to separate the industrial areas from the residential areas. The boundaries of the original Torrance Tract

are Dominguez Street to the north, Western Avenue to the east, Plaza Del Amo to the south and Crenshaw Boulevard to the west.

Groundbreaking for the model garden-industrial city commenced in 1912 with the renowned Irving Gill as the chief architect. Since 1912, several structures of aesthetic or historic interest were built. Gill's buildings are characterized by clean simple lines free of ornamentation. His most famous structures in Torrance are the Pacific Electric Railway Depot and the Southern Pacific Railroad bridge over Torrance Boulevard. Although many structures have been lost through the passage of time, these structures and a number of other significant buildings remain. They have provided an enriched sense of community to the citizens and a reserve of heritage. They classify Torrance as one of a small handful of American cities with auspicious origins in early city planning and architecture.



**Figure CR-4:
Original Torrance Tract**

Torrance has grown to the west, north, and south of the original tract. Old Torrance is characterized by its narrow streets, small lots, and low-scale buildings. Many of the older commercial buildings have been adapted for more modern commercial enterprises, and home owners have taken pride to preserve the original look of the houses built to house workers in Torrance's early industries.

3.1.2 HISTORIC RESOURCES

HISTORIC RESOURCES INVENTORY

Torrance is fortunate to have residents with a keen interest in documenting and preserving the City's history. In 1978, the City conducted a local historic resources survey to inventory historically and architecturally valuable sites and structures built before 1945. Over 1,000 structures were inventoried, and eventually 120 structures were selected as being particularly significant in terms of their role in the community's growth and development, relationship to noted persons in the City's history, and architectural importance.

The inventory represents a "character analysis" of Torrance expressed through building design and associated local history. The historic structures and landmarks lend character to neighborhoods and provide an incentive for preservation and maintenance of community identity. They serve as resources to planners, historians, students, and interested citizens seeking information about Torrance history, period architectural styles, or significant persons.

NATIONAL REGISTER OF HISTORIC PLACES

Structures in Torrance listed on the National Register of Historic Places include Torrance High School, the Southern Pacific Railroad Bridge, and Fern Avenue School. Listing in the National Register provides recognition and assists in preserving historic properties by:

- Placing them under consideration in planning federally assisted projects
- Making them eligible for tax benefits
- Qualifying them for federal grants for historic preservation



Torrance High School: Torrance High School was designated on the National Register of Historic Places in 1983. The school consists of a complex of buildings and structures built between 1917 and the 1960s. It has been in continuous use through the years.

TORRANCE HISTORICAL SOCIETY LANDMARK PLAQUE PROGRAM

In 1983, with the Torrance Historical Society Landmark Plaque Program, the Historical Society began a long-term program of placing bronze plaques on Torrance landmarks that merit recognition. Plaques have been placed on landmarks throughout Torrance including:

1. Torrance Public Library, 1345 Post Avenue, 1936 -1978
2. Pacific Telephone and Telegraph Co., 1266 Sartori Avenue, 1928 -1953
3. U.S. Post Office, 1433 Marcelina Avenue, 1936
4. Torrance City Hall, 1511 Cravens Avenue, 1936 -1956
5. Stone and Myers Mortuary, 1230 Cravens Avenue, 1924 -1984
6. Jared Sidney Torrance Memorial Hospital, 1425 Engracia Avenue, 1924 -1971
7. Torrance Woman's Club, 1422 Engracia Ave., 1925

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8. Torrance High School, 2200 West Carson Street, 1917
9. Fern Avenue School, 1314 Fern Avenue, 1932
10. Miramar Park (Torrance Beach) site of Hollywood Riviera Beach Club, 201 Paseo de la Playa, 1931-1958
11. Methodist Episcopal Church, 1551 El Prado, 1923
12. Southern Pacific Railroad Bridge, Torrance Boulevard, west of Western Avenue, 1913
13. Pacific Electric Railway Station, 1300 Cabrillo Avenue, 1912, designed by Irving Gill, architect.
14. The Rocketship, Los Arboles "Rocketship" Park, 5101 Calle de Ricardo, 1960



On July 13, 1989, the Southern Pacific Bridge, constructed in 1913 and designed by Irving Gill, was placed on the National Register. The bridge was designed to serve as both the literal and symbolic gateway to the City of Torrance, a function it still fulfills with grace and distinction.

The structures formerly occupied by Pacific Telephone and Telegraph Co., Torrance City Hall, Stone and Myers, and Pacific Electric Railway Station are presently occupied by new uses. The following structures are no longer in existence: Jared Sydney Torrance Memorial Hospital and Hollywood Riviera Beach Club.

3.1.3 HISTORIC PRESERVATION OBJECTIVES AND POLICIES

To encourage and support a growing public awareness and interest in Torrance's history and architectural heritage, the City is committed to shared endeavors with local historic groups that will promote preservation and public education. Preservation of structures identified as historically significant should be achieved whenever feasible, consistent with the interests of individual property owners. Over time, additional neighborhoods and districts or structures within them may be recognized as historic and representative of specific architectural periods or events. The City will continue to encourage

historic preservation efforts and make it an integral part of the community's planning process.

To encourage the preservation of historic resources, the City is creating a voluntary historic preservation ordinance that takes advantage of the Mills Act property tax abatement program. The Mills Act program allows the property owner of a qualified historic property, who maintains and/or restores their property in a manner prescribed by a contract entered into with the City, to receive property tax relief.

While the following polices identify the City's general approaches to historic preservation, the General Plan Implementation Plan (Appendix A) outlines specific methods to achieve the objective and polices contained here. In addition, goals, objectives, and polices in the Land Use Element apply to historic preservation, such as ensuring consistency between the zoning code and the General Plan and requiring new construction to be consistent in scale, mass and character with defining structures in an established neighborhood or district. Time-honored setbacks and the location of curb cuts will be considered when reviewing new development in an established neighborhood.

OBJECTIVE CR.12:	Preservation of sites of local historical or cultural importance
Policy CR.12.1:	Encourage the preservation of public and private buildings which are of local, historical, or cultural importance.
Policy CR.12.2:	Support the work of local historic groups to identify and preserve local structures and sites of historical interest and importance.
Policy CR.12.3:	Balance historic preservation goals with the interests of private property owners.
Policy CR.12.4:	Work toward the establishment of a citywide historic policy and programs for recognition of historical assets within the City.

3.2 AIR QUALITY

Each of us breathes about 3,400 gallons of air every day. Unfortunately, our air is contaminated on a daily basis by human activities such as driving cars, burning fossil fuels for energy, and manufacturing chemicals. These activities are also the largest contributors to global warming from greenhouse gas emissions. Natural events such as wildfires and windstorms also degrade air quality. Although air quality in Southern California has improved since the 1960s, the Los Angeles region still has some of the most polluted air in the nation. With the region's substantial economic expansion and population growth, further improvements will be needed to ensure clean air for future Torrance residents.

3.2.1 GLOBAL WARMING AND CLIMATE CHANGE

One of our emerging greatest concerns is related to climate change, global warming, and the source of these problems: greenhouse gas emissions. This generation recognizes the imperative of addressing this issue to preserve our quality of life for generations to come.

Global warming and climate change are largely due to an increase in the level of greenhouse gases emitted throughout the world. These two terms—global warming and climate change—have subtly different meanings. Global warming relates directly to the greenhouse effect, which is an increase in temperature as a result of carbon dioxide and other greenhouse gases trapping the sun’s warmth below our atmosphere. This process then causes rising sea levels, as water stored in the form of icecaps, icebergs, and glaciers begins to melt at accelerated rates. Climate change is a broader effect of global warming, and can include changes in rainfall patterns and increased intensity and frequency of extreme weather events. Some expected changes in climate due to global warming include water scarcity in some regions and increased precipitation in others, changes in mountain snowpack, adverse health effects from warmer temperatures, and effects on agriculture and other food sources.

California Global Warming Solutions Act of 2006 (Assembly Bill 32) requires California to reduce greenhouse gas emissions to 1990 levels by 2020.

Greenhouse gases are made up of a variety of different gases, including carbon dioxide, methane, and nitrous oxide. Carbon dioxide is the gas of most concern, as it represents approximately 85 percent of the U.S.’s greenhouse gas emissions. Concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased significantly as a result of human activities over the past few centuries, and now far exceed amounts found during pre-industrial times. The global increase in carbon dioxide concentrations is due primarily to fossil fuel combustion and land-use changes, while those of methane and nitrous oxide are primarily due to agriculture, including livestock. In urban areas, methane emissions from landfills are another source of greenhouse gas.

The State of California has taken a leadership role in addressing climate change through the California Global Warming Solutions Act of 2006 (Assembly Bill 32). This bill states that “global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” The bill created the first-ever statewide cap on global warming pollution, requiring that the State’s global warming emissions be reduced to 1990 levels by 2020. The California Air Resources Board is responsible for determining the level of greenhouse gases emitted in 1990 and developing mitigation measures to reach that level. The bill culminates in a target 80 percent reduction of greenhouse gases from 1990 levels by the year 2050.

Policies addressing climate change are integrated throughout the Torrance General Plan, as indicated in Table CR-3. The primary avenues to address

climate change in urban areas are by lowering transportation emissions and encouraging energy conservation and efficiency. In addition, cities should address the urban heat island effect resulting from land use patterns, and encourage recycling, which reduces the amount of trash sent to landfills, lowering methane emissions. Recycling also reduces the amount of energy needed to produce products.

**Table CR-3
Issues Related to Climate Change Addressed in the General Plan**

Issue area	Element	Section	Policy
Greenhouse Gas Reduction	Community Resources	3.2.4 Air Quality Objectives and Policies	CR 13.1-13.6; CR 14.1-14.4
Emissions and Alternative Modes of Transportation	Land Use	2.2 Balancing New Development and Circulation	LU 4.1-4.2
		4.2 Commercial Districts Objectives and Policies	LU 6.3
		5.3 Mixed Use Objectives and Policies	LU.7.2
		8.3 Urban Design Objectives and Policies	LU 11.7
	Circulation	2.3.6 Local Circulation Objectives and Policies	CI 3.5-3.6; CI 4.3-4.4
		3.5.3 Alternatives to the Automobile Objectives and Policies	CI 7.1-7.11; CI 8.1-8.11
Community Resources	3.2.4 Air Quality Objectives and Policies	CR 13.7	
Sustainable Development and Energy Efficiency	Land Use	2.2 Balancing New Development and Circulation	LU 3.2-3.3
	Community Resources	3.2.4 Air Quality Objectives and Policies	CR 13.8
		3.8.4 Energy Conservation Objectives and Policies	CR 20.1-20.9
		3.9.3 Sustainable Practices Objectives and Policies	CR 23.1-23.4
Urban Heat Island Effect	Land Use	3.2 Residential Objectives and Policies	LU 5.3
		7.3 Public and Quasi-Public Uses Objectives and Policies	LU 9.1
	Circulation	2.3.6 Local Circulation Objectives and Policies	CI 6.2
	Community Resources	1.3 Open Space Objectives and Policies	CR.1.1-1.3; CR 2.1; CR 4.1-4.3
		2.4 Parks and Recreation Objectives and Policies	CR 7.5; CR 7.7
		3.5.2 Wildlife Habitat Objectives and Policies	CR 15.1-15.2
		3.7.4 Aesthetic Resources Objectives and Policies	CR 17.1-17.3
	Recycling	Community Resources	3.9.3 Sustainable Practices Objectives and Policies

According to the U.S. Department of Energy’s Smart Communities Network, buildings account for 35 percent of greenhouse gas emissions across the country. The most emission-producing activities in buildings are related to heating and cooling and electricity consumption. As such, developing strategies to create and retrofit buildings to be more energy efficient is one of the primary ways to combat global warming. Cities can begin by addressing their own public buildings to act as examples throughout the community on green building practices. Local governments can also save money and energy by purchasing energy-efficient office equipment. In Torrance, the City government will act as a leader and example in sustainability and reduction in greenhouse gas production. The City will pursue business in the most greenhouse gas-sensitive way, promoting resource efficiency and conservation in buildings and office equipment.

Additionally, approximately one-third of the greenhouse gases emitted in the United States derive from transportation sources, including trucks and personal automobiles. In the Los Angeles area, much of the urban landscape lends itself to significant commutes and traffic. Municipalities can work to shift this pattern of development, to create opportunities for alternative forms of transportation, and to foster effective public transportation systems. Torrance promotes alternatives to the automobile and will continue to support and encourage safe and convenient ways for transit riders, pedestrians, and bicyclists to travel throughout Torrance.

Due to its largely urban nature, Torrance experiences an “urban heat island effect” which means ambient temperatures are higher than in more suburban or rural areas. The main cause of the urban heat island is the replacement of natural environments with paving, buildings and infrastructure. Waste heat generated by energy usage also contributes to an increase in temperatures in cities. Displacing trees and vegetation minimizes the natural cooling effects of shading and evaporation of water from soil and leaves, while at the same time, dark materials commonly used in urban areas, such as asphalt, retain the sun’s heat and increase the temperature of the air. Policies to increase open space, utilize light-colored development materials, and encourage the planting and preservation of trees for shading of streets and buildings can help reduce the heat island effect in Torrance.

Climate change is a global problem, but the solutions require local-level leadership and participation. By fostering sustainable communities, conserving energy, and encouraging alternative energy sources, municipalities are a crucial component in the state’s drive to meet climate change goals. Integrating principles of sustainability into all facets of planning, as indicated in Table CR-3, can help shift lifestyle patterns and reduce our impact on the Earth’s resources.

The City of Torrance has taken steps to address climate change impacts collaboratively through agreements with other local governments. Torrance has joined the Cities for Climate Protection (CCP) Campaign, a program administered by the International Council for Local Environmental Initiatives (ICLEI). To date, more than 800 local governments worldwide participate in the Campaign, including 78 cities and counties located in California. Participant governments in the program commit to lowering greenhouse gases through the achievement of five milestones. These milestones are: (1) conducting a baseline emissions inventory identifying the sources of greenhouse gases, and calculating the volume contributed from energy use, transportation, and waste management; (2) adopting an emissions reduction target; (3) developing a local action plan; (4) implementation; and (5) monitoring. In addition, Torrance signed the U.S. Mayors Climate Protection Agreement, an aggressive global warming initiative which calls for cities to enact policies and programs to reduce global warming pollution levels to seven percent below 1990 levels by 2012.

3.2.2 SOUTH COAST AIR BASIN

Torrance is located within the South Coast Air Basin, a 6,000-square-mile area which encompasses Los Angeles County and the non-desert portions of Orange, Riverside, and San Bernardino Counties. The South Coast Air Quality Management District (SCAQMD), created in 1976, is the regional agency authorized to develop and enforce air pollution control standards mandated by the federal and state Clean Air Acts. Since Torrance is located within the SCAQMD planning area, the City must comply with the provisions of the AQMP, including the adoption of an Air Quality Element or its equivalent in the General Plan to implement appropriate air pollution control measures.



Blue skies over Torrance: Torrance normally experiences better air quality than found in communities farther inland.

Many factors contribute to the poor air quality in the South Coast Air Basin: the area is highly populated, industrialized, and mobile. The particular climate and geography of the area are major contributors as well. The generally light

winds and cool, marine layer capped by a temperature inversion layer restrict the dispersal of the Basin's emissions.

Pollutants are emitted into the atmosphere from a variety of sources. Carbon monoxide (CO) is formed by the incomplete combustion of fuels and is primarily the product of vehicular emissions. Ozone (O₃) is formed by photochemical reactions between nitrogen oxides (NO_x) and reactive organic gases (ROG). Fine particulate matter (PM₁₀/PM_{2.5}) refers to small particles 10 or five microns or less in diameter suspended in the air. These particles can be formed in the air by chemical reactions or directly emitted by fuel combustion, through abrasion, or soil erosion.

Torrance is located in the SCAQMD's Southwest Coastal monitoring area. Due to its geographic location and the prevailing westerly winds, Torrance normally experiences better air quality than found in basin communities farther inland. Nonetheless, the air basin is a "non-attainment" area for federal and state air quality standards for ozone and state standards for particulate matter less than 10 microns in diameter (PM₁₀). Peak air quality statistics for the six principal pollutants measured in the year 2005 in the Southwest Coastal Los Angeles County area, which includes Torrance, show that only one of the peak values in the Southwest Coastal Los Angeles County area exceeded the federal or state ambient air quality standards: ozone. SCAQMD data indicate that in 2005, State standards for ozone were exceeded only on one day³. Days in excess of State or federal standards for PM₁₀ have been consistently dropping. The maximum allowable concentration of PM₁₀ was exceeded 12 times in 2002, three times in 2003, two times in 2004, and no times in 2005.⁴

3.2.3 EMISSIONS

Historically, Torrance and other South Bay cities experience better air quality relative to other Basin cities due to the proximity of the ocean and prevailing temperature and wind patterns. For example, during the summer, when photochemical smog is normally at its worst, the sunlight needed to create photochemical smog is often blocked out by morning fog and low clouds, which prevents the formation of smog along the coast.

³ South Coast Air Quality Management District, 2002, 2003, 2004, 2004 Air Quality Data Tables. <http://www.aqmd.gov/smog/historicaldata.htm>

⁴ South Coast Air Quality Management District, 2002, 2003, 2004, 2004 Air Quality Data Tables. <http://www.aqmd.gov/smog/historicaldata.htm>



Cars and Air Pollution: Cars contribute significantly to the poor air quality in the South Coast Air Basin.

However, the City is home to a number of emission sources which affect the ambient air quality in the region. These emission sources are divided into two categories, direct and indirect. Direct sources include stationary emission sources, such as power plants and manufacturing and petroleum industries. Indirect sources are businesses and activities which generate motor vehicle traffic and therefore cause emissions.

DIRECT SOURCES

Direct sources for emissions primarily come from industrial processes. As the twentieth century ended, heavy manufacturing businesses—regionally and locally—moved out of the region and were replaced by light industrial businesses which do not emit the level of pollutants generally associated with heavy manufacturing. This transition has helped to improve the overall air quality in the City and region. Industries that have remained include major chemical and petrochemical businesses which contribute substantially to the local economy.

The drilling and maintenance of oil wells also contributes to local air pollution. To minimize environmental impacts from oil well activities, the City has developed a policy to eliminate isolated wells as they are retired from use (primarily in residential areas) and to encourage producers to convert to a combined oil district method of pumping oil, whereby dispersed wells are consolidated at a primary pumping station, thereby reducing oil activities and associated negative environmental impacts.

INDIRECT SOURCES

Automobile emissions are a primary source of air pollution the Los Angeles Basin. Thus, efforts to reduce emissions from this source can result in significant improvements in air quality. The City has adopted a Trip Reduction Ordinance (Municipal Code Division 9 Chapter 10) to incentivize walking, cycling, use of public transit, and carpooling to work. In addition to automobiles, the construction and operation of buildings are estimated to use one-third of all energy consumed in the United States. This energy use produces carbon dioxide emissions, a primary contributor to global warming.

The refrigerants used in air-conditioned buildings not only use more energy, these systems produce emissions that can deplete the earth’s ozone layer. Building materials are also a major source of air quality problems as they may emit damaging sulfur dioxide, nitrous oxide, and particulate emissions. Building design and construction practices can be modified to reduce the amount of energy and fossil fuels used and reduce emissions that erode the region’s air quality. These design and construction processes can be achieved without compromising safety and comfort or increasing construction and operating costs. Energy efficiency in buildings is discussed further in two sections below: 3.8 Energy Conservation and 3.14 Sustainable Building Practices.

Trip reduction strategies are addressed in the Land Use and Circulation Elements. The Land Use Element includes policies to encourage site design that is conducive to walking. To reduce vehicle traffic and congestion within Torrance, the Circulation Element includes policies to encourage the use of alternative forms of transportation and Transportation Demand Management (TDM) strategies to be implemented by employers, developers and merchants within the City. TDM strategies include promoting the use of carpools, vanpools, work-related transit use, bicycling and walking as a means to improve air quality and to minimize congestion on the local and regional network. Implementation actions for air quality as they relate to reduced automobile trips are included in Appendix A.

3.3 AIR QUALITY OBJECTIVES AND POLICIES

The long-term improvement of air quality is a regional concern requiring the coordination and cooperation of all jurisdictions within the South Coast Air Basin. While Torrance residents enjoy relatively good air quality, the City recognizes that its position as a regional employment center attracts vehicle trips from locations where the air quality is not so good. The City recognizes its responsibility to help reduce vehicle trips, continue to encourage industries to adopt air friendly practices, and to reduce energy consumption that contributes to air pollutant emissions.

OBJECTIVE CR.13:	To contribute to the improvement of local and regional ambient air quality to benefit the health of all
Policy CR.13.1:	Continue to participate in the efforts of the State Air Resources Board and the South Coast Air Quality Management District to meet State and federal air quality standards.
Policy CR.13.2:	Work with neighboring cities to implement local and regional projects that improve mobility on freeways and railways, reduce emissions, and improve air quality.
Policy CR.13.3:	Support regional air quality goals through conscientious land use and transportation planning and the implementation of resource conservation measures.

Policy CR.13.4:	Balance the achievement of clean air with other major goals of the City.
Policy CR.13.5:	Support air quality and energy and resource conservation by encouraging alternative modes of transportation such as walking, bicycling, transit, and carpooling.
Policy CR.13.6:	Promote citizen awareness and participation in programs to reduce air pollution and traffic congestion.
Policy CR.13.7:	Encourage the use of alternative fuel vehicles and re-refined oil.
Policy CR.13.8:	Promote energy-efficient building construction and operation practices that reduce emissions and improve air quality.

OBJECTIVE CR.14:	To reduce the City’s overall carbon footprint and counteract the effects of global warming through a reduction in the emissions of greenhouse gases within Torrance
Policy CR.14.1:	Support the California Air Resources Board in its ongoing plans to implement AB32, and fully follow any new AB32-related regulations.
Policy CR.14.2:	Develop and implement greenhouse gas emissions reduction measures, including discrete, early-action greenhouse gas-reducing measures that are technologically feasible and cost-effective.
Policy CR.14.3:	Pursue actions recommended in the U.S. Mayors Climate Protection Agreement to meet AB32 requirements.
Policy CR.14.4:	Act as a leader and example in sustainability and reduction in greenhouse gas emissions by conducting City business in the most greenhouse gas-sensitive way.

3.4 WATER RESOURCES AND CONSERVATION

The Los Angeles Basin is a semi-arid desert environment. Average yearly precipitation in the Torrance area is about 13 inches.⁵ Water is considered a limited natural resource given climate conditions and the fact that Southern California communities rely upon domestic water supplies imported from as far away as the Colorado River. As part of a larger water system that imports water, Torrance could, with careful management, reduce overall water use, enhance local water resources, and reduce the City’s reliance on imported water.

⁵ Earth Consultants International, “Technical Background Report to the Safety Element of the General Plan for the City of Torrance, Los Angeles county, California”, 2005. page 3-3

3.4.1 WATER SUPPLY

Two water agencies provide drinking water to Torrance residents and businesses: the Torrance Municipal Water Department (TMWD) and the Rancho Dominguez and Hermosa-Redondo Districts of the California Water Service Company.

TMWD receives approximately 68 percent of its water supply from Metropolitan Water District of Southern California (MWD) and 32 percent from local supplies. Local sources include groundwater, desalinated groundwater, and recycled water. Recycled water comprises approximately 21 percent of TMWD's water supply, while groundwater supplies (including desalinated groundwater) make up approximately 11 percent. The Circulation and Infrastructure Element provides additional information regarding water supplies, infrastructure, and wastewater treatment.

3.4.2 WATER CONSERVATION AND QUALITY

Water conservation represents the most cost-effective and environmentally sound way to reduce water use. Homeowners can take many actions to reduce consumption, such as installing water-conserving plumbing fixtures and appliances, fixing leaks, planting drought-tolerant landscaping, and simply avoiding excessive watering of plants. Industrial and commercial users cannot so easily reduce water use, particularly if manufacturing processes or commercial enterprises require substantial water volumes.

The Urban Water Management Plan prepared by TMWD identifies several demand management measures the City will pursue to ensure that the City has enough water for everyday and emergency use. These include:

- Residential water surveys for residential customers
- Residential plumbing retrofit programs
- Distribution system water audits, leak detection, and repairs
- Landscape conservation programs
- High-efficiency washing machine rebate program
- Public information programs
- Water efficiency rebates for commercial and industrial customers
- Implementation of the City's Water Waste Ordinance that requires conservation measures in the case of water shortages
- Residential ultra low-flush toilet program

Recycled water (also referred to as reclaimed water) represents an important resource that can be used to offset use of potable water for non-potable purposes, particularly for landscape irrigation. Recycled water is domestic wastewater that is purified through primary, secondary, and tertiary treatment. In response to increasing demands for water, the West Basin Municipal Water

District (WBMWD) has developed a regional water recycling program known as the West Basin Water Recycling Project. WBMWD is a public agency that purchases imported water from MWD and wholesales the imported water to cities, mutual water companies, investor-owned utilities and private companies in southwest Los Angeles County. TMWD purchases recycled water from the WBMWD through the Water Recycling Project. The recycled water comes from the West Basin Water Recycling Plant located in El Segundo. Current recycled water users include Casmir, Arlington, and Magruder Schools and McMaster, Descasno, Guenser, and Columbia Parks.⁶ The ExxonMobil Oil Refinery is the largest user of recycled water in the City, using approximately 97 percent of all recycled water within the City⁷.

The City's commitment to encourage recycled water use is best demonstrated through the reclaimed water ordinance in the Municipal Code (Section 76.5.1). The purpose of the ordinance is to:

- Establish a City policy with regard to the use of reclaimed water that is consistent with State of California law.
- Preserve the reliability of the potable public water supply during times of water shortage by diversification of source of supply through the use of reclaimed water for various non-potable uses.
- Provide an alternative water supply source that will, in the long term, lower overall water costs to water customers in the City.
- Provide a uniform means of implementing a reclaimed water program in the City.

In addition, the updated Recycled Water Master Plan will identify and prioritize public and private sites for possible connection to the recycled water system. The City's *Urban Water Management Plan* also identifies potential users of recycled water and methods such as financial incentives to encourage recycled water use.

To promote water conservation, the City will continue to implement water conservation measures set forth in the Municipal Code and the *Urban Water Management Plan*.

STORM POLLUTANTS

The federal Water Pollution Control Act prohibits the discharge of any pollutant to navigable waters from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permit requirements were established in 1987 with the passage of the Water Quality

⁶ City of Torrance, 2005 Urban Water Management Plan, 2005. page 8-3

⁷ Ibid.

Act. The NPDES permit program controls water pollution by regulating point sources that discharge pollutants into so-called waters of the United States.

In Torrance, NPDES permits are issued by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) as part of its Storm Water Program. The Los Angeles Region has jurisdiction over all coastal drainages flowing to the Pacific Ocean between western Ventura County and the eastern Los Angeles County line, as well as the drainages of five coastal islands. The NPDES program coordinates the actions of all incorporated cities within this region (except Long Beach) and the Los Angeles County government to regulate and control storm water and urban runoff into Los Angeles County waterways and ultimately, into the Pacific Ocean.

In support of the permit (NPDES No. CAS004001) and the obligation to keep waterways clean by reducing or eliminating contaminants from storm water and dry-weather runoff, the City complies with the California Regional Water Quality Control Board's Monitoring and Reporting Program. The City has a storm water education program, an aggressive inspection team that issues citations for water quality violations, and requires the use of "best management practices" in many residential, commercial, and development-related activities to reduce runoff.

DETENTION AND RETENTION BASINS

Three storm water retention basins (referred to locally as sumps) and fourteen detention basins throughout Torrance serve the primary purpose of controlling storm water runoff and preventing localized ponding and flooding. (Refer to the discussion in the Safety Element.) Retention basins hold water after a storm but have no outlet. Detention basins have an outlet and retain the water for a period of time. Although not originally intended as a means of collecting pollutants, they do serve this dual function. As the County upgrades the capacity of the regional storm drain system, several basins will no longer be needed for flood control purposes. Basins have the potential to serve as combined flood control and recreational areas. The retention basins have a greater potential for use as parks as water quality regulations do not apply to them.



Detention Basin at Entradero Park: detention and retention basins (sumps) are scattered throughout the city that are used to store runoff

3.5 WATER RESOURCES AND CONSERVATION OBJECTIVES AND POLICIES

Water conservation will be pursued through the coordination with water agencies and public education and incentive programs.

OBJECTIVE CR.15:	A water supply sufficient to meet present and future needs
Policy CR.15.1:	Continue to cooperate with and support regional programs that protect water resources in Torrance.
Policy CR.15.2:	Promote continued research and programs by the Metropolitan Water District, the Water Replenishment District, the West Basin Municipal Water District, and county and State agencies regarding water recycling and desalination of groundwater for domestic use.
Policy CR.15.3:	Maximize the use of local water resources to reduce imported water supplies.
Policy CR.15.4:	Encourage residents and businesses in Torrance to practice water conservation through incentive programs and where necessary, programs that penalize wasteful practices.
Policy CR.15.5:	Enforce regulations aimed at reducing groundwater and urban runoff pollution, including the National Pollutant Discharge Elimination System (NPDES) requirements of the Regional Water Quality Control Board.
Policy CR.15.6:	Reduce the amount of water used for landscaping through such practices as the planting of native and drought-tolerant plants, use of efficient irrigation systems, and collection and recycling of runoff.
Policy CR.15.7:	Implement the water conservation projects set forth in the City's Urban Water Management Plan.

Policy CR.15.8:	Expand the use of recycled water at schools, parks, at City facilities, and other potential irrigation or industrial use sites.
Policy CR.15.9:	Identify opportunities for increased use of reclaimed water.
Policy CR.15.10:	Promote implementation of effective water conservation and water demand management measures including Best Management Practices.
Policy CR.15.11:	Actively support and participate in the development and implementation of an effective conjunctive use program in the local area.

3.6 MINERAL RESOURCES

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that all cities consider mapped mineral resources designations (as defined by the State Mining and Geology Board) in long-term planning efforts. SMARA was enacted to promote the conservation and sensitive use of significant mineral deposits. The law ensures that significant aggregate resources are recognized and considered before land use decisions are made that may compromise the long-term availability of these resources.

The State Mining and Geology Board classifies lands in California based on availability of mineral resources. Four Mineral Resources Zone (MRZ) designations have been established for the classification of sand, gravel, and crushed rock resources:

- MRZ-1 – Adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2 – Adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled.
- MRZ-3 – The significance of mineral deposits cannot be determined from the available data.
- MRZ-4 – There is insufficient data to assign any other MRZ designation.

The classification system is intended to ensure consideration of statewide or regionally significant mineral deposits by the City in planning and development administration. These mineral resource designations are intended to prevent incompatible land use development on areas determined to have significant mineral resource deposits. Figure CR-5 identifies the locations of the mineral resource zones in Torrance. According to the State Mining and Geology Board, the majority of land within Torrance is classified as MRZ-1 and MRZ-3⁸. A small

⁸ *Generalized Mineral Land Classification Map of Los Angeles County – South Half*. 1994 State Mining and Geology Board

Figure CR-5
Mineral Resource Zones

Legend

Mineral Resource Zones

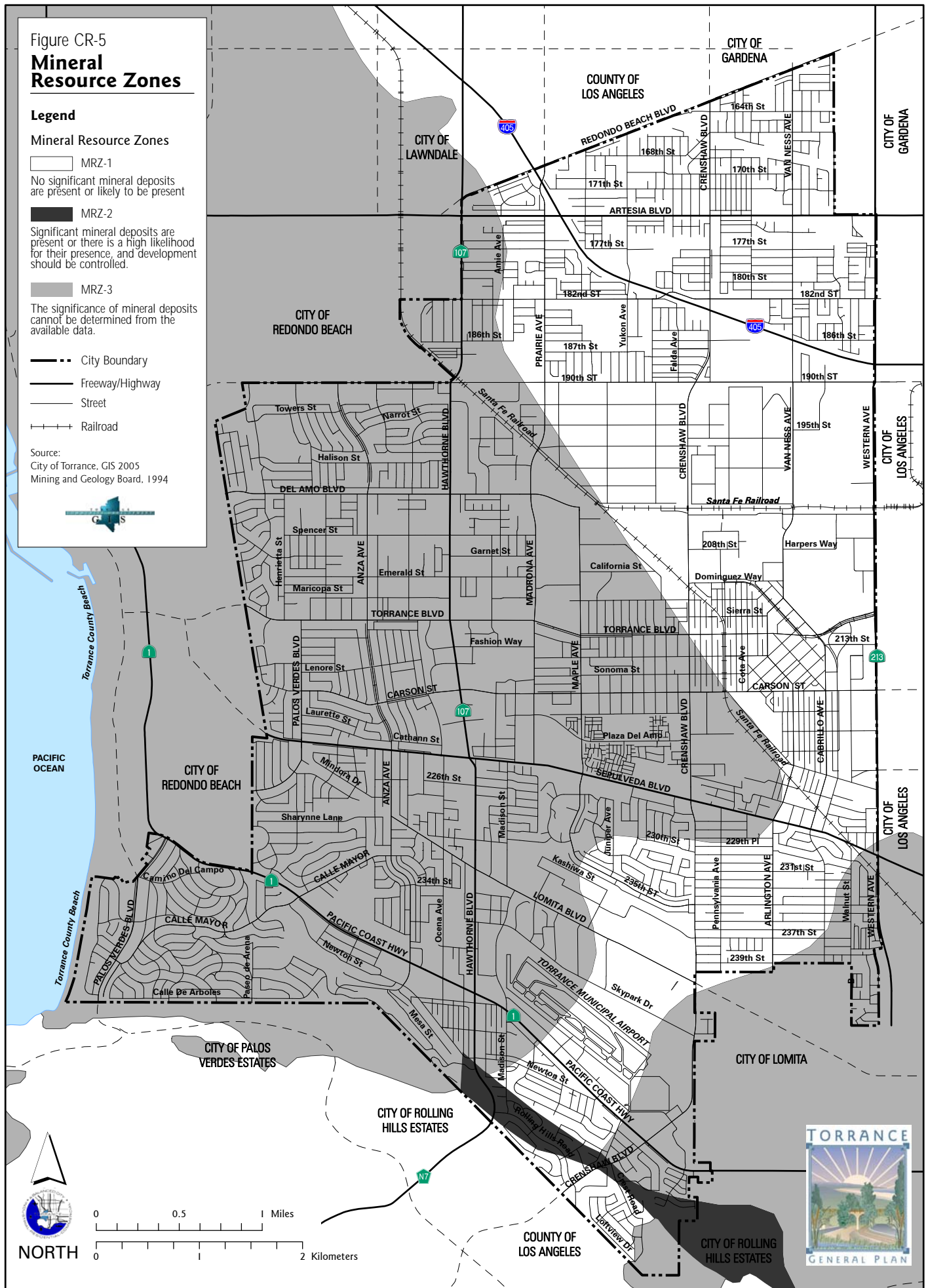
MRZ-1
 No significant mineral deposits are present or likely to be present

MRZ-2
 Significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled.

MRZ-3
 The significance of mineral deposits cannot be determined from the available data.

- City Boundary
- Freeway/Highway
- Street
- +—+— Railroad

Source:
 City of Torrance, GIS 2005
 Mining and Geology Board, 1994



strip of land within the City is designated as MRZ-2. The area is located south of Pacific Coast Highway, and roughly east of Hawthorne Boulevard.

3.7 WILDLIFE PROTECTION

Madrona Marsh is the most important wildlife habitat area in Torrance. Although the City has many beautiful open space areas, these largely are highly developed and programmed urban parks which support birds and small animals commonly found in such environments.



Madrona Marsh: Vernal marshes are distinct in that they flood during the rainy season and dry out after the rainy season has passed

3.7.1 MADRONA MARSH

Madrona Marsh represents a significant achievement in natural resource conservation. After 15 years of effort by the City and the Friends of Madrona Marsh to save the marsh from extinction, the Madrona Marsh was established as a permanent ecological preserve in 1986.

The Marsh was privately owned until November, 1986, at which time it was deeded to the City of Torrance by the developers of the Park Del Amo project, the Torrance Investment Company, and the Santa Fe Land Improvement Company.

The Madrona Marsh and adjacent sandy upland has been designated by Los Angeles County as a Significant Ecological Area. This designation was the result of a growing awareness that natural areas of real value were fast disappearing. This remnant area is viewed by the environmental, educational, and scientific communities as a resource that should be preserved for future generations.

Madrona Marsh is a remnant of a natural vernal wetland sustained by a historic drainage basin that no longer exists. The marsh covers approximately 11 acres within a larger open space preserve area; the balance of the area is sandy upland and wetland. Vernal marshes are distinct in that they flood during the rainy season and dry out after the rainy season has passed. This wetland regime

produces a unique ecosystem, and its significance is evidenced by the diversity of life that resides there. This 42-plus acre site is home to over 110 species of plants, over 65 families of insects, two amphibian species, three species of reptiles, about 160 types of birds, and at least four mammal species.

As an ecological preserve, the Marsh also provides the community with the benefits of a natural park, zoo, and arboretum combined. In 2001, the 8,000-square-foot Madrona Marsh Nature Center was established. The facility is an educational and interpretive center for the Madrona Marsh Preserve's natural resources. The Center offers special educational programs, laboratories, displays, books, and other aids to understanding the Marsh's unique habitat. The Center includes a reception area, exhibit room, classroom, project lab, curator's lab, restrooms, gift shop, staff offices, administrative area, and volunteer room.

3.7.2 ADDITIONAL WILDLIFE RESOURCES

In addition to Madrona Marsh, many detention and retention basins, selected open parkland, and other sites on public and private property contain natural habitat systems. These sites have the potential for restored natural habitat. Valuable sites include:

- Entradero Park – well over half of this park is natural open space but not managed for habitat
- Henrietta Marsh (across from West High School) – Historical/seasonal wetland/marsh, contoured as a storm water detention basin
- Los Arboles Park – Lower slope on the south Torrance hillside is natural area with native plant communities
- Torrance Beach – Beach sand and shoreline/tidal system, unique sand bluffs, and restorable habitat communities
- Walteria Detention Basin – The remains of historical Lake Walteria, a seasonal lake and wetlands with potential for waterfowl and general bird sanctuary
- Amie, Entradero, Walnut, and 237th Street detention basins – These sumps have the potential for wildlife habitat, habitat restoration, and public education



Madrona Marsh Nature Center:
The Nature Center is an educational and interpretive center for the Madrona Marsh.

3.8 WILDLIFE HABITAT OBJECTIVES AND POLICIES

Madrona Marsh is one of the City’s most important assets. The marsh’s contribution to the preservation of natural habitat in an urban environment and to the educational and recreational enrichment of residents is invaluable. As a steward of the preserve, the City is committed to the proper management of the physical and biological resources on the property and non-destructive public use of the site.

OBJECTIVE CR.16:	The preservation of unique and beneficial wildlife habitat in Torrance
Policy CR.16.1:	Maintain the Madrona Marsh Nature Preserve for the enjoyment and education of present and future generations.
Policy CR.16.2:	Support the dual use of drainage detention and retention basins for open space, recreation, and/or wildlife habitat opportunities, and increased groundwater recharge as long as the secondary use does not conflict or interfere with the operation and maintenance of the primary function of flood control and drainage.

3.9 TORRANCE BEACH

While many people do not think of Torrance as a beach community, Torrance Beach is a hidden resource that residents treasure. Torrance Beach extends roughly one mile along the Pacific Coast and reaches inland approximately 200 feet. This community resource provides about 20 acres of beach for the swimming, surfing, and sunbathing enjoyment of residents and visitors. The

southern portion of Torrance Beach is controlled by the City through ownership, easement, or lease from the State of California, and the northern portion is owned and/or controlled by the County of Los Angeles. The Los Angeles County Department of Beaches and Harbors manages the beach services and facilities.



Torrance Beach: The Beach provides approximately 20 acres of beach access to the Pacific Ocean.

Facilities at Torrance Beach include public restrooms, showers, a lifeguard facility, concession stand, volleyball courts, swing sets, strand walkway, a bike path, and a parking lot. Five paths provide easy beach access, including access for handicapped visitors.

3.9.1 TORRANCE BEACH OBJECTIVES AND POLICIES

Torrance Beach, like the Madrona Marsh, is an open space resource that benefits the community and complements developed parks and open spaces. The City recognizes the beach as a place for recreation and refuge from urban life. The City is committed to working with the State and County agencies to ensure cooperation and the proper maintenance and safeguard of this significant coastal resource.

OBJECTIVE CR.17:	Preservation of Torrance Beach as an attractive, accessible open space resource
Policy CR.17.1:	Reaffirm to the State and County authorities the City’s intent to conserve the maximum amount of beach area possible.
Policy CR.17.2:	Work with State and County agencies to limit improvements to structures which are absolutely necessary for recreation, safety, and beach protection.
Policy CR.17.3:	Ensure full and easy access to the beach for all visitors.
Policy CR.17.4:	Support efforts to have offshore environmentally and economically sensitive areas, including the offshore waters of Torrance Beach, deleted from future offshore oil lease sale plans.

Policy CR.17.5:	Oppose any proposals for off-shore oil drilling in the Santa Monica Bay and off the Palos Verdes Peninsula.
Policy CR.17.6:	Preserve and restore natural plant and animal habitat at Torrance Beach including dunes, slopes, and bluff.

3.10 AESTHETIC RESOURCES

One of Torrance’s greatest assets is the aesthetic quality of our community. As visitors cross from neighboring cities and county areas into Torrance, the canopy of street trees and landscaped boulevards create a feeling of calm and distinction. The attention paid to quality private development and public spaces shows that we care about community appearance. Although aesthetic value is subjective and can change over time, we always expect high standards.

3.10.1 URBAN FOREST

Trees create the “urban forest” of Torrance and enhance the aesthetic quality of the City. They also contribute to clean air, provide cooling shade, support wildlife, increase property values, control soil erosion, conserve water, create sound barriers, absorb greenhouse gases from the air, and provide protection from high winds. The urban forest is comprised of a street tree system, trees on parks and other public lands, and trees on private properties and in yards throughout Torrance.



Tree-lined Neighborhood near PCH: Mature tree canopies add a unique aesthetic element to residential neighborhoods

Torrance is fortunate to have numerous mature specimen trees. Many trees were planted in the early decades of the 1900s as street trees in residential neighborhoods and windbreaks on what was once agricultural land. Because of the age and size of these trees, a comprehensive approach to their eventual replacement is needed to maintain the qualities they contribute to the community aesthetic.

The eucalyptus trees that parallel Torrance Boulevard between Madrona Avenue and Border Avenue average over 60 feet in height and 80 years in age.

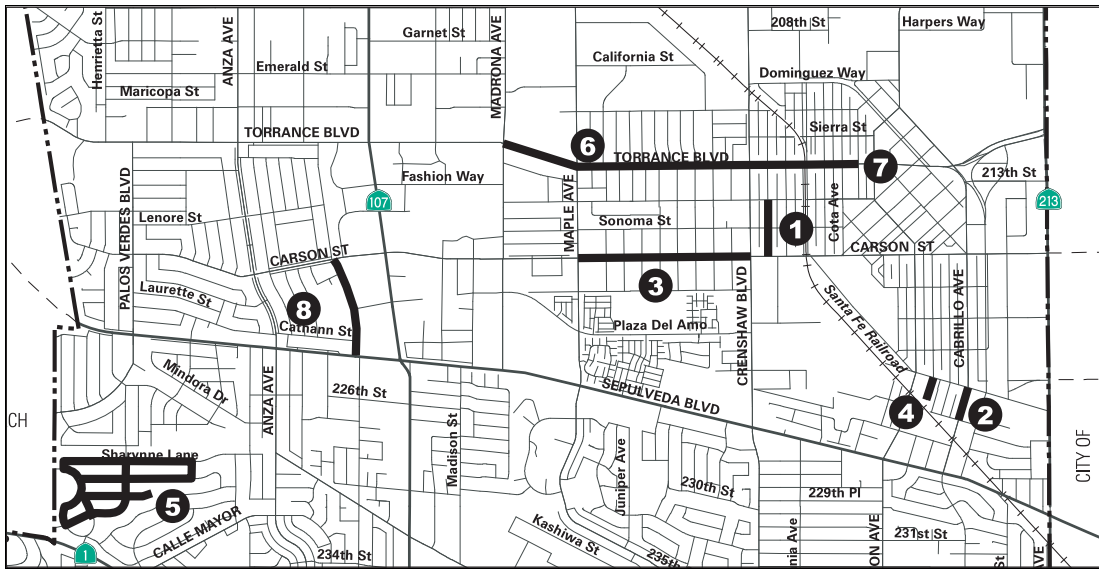
Eucalyptuses of similar age and height line segments of Pacific Coast Highway between Crenshaw Boulevard and Calle Mayor, along Plaza Del Amo from Carson Street to Arlington Avenue, and in the WALTERIA area. Downtown Torrance contains acacias, palms, camphors, jacarandas, and California pepper trees dating to establishment of the area. In the Hollywood Riviera neighborhood are excellent examples of pine, eucalyptus, palm, and bottle brush trees which were planted in the late 1920s.

To preserve these community assets, the City is developing a program to map street trees. Such an inventory yields important information regarding the age and condition of trees and an indication of areas that will benefit from additional plantings. The City will continue to implement a master landscaping plan that defines the types, sizing, and spacing of street trees and that sets forth a comprehensive approach for replacing older trees that die. As appropriate, this effort will be accomplished in conjunction with the development of corridor plans for arterial streets and with plans for key entry points into Torrance.

Additionally, the City will work to preserve specimen trees on public and private property. For example, where specimen trees may be threatened by street widening projects, trees may be saved by relocation and/or reducing the width of sidewalks. On private property, the preservation of specimen trees should factor into land development decisions. In July 2001, the City's street tree policy established special designated areas where street trees have created an ambiance and image for Torrance and should be protected and conserved. This policy will apply to additional areas over time as new streets trees are planted and existing trees mature.

3.10.2 SCENIC VISTAS

The topography of Torrance creates many scenic vistas throughout the City. From the hillsides along the City's western and southern boundaries, one can see the distant San Gabriel Mountains to the north. The hillsides of the Riviera neighborhood look over the Pacific Ocean. Recognizing the value of these scenic views, the City has adopted policies for the hillside areas that require review of development proposals. Similar protections are appropriate for views from public places, including street rights-of-way.



1. Beech Avenue - between Carson Street and El Dorado Street (*cinnamomum camphora*- Camphor tree)
2. Cabrillo Avenue - between Plaza Del Amo and Lincoln Avenue (Camphor tree)
3. Carson Street - between Maple Avenue and Crenshaw Blvd. (*eucalyptus ciminalis*- Manna Gum)
4. Gramercy Avenue- South of Plaza Del Amo (Camphor tree)
5. Seaside Rancho Area- (Holiday Lights area) (*ulmus arviflora* - Chinese Evergreen Elm)
6. Torrance Blvd.- between Madrona Avenue and Madrid Avenue (*eucalyptus camaldulensis* - Red Gum)
7. Torrance Blvd - between Madrid Avenue and Portola Avenue (*grevillea robusta*- Silk Oak)
8. Ocean Avenue- between Carson Street and Sepulveda Blvd.(*platanus racemosa* – Sycamore)

**Figure CR-6:
Special Designated Areas for Street Trees**

3.10.3 LIGHTING

Artificial light sources used in abundance can create irritating glare effects and light pollution. Glare can impact residents’ enjoyment of their outdoor living spaces, and light pollution can hinder clear views of the night sky. To minimize adverse impacts of light and glare, the City will adopt outdoor lighting standards. The standards may also require the use of energy conservation lighting fixtures to reduce energy consumption.

3.11 AESTHETIC RESOURCES OBJECTIVES AND POLICIES

OBJECTIVE CR.18:	To preserve significant stands of trees and to establish a comprehensive plan to protect and enhance the urban forest
Policy CR.18.1:	Preserve specimen trees whether they occur on public or private property, and promote the planting of new trees.
Policy CR.18.2:	Provide, maintain, and encourage appropriate street trees along all sidewalks and property frontages.
Policy CR.18.3:	Develop and implement a comprehensive citywide street tree program that includes sidewalk-appropriate, drought-tolerant, and native species.

OBJECTIVE CR.19:	To preserve scenic vistas wherever possible
Policy CR.19.1:	Make the preservation of scenic vistas an integral factor in land development decisions.
Policy CR.19.2:	Look for opportunities to create public open space areas with scenic vistas that all can enjoy.
Policy CR.19.3:	Coordinate with Southern California Edison and other utilities to underground utility lines in new developments and to systematically replace overhead lines with underground facilities, with a priority placed along major roadways, key commercial areas, and within viewsheds of the beach.

OBJECTIVE CR.20:	To minimize sources and adverse effects of light pollution
Policy CR.20.1:	Establish regulations for private lighting that minimize or eliminate light pollution, light trespass, and glare (obtrusive light).
Policy CR.20.2:	Require that nonresidential uses adjacent or near residential neighborhoods provide shielding or other protections from outdoor lighting and lighted signage.

3.12 ENERGY CONSERVATION

When we drive our children to school, boil a pot of water, or cool down the house on a warm sunny day, we use energy. The energy that keeps our appliances and vehicles running generally requires the burning of fossil fuels. Given the nonrenewable nature of fossil fuels, California consumers and power providers continue to evaluate other sources of energy and adopt energy conservation strategies.

Energy conservation is the practice of decreasing the quantity of energy used while achieving a similar outcome of end use. Energy conservation has the added benefit of decreasing pollutants released into the air and preserving natural resources. Individuals and organizations often conserve energy to reduce energy costs and promote environmental values. Industrial and commercial users may want to increase efficiency and maximize profit.

3.12.1 RENEWABLE ENERGY

Renewable energy sources capture energy from on-going natural processes such as sunshine, wind, flowing water, biological processes, and geothermal heat flows. The advantage of renewable energy sources is that they can be replenished within a relatively short time period. Alternative energy resources may be used directly or used to create other more convenient forms of energy. Examples of direct use include solar ovens, geothermal heating, and water-wheels and windmills. Examples of indirect use which require energy harvesting are electricity generation through wind turbines or photovoltaic cells, or production of fuels such as ethanol from biomass.

The City of Torrance and much of Southern California are fortunate to have abundant sunshine making it possible to design or modify buildings to take advantage of passive solar heating and natural cooling. Use of solar heating and natural cooling can also result in more pleasant interior environments because of increased natural light and reduced noise from mechanical equipment.

3.12.2 OIL RESOURCES AND PRODUCTION

Oil and gas are non-renewable resources that must be extracted from the earth. A considerable portion of Torrance overlies oil- and gas-bearing strata that constitute part of the Torrance Oil Field, which extends from the Redondo Beach offshore area on the northwest to the Wilmington Oil Field on the southeast. Petroleum has been pumped continuously from the Torrance Oil Field since the early 1920s; since 1922, over 200 million barrels of oil have been withdrawn from the field.

Given the value of these oil resources to the local economy and the importance of petroleum products to many industries, the City supports continued productive oil recovery operations within the Torrance Oil Field, provided such activities do not represent a safety hazard or cause localized visual or economic blight. As emerging technologies allow for extraction activities to become increasingly efficient, the City will promote and encourage consolidated operations, the conversion of idle oil lands to more productive uses, and the revitalization of marginal facilities. (Refer to the Land Use Element for a discussion of related land use compatibility issues and the Safety Element for a discussion of the safety aspects of oil production.)

3.12.3 ENERGY CONSERVATION

As noted above, efficient energy use brings environmental and economic benefits to residents and businesses. Conservation can be encouraged by changing customer behavior, rewarding use of energy-saving appliances, and employing building design and construction approaches that reduce electric power and natural gas usage. Alternative energy sources such as solar can provide opportunities to reduce reliance on more traditional sources.

Residents and businesses can conserve energy through the purchase of Energy Star appliances and fixtures. The Energy Star label certifies that the product exceeds federal energy-efficiency standards.

The City promotes energy conservation through the implementation of State of California Title 24 building code energy performance requirements. Title 24 measures require, for example, minimum ceiling, wall, and raised floor insulation, and minimum heating, ventilating, air conditioning and water heating equipment efficiencies. The City also recognizes the role of sustainable building practices in achieving energy efficiency (see discussion in Section 3.14 below).

3.13 ENERGY CONSERVATION OBJECTIVES AND POLICIES

Energy conservation will be implemented in Torrance to reduce dependence upon and conserve fossil fuels, minimize pollutant emissions, and implement the principles of sustainability.

OBJECTIVE CR.21:	The efficient use and conservation of energy resources to reduce consumption of natural resources and fossil fuels
Policy CR.21.1:	Promote and encourage energy resource conservation by the public sector, private sector, and local school district.
Policy CR.21.2:	Partner with utility providers and regional agencies to inform residents and business of the financial benefits of energy conservation.
Policy CR.21.3:	Support the development and use of non-polluting, renewable energy resources.
Policy CR.21.4:	Encourage the construction of homes and buildings that exceed Title 24 standards. Consider adoption of regulations requiring greater energy efficiency in new or remodeled larger homes and businesses.
Policy CR.21.5:	Educate residents and businesses about the benefits of energy efficiency technologies and practices, such as solar panels and low-energy appliances.
Policy CR.21.6:	Promote energy-efficient design features, including appropriate site orientation, use of light-colored roofing and building materials, and use of trees to reduce fuel consumption for heating and cooling.
Policy CR.21.7:	Encourage owners to retrofit existing buildings with energy-

	conserving lighting fixtures. Also encourage owners to equip new buildings with energy-efficient lighting devices and to design projects to take full advantage of natural lighting.
Policy CR.21.8:	Explore and consider the cost/benefits of alternative fuel vehicles—including hybrid, natural gas, and hydrogen-powered vehicles—when purchasing new City vehicles.
Policy CR.21.9:	Support legislation that requires improved fuel economy in private and commercial vehicles.

OBJECTIVE CR.22:	To allow for continued safe, efficient, and environmentally sound oil and gas production activities
Policy CR.22.1:	Support the enactment of federal and State legislation which encourages more efficient production of oil and gas.
Policy CR.22.2:	Encourage revitalization of marginally producing oil lands.
Policy CR.22.3:	Require the use of newer and safer methods and equipment for oil recovery operations.

3.14 SUSTAINABLE PRACTICES

3.14.1 SOLID WASTE GENERATION AND RECYCLING

Since the late 1970s, an increasing shortage of refuse disposal sites and diminishing landfill capacity led the California Legislature to implement the Integrated Waste Management Act (AB 939) to reduce, recycle, and reuse solid waste generated in the state. Specifically, the Act requires jurisdictions to divert 50 percent of solid waste from landfill disposal through recycling or source reduction programs, as well as to oversee the disposal of household hazardous wastes. The state has continued to refine program goals and work toward preserving land resources for productive uses, not landfills. To meet these goals, the City established a Source Reduction and Recycling Element to define the diversion goals for waste haulers contracted with the City of Torrance.

The City Council, residents, and businesses have also entered into the Resource Conservation Awareness Partnership to raise awareness about conservation and recycling. Through various waste collection, reduction, and recycling programs, Torrance residents and businesses recycle over 10,000 tons of materials each year. In addition, the City partners with the Torrance Unified School District. To further encourage recycling and waste reduction, the City is committed to expanding residential and commercial curbside waste collection to include collection and recycling of green waste.

CONSTRUCTION WASTE

Waste is measured by weight, and construction and demolition materials represent a significant part of the waste stream. Recycling or reusing waste from construction and demolition job sites can often reduce project costs and create jobs, as well as benefit the environment and help meet waste diversion goals. Reuse and recycling of construction and demolition materials is one component of a larger, holistic practice of sustainable or “green” building construction. The efficient use of resources is a fundamental tenet of sustainable construction practices. This means reducing, reusing, and recycling most, if not all, materials that remain after a construction or renovation project.

Common construction and demolition materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, and green waste related to land development. Of these, metals are the most commonly recycled material, while lumber makes up the majority of construction debris deposited in landfills.

The City requires that all demolition projects and construction or remodeling projects valued at \$100,000 or more recycle or reuse at least fifty percent of the materials that leave a project site. A Waste Management Plan (WMP) form is part of the permit process for projects that meet these criteria. Failure to fulfill the requirements of the WMP process can result in penalties of \$5,000 or more for construction projects and \$10,000 for demolition projects.

3.14.2 SUSTAINABLE BUILDING PRACTICES

Buildings in the United States consume extraordinary land, energy, water, and natural materials resources. The activities associated with constructing and operating buildings are a major source of pollution, contributing to decreased air quality in urban areas and also heightened carbon dioxide levels, a major contributor to climate change. According to the U.S. Department of Energy’s Smart Communities Network, buildings produce 35 percent of the country’s carbon dioxide emissions.

Sustainable (green) building practices use natural resources in more efficient and ecological manners than traditional buildings. Sustainable building practices include designing, constructing, and operating buildings and landscapes to incorporate energy efficiency, water conservation, waste minimization, pollution prevention, resource-efficient materials, and high standards of indoor environmental quality in all phases of a building's life. Green approaches to building design involve an integrated, interdisciplinary approach to design and construction, together with investments in energy- and resource-efficient materials and technology.

Sustainable building practices yield a variety of environmental, economic, and health benefits.

Environmental benefits:

- Improve air and water quality
- Reduce solid waste
- Conserve natural resources

Economic benefits:

- Reduce operating costs
- Enhance asset value and profits
- Improve employee productivity and satisfaction
- Optimize life-cycle economic performance

Health and Community Benefits:

- Improve air, thermal and acoustic environments
- Enhance occupant comfort and health
- Minimize strain on local infrastructure

Benefits include:

- Efficient use of water, energy, lumber, and other resources, which also minimize maintenance and operation costs to homeowners and businesses
- Designs that are site, climate, and context specific
- Site plan design can promote a sense of community
- Pollution prevention and reduced waste

Energy efficient buildings are certified “green” by the U.S. Green Building Council’s Leadership in Energy & Environmental Design (LEED) rating system. The LEED rating system is a nationally accepted standard that rates development that minimizes the use of energy, water, and other natural resources. The City of Torrance is home to one of the world’s largest and most publicized models for green building. In 2003, the south campus addition to the Toyota Motor Sales headquarters became the largest project to receive a Gold rating in the U.S. LEED green building program (gold is the second highest level).

3.14.3 LOW-IMPACT DEVELOPMENT

One innovative approach to sustainable development practices is low impact development (LID) which is an approach to land development (or redevelopment) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treats storm water as a resource rather than a waste product. LID benefits water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site’s pre-development runoff rates and volumes. LID’s goal is to mimic a site’s predevelopment hydrology by using design practices and techniques that effectively capture, filter, store, evaporate, detain and infiltrate runoff close to its source. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Developer cost savings can be achieved through reductions in clearing and grading costs, and the costs of pipes, ponds, curbs and paving usually associated with traditional development.



The Toyota headquarters in Torrance is a prime example of excellence in green building practices through the use of recycled building material, and water and energy conservation measures

The City will undertake a phased approach to adopting green building practices. Public education will be a key to implementing green building design and construction on a wide scale. Programs will focus on educating residents and businesses regarding the environmental and financial incentives of sustainable design. A recognition program will serve as a tool to publicize outstanding examples of sustainable buildings and clarify misconceptions about the look and cost of sustainable building and design.

3.15 SUSTAINABLE PRACTICES OBJECTIVES AND POLICIES

The City will continue to implement strong waste diversion and recycling programs to increase public awareness of sustainable practices and reduce pressures on regional landfills. Green building will be promoted, with the City taking a leadership role in demonstrating the benefits of sustainable design and construction.

OBJECTIVE 23:	To continue to reduce the percent of the overall waste stream that enters regional landfills
Policy CR.23.1:	Provide residents and businesses with comprehensive and efficient solid recycling services that, at a minimum, meet state diversion mandates.
Policy CR.23.2:	Implement the policies and programs in the Source Reduction and Recycling Element.
Policy CR.23.3:	Implement the policies and programs in the Household Hazardous Waste Element submitted by Los Angeles Area Integrated Waste Management Authority, in which Torrance is a member, to provide for the proper treatment and disposal of household hazardous wastes.
Policy CR.23.4:	Establish a construction waste recycling program that mandates the recycling of a high percentage of construction and demolition waste.
Policy CR.23.5:	Maximize composting opportunities for Torrance residents and businesses.
Policy CR.23.6:	Work with Los Angeles County and private businesses to continue programs that encourage the recycling of electronics, tires, and motor oil.
Policy CR.23.7:	Establish permanent collection centers within the City to meet the recycling and hazardous materials disposal needs of residents, businesses, and City government.

OBJECTIVE CR.24:	To encourage and promote green building methods and practices within Torrance
Policy CR.24.1:	Encourage sustainable construction practices and the use of energy-saving technology. Consider establishing a green building program that draws from the LEED (Leadership in Energy & Environmental Design) standards.
Policy CR.24.2:	Renovate City buildings and facilities to achieve as many LEED or LEED-related pre-requisites and credits as feasible.
Policy CR.24.3:	Explore the feasibility of adopting green building requirements for all new commercial and industrial development projects of large scale.
Policy CR.24.4:	Provide information to the residents and the residential development community about options for “going green” in residential construction, including option for Low Impact Development.