

# CONSERVATION/ OPEN SPACE ELEMENT

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## INTRODUCTION

The uniqueness of Rancho Santa Margarita is due in large part to its many natural and open space resources including scenic vistas, parks, lake, creeks, and lush vegetation. The Conservation/Open Space Element focuses on the preservation and enhancement of these resources to ensure the community's distinct setting and natural beauty are preserved and that the quality of the environment is maintained.

### **Purpose of the Conservation/Open Space Element**

The Conservation/Open Space Element describes the open space and natural resources within Rancho Santa Margarita. The Element addresses the following key issues related to environmental resources and conservation and establishes goals and policies to protect and enhance these resources within the community and region:

- 1) Ecological and biological resources;
- 2) Scenic resources;
- 3) Water quality;
- 4) Air quality;





- 5) Energy conservation;
- 6) Cultural resources; and
- 7) Greenhouse gas emissions.

## Scope and Content of the Element

The Rancho Santa Margarita Conservation/Open Space Element meets the State requirements for Conservation and Open Space elements as defined in Sections 65302(d) and 65302(e) of the Government Code. According to these requirements, the Conservation Element must contain goals and policies to protect and maintain natural resources such as water, soils, wildlife, and minerals to prevent wasteful resource exploitation and destruction. The Open Space Element must address several open space categories such as those used for the preservation of natural resources and outdoor recreation as well as open space maintained for public health and safety, which is addressed in the Safety Element. Additionally, while air quality is not a State mandated element, air quality is included in the Conservation/Open Space Element to address reducing pollutant levels through stationary source, mobile source, transportation, land use control, and energy conservation measures. Because the subjects required to be addressed under the Conservation Element and the Open Space Element overlap, the two elements have been combined.

The Conservation/Open Space Element is comprised of three sections:

- 1) Introduction;
- 2) Issues, Goals, and Policies; and
- 3) the Conservation/Open Space Plan.

The Introduction provides an overview of the intent of the Conservation/Open Space Element. The Issues, Goals, and Policies section identifies open space and resource management issues and establishes corresponding goals and policies. The goals are comprised of broad, overall statements of purpose and direction pertaining to open space and resource conservation. The policies serve as guidelines for preserving and enhancing the community's natural environment and resources, while contributing toward improved air quality and energy and resource conservation. The Conservation/Open Space Plan identifies how the City will maintain open space lands and protect its natural resources through implementation of the goals and policies.

## Relationship to Other General Plan Elements

The Conservation/Open Space Element must be consistent with the other General Plan Elements and many of the goals and policies also address issues that are the primary subjects of other elements. The Conservation/Open Space Element most closely relates to the Land Use, Circulation, and Safety Elements. The Land Use Element provides a planned land use pattern and land use designations, which includes private and public open space such as parks, golf course, and regional open space. These designations apply to areas that have an abundance of natural resources, visual resources, and recreational value. The Conservation/Open Space Element goals and policies protect and maintain these resources,



which in turn ensures the community's distinct setting and natural beauty are maintained. The Circulation Element is responsible for providing residents and visitors with safe and convenient access to open space areas. The Safety Element relates to the Conservation/Open Space Element by identifying hazard-prone areas such as floodplains, potentially unstable hillside areas, and seismic hazard areas that should be conserved as open space.

## ISSUES, GOALS, AND POLICIES

Rancho Santa Margarita possesses valuable assets in the form of its open space and natural resources. The Goals and Policies identified in this Element reflect the community's goals to conserve and enhance these assets and provide a high-quality environment for its residents. These include:

- 1) Protecting and enhancing ecological and biological resources;
- 2) Preserving the community's scenic resources and vistas;
- 3) Protecting water quality;
- 4) Contributing toward improved air quality;
- 5) Encouraging energy conservation;
- 6) Preserving and protecting cultural resources; and
- 7) Reducing greenhouse gas emissions.





## Ecological and Biological Resources

Rancho Santa Margarita contains important ecological and biological resources such as Tijeras and Trabuco Creeks, O'Neill Regional Park, the Upper Oso Reservoir Habitat Restoration site, and the natural plants and wildlife that inhabit them. In a region of growth and urbanization, these resources are threatened by the encroachment of urban development. The City understands the importance of these resources and their contribution to the natural environment of the community, and will protect them for future generations.

**Goal 1: Protect and enhance the ecological and biological resources within and surrounding the community.**

- Policy 1.1:** Preserve ecological and biological resources by maintaining these resources as open space.
- Policy 1.2:** Continue to preserve the coast live oak woodlands in the City by retaining the habitat as open space.
- Policy 1.3:** Protect and enhance the creeks and adjacent wetlands for their value in providing visual amenity, habitat for wildlife, and recreational opportunities.
- Policy 1.4:** Through land use planning, environmental review, and conditions placed on development projects, reduce the impact of urban development on important ecological and biological resources, including the beneficial uses of receiving waters.
- Policy 1.5:** Adopt open space management and park maintenance and development practices that minimize negative impacts to the natural environment.
- Policy 1.6:** Continue to preserve and maintain the Upper Oso Reservoir Habitat Restoration site and consider opportunities for expansion of this area.
- Policy 1.7:** Continue to maintain open space areas for passive recreational use.

## Scenic Resources

Rancho Santa Margarita is rich with scenic resources such as Lake Santa Margarita, ridgelines, creeks, open space, and views of the surrounding hillsides (i.e., Santiago Peak). These resources provide open vistas and variety in the scenic quality of the City. The City will preserve these resources and their contribution to the community's character and identity.



**Goal 2: Maintain community character and identity by protecting the City's scenic resources and vistas.**

**Policy 2.1:** Maintain scenic resources, such as the City's hillsides, ridgelines, and surface water resources as open space.

**Policy 2.2:** Encourage and maintain high-quality architectural and landscaping design to preserve the community's visual character.

## **Water Quality**

The City contains ground and surface water resources (Lake Santa Margarita, the Upper Oso Reservoir, Upper Chiquita Reservoir, Tijeras Creek, and Trabuco Creek) that are subject to various sources of pollution associated with urban runoff. Rancho Santa Margarita will continue to monitor and protect the quality of water resources to promote their protection within the community.

**Goal 3: Protect the beneficial uses of ground and surface waters.**

**Policy 3.1:** Adopt and enforce water quality regulations and support water quality educational efforts to eliminate pollution from urban runoff.

**Policy 3.2:** Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones.

## **Air Quality**

Cooperation among all agencies in the South Coast Air Basin is necessary to achieve desired improvements to air quality. Goals and policies address reducing pollutant levels through stationary source, mobile source, transportation and land use control, and energy conservation measures. The City will participate and contribute its share to these efforts by proper planning and participation in regional air quality management programs.

**Goal 4: Cooperate with local and regional agencies to improve air quality.**

**Policy 4.1:** Cooperate with the South Coast Air Quality Management District and Southern California Association of Governments in their efforts to implement the regional Air Quality Management Plan.

**Policy 4.2:** Promote land use patterns that reduce the number and length of motor vehicle trips.

**Policy 4.3:** Encourage the expansion and retention of local serving retail businesses (e.g., restaurants, drug stores) to reduce the number and length of automobile trips to comparable services located in other jurisdictions.





**Policy 4.4:** Encourage complete streets improvements and alternative modes of transportation, such as walking, biking, and public transportation to reduce emissions associated with automobile use.

**Policy 4.5:** Consider vehicle miles traveled when creating and implementing planning documents and reviewing development proposals.

**Policy 4.6:** Require new development and reuse/revitalization projects with sensitive uses in areas within 500 feet of a freeway or urban road with 100,000 vehicles/day to be designed to lessen any potential health risks through site design, landscaping, ventilation systems, or other measures.

## **Energy Conservation**

Urban development depends upon adequate supplies and distribution of energy. The City will promote the conservation of energy to sustain existing and future economic and population growth.

### **Goal 5: Encourage energy conservation.**

**Policy 5.1:** Participate in local, regional, and state programs that promote energy conservation and alternative energy sources.

**Policy 5.2:** Collaborate with energy suppliers and distributors to institute energy conservation programs, and inform the public of these programs.

**Policy 5.3:** Encourage green design features such as passive solar design, natural ventilation, and building orientation during the development review process.

## **Cultural Resources**

Rancho Santa Margarita contains important archeological and paleontological sites. In a region of growth and urbanization, these resources may be threatened by the encroachment of urban development. The City will ensure proper identification of resources through the development review process and promote opportunities for protection of significant resources.

### **Goal 6: Preserve and protect historical, archaeological, and paleontological resources.**

**Policy 6.1:** Balance the benefits of development with a project's potential impacts to existing cultural resources.

**Policy 6.2:** Identify, designate, and protect sites of historic importance.



## Greenhouse Gas Emissions

Greenhouse gas emissions have been identified by the State as an environmental issue of concern that requires additional consideration to meet the State's greenhouse gas emissions reduction goals. The City will participate and contribute to those efforts through planning and participation in programs that provide opportunities to reduce greenhouse gas emissions.

**Goal 7: Reduce greenhouse gas emissions from activities occurring in Rancho Santa Margarita to levels consistent with state goals.**

**Policy 7.1:** Pursue funding sources to develop and implement programs and projects that reduce greenhouse gas emissions produced within the City.

**Policy 7.2:** Proactively inform and educate residents, business-owners, and developers regarding techniques for sustainable development and resource conservation.

### Related Goals and Policies

The goals and policies in the Conservation/Open Space Element are related to and support subjects included within other General Plan Elements; refer to Table COS-1.

**Table COS-1**  
**Conservation/Open Space Related Goals and Policies by Element**

General Plan Element	Conservation/Open Space Element Issue Areas						
	Ecological and Biological Resources	Scenic Resources	Water Quality	Air Quality	Energy Conservation	Cultural Resources	Greenhouse Gas Emissions
Land Use	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7	2.1, 2.2	3.1, 3.2	4.1, 4.5, 4.6	5.3	6.1, 6.2	7.2
Economic Development							
Circulation	4.1			4.2, 4.3, 4.4, 4.5			
Housing							
Safety				4.6			
Noise				4.6			





## CONSERVATION/OPEN SPACE PLAN

The combination of unique environmental amenities and relatively modern development gives Rancho Santa Margarita a positive, enduring identity. The Conservation/Open Space Plan reflects the community's goals to protect and enhance these assets and the environmental resources that contribute to the community's distinct setting and natural beauty.

### Ecological and Biological Resources

The setting of Rancho Santa Margarita is unique among urban communities due to the many open space areas around and within the City. Approximately 66% of the land area within the City is designated for some form of passive open space or active park use; refer to Figure LU-1. The Land Use Element has four separate open space land use designations: P (Parks), OS (Open Space), OSG (Open Space Golf), and ROS (Regional Open Space). These designations provide for the preservation of natural resources as well as a variety of passive and active recreational opportunities. The primary areas of remaining substantive open space include Trabuco Canyon, Tijeras Canyon, the bluffs encompassed within O'Neill Regional park in the City's northwestern corner, and much of the area located between Antonio Parkway and the western boundary of Coto de Caza, south of La Promesa. Chiquita Ridge, a 92-acre property owned by the City, is currently designated open space and contains habitat for many native species. Subject to the terms of the Settlement Agreement which transferred the property to City ownership, 55 acres of the property may be developed. However, if developed, the City is required to preserve and protect the habitat value of the remaining 37 preserved acres.

Open space areas within the City provide valuable habitat for native species, migratory corridors, natural streams and waterways, and wildlife the State has determined to be special status.

Orange County's Southern Subregion Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (NCCP/MSAA/HCP) primary goal is to protect and preserve coastal sage scrub and other natural vegetation communities that occur within the Reserve System, as well as associated habitats and species. This includes a proposed list of covered species comprising seven plant species, 25 wildlife species and 10 habitat types. The City is located within NCCP/MSAA/HCP subareas 1 – 3.



## **Vegetation and Native Plant Species**

The City of Rancho Santa Margarita continues to support a wide and diverse array of vegetation and habitats. Eleven vegetation communities were identified within the City limits including coastal sage scrub, chaparral, southern sycamore alder riparian woodland, southern willow scrub, southern mixed riparian forest, mulefat scrub, southern riparian scrub, southern coast live oak riparian forest, freshwater marsh, non-native grassland, and agriculture.

## **Migratory Corridors**

There are four officially designated wildlife corridors under the Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (NCCP/MSAA/HCP) that either occur within City limits or are immediately outside them, and provide movement opportunities into or out of the City. These include: Arroyo Trabuco, Saddleback Meadows, an area north of the Upper Osos Reservoir, and Live Oak Canyon. However, all open space areas in the City provide some level of wildlife linkages and local migration.

## **Streams and Waterways**

The City contains at least five areas determined to be "waters of the U.S." and/or "waters of the State": Oso Creek, Trabuco Creek, Tijeras Creek, Dove Canyon Creek, and an unnamed creek flowing roughly parallel to the eastern side of SR-241 in the Chiquita Canyon Conservation Area; refer to Figure COS-1. These creeks fall under the jurisdiction of the USACE, RWQCB, and CDFW.

## **Special Status Species and Critical Habitat**

Thirteen special-status wildlife species are known to regularly occur and are considered present within the City. Based on habitat needs, there is also potential for an additional 23 special-status wildlife species to occur in City limits. Twelve special-status plant species have been recorded in adjacent areas that have suitable habitat within City limits, and the California Natural Diversity Database (CNDDB) lists seven special-status habitats as being identified in the region. Special status species and plants are covered under the NCCP/MSAA/HCP. The City of Rancho Santa Margarita contains Federally Designated Critical Habitat for three Federally listed species: arroyo toad, California gnatcatcher, and Riverside fairy shrimp.



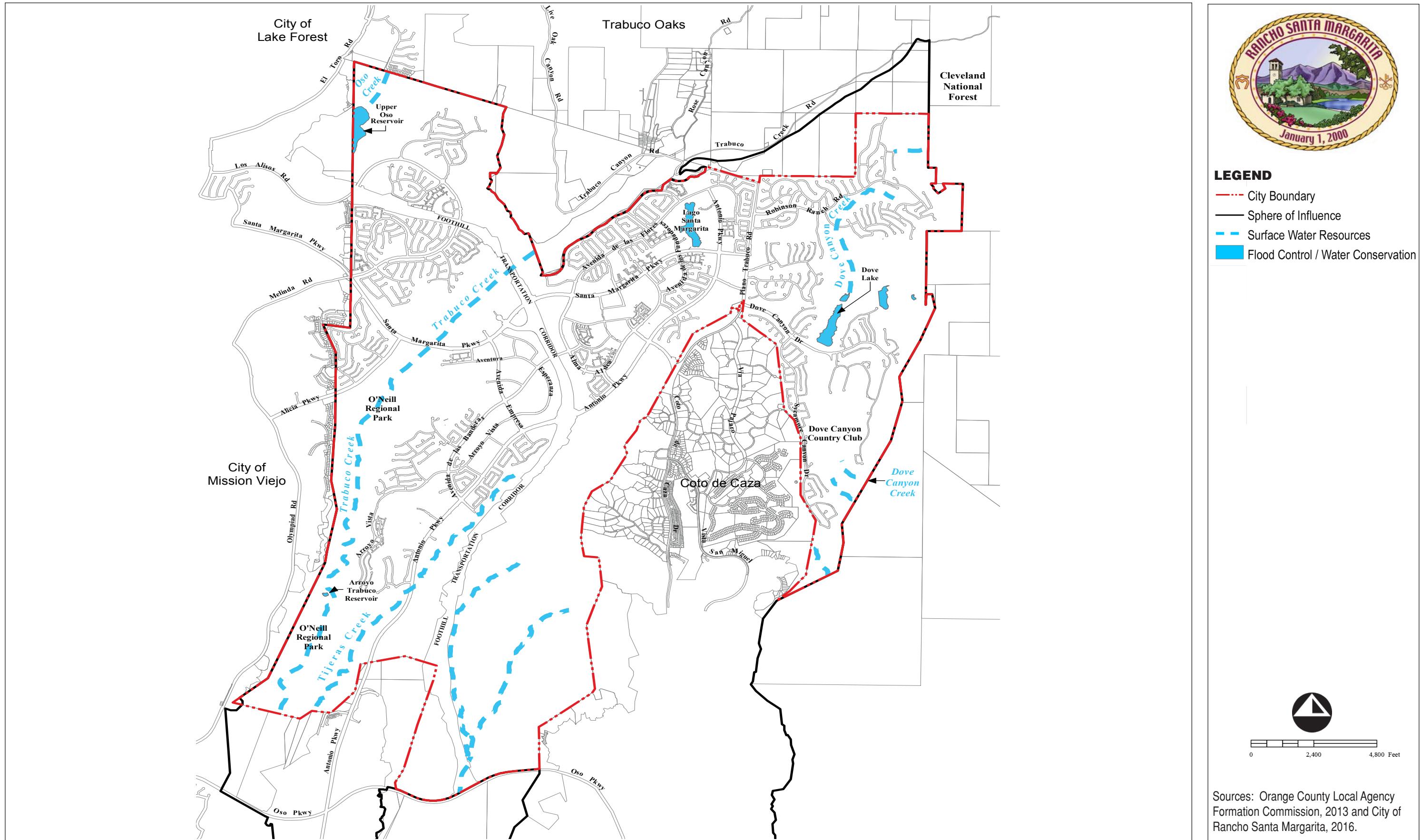


## **Biological Constraints on Development**

Virtually all remaining open space within City limits has been designated as Reserve Lands under the NCCP/MSAA/HCP, which limits development in these areas. However, the Northeast Future Planned Community area, located within the City's SOI, is not designated as part of the NCCP/MSAA/HCP Reserve or on National Forest System Lands, which could provide opportunity for future development. Future development of the Northeast Future Planned Community is expected to occur following annexation of the properties by the City and the approval of a Specific Plan. As part of this process, detailed analysis of the biological resources and potential development constraints would be identified.

Additionally, Chiquita Ridge is outside of designated Reserve Lands under the NCCP/MSAA/HCP. There is the potential for future development within Chiquita Ridge. As noted above, 55 acres of the property may be developed with the remaining 37 acres required to be preserved and protected. The Chiquita Ridge development is undergoing feasibility studies and has already undergone prescribed mitigation as well as associated land transfers and preservation as part of a settlement between the City, the County of Orange, and the Endangered Habitats League (EHL). As part of this settlement, the City completed a Final Habitat Restoration Plan for the approximately 82.9-acre Upper Oso project located within O'Neill Regional Park; refer to Figure COS-2. The 2013 Restoration Plan was developed in coordination with OC Parks Management Division, USFWS, EHL and Rancho Mission Viejo. The 82.9-acre site has received habitat enhancements and modifications and will continue to receive maintenance and monitoring until 2020. The Upper Oso project mitigation site will remain conserved open space.

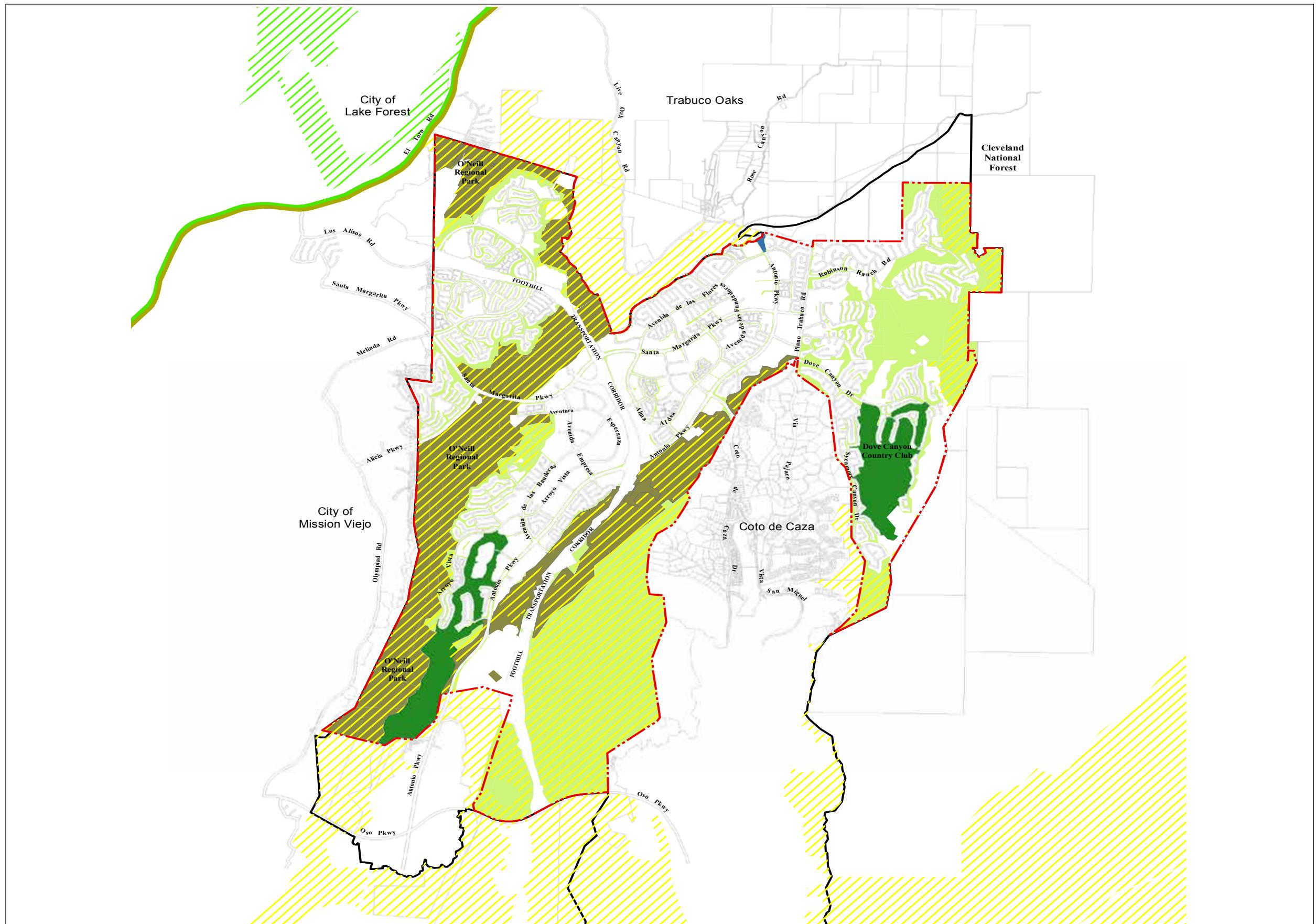






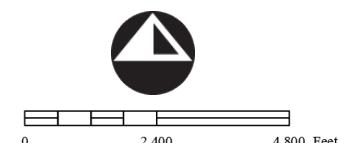
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## LEGEND

- Conservation Plan Boundaries**
  - Central-Coastal NCCP/HCP Boundary
  - Central-Coastal Reserve
  - Southern HCP Boundary
  - Southern Reserve
- Undeveloped Areas**
  - Dove Canyon Preservation Easement
  - Rose Canyon Area
- Regional Park**
  - O'Neill Regional Park
- Open Space**
  - Open Space
  - Open Space Golf
- City Boundary**
- Planning Area Boundary**



Sources: City of Rancho Santa Margarita, 2016 and California Department of Fish and Wildlife, 2010.



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## Parks and Recreation

The Rancho Santa Margarita park and recreation system consists of neighborhood parks, community parks, O'Neill Regional Park, joint use parks, community services and facilities, an extensive open space system (described earlier), and the Bell Tower Regional Community Center; refer to Figure COS-3. All parks in the City (except for Santa Margarita's Dog Park, Skate Park, O'Neill Regional Park and County trails) are privately owned, operated, and maintained by homeowners' associations. Rancho Santa Margarita currently has 24 developed parks that range in size from the 0.5-acre Dove Canyon Trail Rest Area to the 21.4-acre Central Park. Local parks in the City can be characterized as primarily neighborhood-serving with most of the neighborhoods located within walking distance of an existing park. Several of the smaller parks function only as passive parks. Active recreational parkland is provided in the City at 17 of the 22 parks. Table COS-2 summarizes the existing parks and recreational facilities in the City.





**Table COS-2**  
**Existing Parks and Facilities in Rancho Santa Margarita**

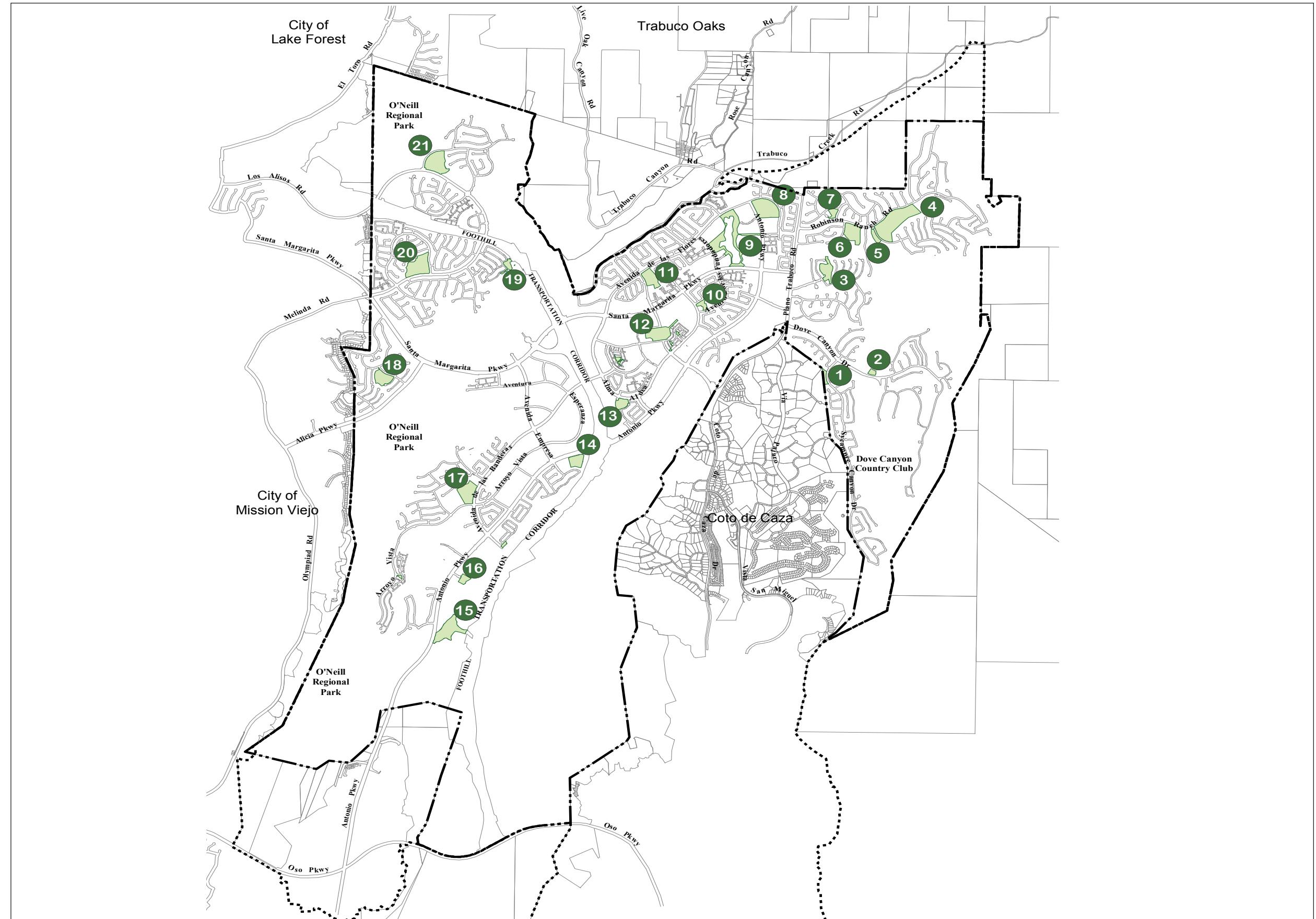
Park	Organized Sports Fields	Baseball	Basketball	Children Play Area/Tot Lot	Community Center/Club House	Hiking Trails	Performance Stage	Picnic Tables	Spa	Swimming Pool	Tennis	Volleyball	Other Uses
<b>Dove Canyon</b>													
1 Sycamore Canyon Drive				X					X				
2 Swim and Racquet Complex/Golf Clubhouse			X	X				X	X	X	X	X	
<b>Robinson Ranch, Trabuco Highlands, Walden, and Rancho Cielo</b>													
3 Walden Park					X	X			X	X			
4 Central Park (Trabuco Highlands)	X	X	X					X		X			
5 Heritage Drive Trailhead						X		X					
6 Ike Arnold Park	X	X	X	X				X					
7 Country Hollow Lane Park		X	X	X						X			
<b>SAMLARC<sup>1</sup></b>													
8 Trabuco Mesa Park	X	X	X	X				X	X		X		
9 Lago Santa Margarita					X	X	X	X		X		X	X <sup>2</sup>
10 Cielo Vista Park					X				X			X	
11 Monte Vista Park	X	X	X	X		X		X		X	X		
12 RSM Central Park	X				X	X		X	X				X <sup>2</sup>
13 Vista Verde Park	X	X		X				X					
14 Tijeras Creek Park	X	X			X		X		X				
15 Cañada Vista Park	X	X	X			X		X					X <sup>2</sup>
16 Mesa Linda Park				X	X		X		X		X	X	
17 Arroyo Vista Park	X	X		X				X		X	X	X	
<b>Rancho Trabuco</b>													
18 San Benito Park				X	X				X		X	X	X
19 Estrella Vista Park <sup>1</sup>	X				X		X		X				
20 Solana Park <sup>1</sup>	X	X	X	X				X		X			
21 Altisima Park <sup>1</sup>	X	X	X	X			X	X		X	X		
<b>Cañada Vista Park<sup>2</sup></b>													
Dog Park													X
Skate Park													X

Park # corresponds to Figure COS-3.

Central Park provides an indoor soccer arena. Lago Santa Margarita Beach Club includes a sandy four-foot deep lagoon and rentals for boats, water trikes, kayaks, and surrey bikes while the Lago Santa Margarita Lakeshore provides an outdoor gym with fitness stations, the lake, and available fishing stations.

1. Maintained by Rancho Santa Margarita Landscape and Recreation Corporation (SAMLARC).
2. The City of Rancho Santa Margarita Dog Park and Skate Park are located at Canada Vista Park.

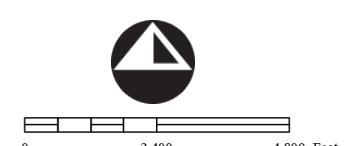




#### LEGEND

- Parks
- 1. Sycamore Canyon Drive
- 2. Swim & Racquet Complex
- 3. Walden Park
- 4. Central Park (TH)
- 5. Heritage Drive Trailhead
- 6. Ike Arnold Park
- 7. Country Hollow Lane Park
- 8. Trabuco Mesa Park
- 9. Lago Santa Margarita
- 10. Cielo Vista Park
- 11. Monte Vista Park
- 12. RSM Central Park
- 13. Vista Verde Park
- 14. Tijeras Creek Park
- 15. Canada Vista Park
  - Dog Park
  - Skate Park
- 16. Mesa Linda Park
- 17. Arroyo Vista Park
- 18. San Benito Park
- 19. Estrella Vista Park
- 20. Solana Park
- 21. Altisima Park

— City Boundary  
···· Sphere of Influence



Sources: City of Rancho Santa Margarita, 2017 and Orange County Local Agency Formation Commission, 2013.



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The provision and availability of parks and recreation programs in Rancho Santa Margarita is of importance to the community given the community's youthful population. Approximately 37% of the population in Rancho Santa Margarita consists of persons under 24 years of age. This segment of the population presents an increased demand for active recreational facilities and services, including playgrounds, ball fields, and organized sporting events. In addition, accessible and well-maintained parks and recreational facilities and programs provide opportunities for all ages to be active and support a healthy community.

The Land Use Element identifies a citywide parkland level of service of three or more acres of parkland per 1,000 residents. Because the City is largely developed, the construction of new parks will likely be limited. This Plan supports the increase of recreational facilities in existing parks and improving the utilization of these facilities. The City will consider the community's needs and the ability for the City to finance, construct, maintain and operate facilities now and in the future prior to any new parkland development. Continued coordination with homeowners' associations and other recreation providers will ensure that parks, community centers, and recreational opportunities and programs that meet the community's needs are provided and maintained.

Active recreational facilities are generally defined by the National Recreation and Park Association (NRPA) as areas where competitive, organized team sports are played, or areas that may require specially built facilities for such competition. In contrast, facilities for passive activities are defined as unstructured and unscheduled, comprising hiking/walking trails, picnic/sitting areas, general open space, and "people watching" areas. No national standards are advocated by NRPA pertaining to passive versus active park space.

Of the approximately 154 acres of parkland located in the City, approximately 85 acres (55%) are devoted to active recreational use. Approximately 69 acres (45%) are devoted to passive uses. This does not include the O'Neill Regional Park, which is 3,358 acres in size, and runs along the western portion of the City. This regional park is maintained and operated by the County of Orange. Table COS-3 approximates the acreages within each park dedicated to active and passive uses.

Applying the definitions of active and passive neighborhood park space from the NRPA to the existing recreational facilities in Rancho Santa Margarita (refer to Table COS-2), the City has approximately 3.17 park acres per 1,000 persons and 1.75 active park acres per 1,000 persons.





**Table COS-3**  
**Active and Passive Parkland in Rancho Santa Margarita**

Active and Passive Parkland Name	Total Acres	NRPA Active	NRPA Passive
<b>Dove Canyon</b>			
1 Sycamore Canyon Drive	2.5	--	2.5
2 Swim and Racquet Complex/Golf Clubhouse	6.5	6.0	0.5
Trail Rest Area	0.5	--	0.5
Community Total	9.5	6.0	3.5
<b>Robinson Ranch, Trabuco Highlands, Walden, and Rancho Cielo</b>			
3 Walden Park	4.6	2.8	1.8
4 Central Park (Trabuco Highlands)	21.4	8.0	13.4
5 Heritage Drive Trailhead	1.0	--	1.0
6 Ike Arnold Park	13.6	9.0	4.6
7 Country Hollow Lane Park	2.4	1.4	1.0
Community Total	43.0	21.2	21.8
<b>SAMLARC</b>			
8 Trabuco Mesa Park	11.9	9.5	2.4
9 Lago Santa Margarita	16.8	--	16.8
10 Cielo Vista Park	2.5	1.0	1.5
11 Monte Vista Park	6.9	6.2	0.7
12 RSM Central Park	8.5	1.8	6.7
13 Vista Verde Park	3.5	3.2	0.3
14 Tijeras Creek Park	4.0	3.5	0.5
15 Cañada Vista Park	6.0	5.5	0.5
16 Mesa Linda Park	2.1	1.3	0.8
17 Arroyo Vista Park	8.4	5.5	2.9
Community Total	70.6	37.5	33.1
<b>Rancho Trabuco</b>			
18 San Benito Park	4.6	0.7	3.9
19 Estrella Vista Park	2.1	--	2.1
20 Solano Park	11.9	9.8	2.1
21 Altisima Park	11.3	9.3	2.0
Community Total	29.9	19.8	10.1
<b>Cañada Vista Park<sup>1</sup></b>			
Dog Park	0.46	0.43	0.03
Skate Park	0.30	0.30	--
Community Total	0.76	0.73	0.03
<b>City of Rancho Santa Margarita</b>	<b>154.0</b>	<b>85.2</b>	<b>68.8</b>

Park # corresponds to Figure COS-3.

1. The City of Rancho Santa Margarita Dog Park and Skate Park are located at Canada Vista Park.





## Scenic Resources

Rancho Santa Margarita is located within a natural setting that provides a unique visual character. Along with slopes, ridgelines and bluffs, several surface water resources are located in and near the City. The City has built on this natural character with high-quality architecture and design standards.

Several ridgelines and vista points are in Rancho Santa Margarita. These include Trabuco Canyon, Live Oak Canyon, Plano Trabuco, Ashbury Canyon, Cochise Canyon, and Bell Canyon. In addition, sections of O'Neill Regional Park are located within City limits, providing open space access and views. The topography of the area allows for expansive views of the surrounding communities as well as the Santa Ana Mountains and Cleveland National Forest.

Surface watercourses in the City include Lake Santa Margarita, Upper Oso Reservoir, and Portola Reservoir as well as Tijeras Canyon Creek, Trabuco Creek, Aliso Creek, Canada Chiquita Creek, and Bell Canyon Creek. The creeks are located within canyon areas surrounded by open space and natural habitat that provide views of the natural setting.

Although there are no State-designated scenic highways within or near Rancho Santa Margarita, this Plan recognizes landscape and viewscape corridors designated by the County. Viewscape corridors are defined as a route that traverses a corridor within which unique or unusual scenic resources and aesthetic values are found. The designation is intended to minimize the impact of the highway and land development upon the significant scenic resources along this route. Viewscape corridors are located outside of and within the City limits, providing varying views that include water features, lush trees and vegetation, expansive views of canyon areas, ridgelines, and hillsides. Rancho Santa Margarita's viewscape corridors are:





- Santa Margarita Parkway, west of the City boundary, between Avenida Empresa and Plano Trabuco Road;
- Plano Trabuco Road, south of Santa Margarita Parkway and north of Robinson Ranch Road; and
- Trabuco Canyon Road between Live Oak Canyon Road and Plano Trabuco Road.

Landscape corridors are defined as a corridor that traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement. Landscape corridors also extend through and outside of the City limits providing lush landscaping and buffering from developed areas. Rancho Santa Margarita's landscape corridors are:

- Santa Margarita Parkway between Melinda Road and Avenida Empresa;
- Antonio Parkway between Oso Parkway and Avenida Empresa; and
- Avenida Empresa between Santa Margarita Parkway and Antonio Parkway.

Scenic resources will continue to be maintained throughout the City since any new development or redevelopment projects will require site plan and environmental review by City staff. The development of areas that contain scenic resources will need to satisfy requirements for the protection of natural resources and to ensure that the community's open space and scenic resources are preserved.

## Water Quality

The City is located within the San Juan Creek watershed. Surface water sources are subject to pollutants and sediment carried in runoff. Pollutants such as heavy metals, petroleum products, animal waste, and trash can be carried through the storm drain system into receiving waters, such as Trabuco and Tijeras Creeks. These pollutants affect the beneficial uses of these receiving waters including recreation, aesthetic enjoyment, and preservation of fish and wildlife habitat.

As noted in the Land Use Element, the City is a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit and will continue to implement the most recent provisions adopted by the San Diego Regional Water Quality Control Board (SDRWQCB). The City will also address surface water quality by coordinating with homeowner's associations to ensure that proper methods to reduce urban runoff are in place. Rancho Santa Margarita also supports and promotes safe water supplies for the community through program coordination with the Santa Margarita and Trabuco Canyon Water Districts and responsible regional, State, and Federal agencies.



## Air Quality

The City of Rancho Santa Margarita is located within the South Coast Air Basin, a non-attainment area for Federal and State air quality standards for ozone and State standards for particulate matter less than ten microns in diameter (PM<sub>10</sub>). Motor vehicles are the major source of regional emissions throughout the air basin and within Rancho Santa Margarita. No major point source emitters, such as heavy industrial uses, are located within the City. Although the Basin is identified as a non-attainment area for two pollutants, overall air quality has been improving due to cleaner vehicles, technological advances, and increased regulatory oversight. The City will work with the South Coast Air Quality Management District (SCAQMD) and the most recent Air Quality Management Plan (AQMP) toward improved regional air quality.

Energy conservation is another strategy for improving air quality. Pollutants are generated by the combustion of fossil fuels to produce electricity, and by the combustion of natural gas. Reducing energy usage decreases the amount of pollutants generated. The next section in this Element, Energy Conservation, provides a discussion of measures to address energy conservation.

## Energy Conservation

Energy usage and pollutants associated with the generation of energy can be reduced through innovative architectural design, building construction, structural orientation, and landscaping. The City promotes energy conservation by implementing State Title 24 energy performance requirements through building codes. In addition, Rancho Santa Margarita participates in the HERO property assessed clean energy (PACE) program, which enables homeowners and commercial property owners to pay off energy- and water-efficiency improvements through their property tax bill.

The City will promote the incorporation of energy efficiency measures through the development review process and promote utility company incentive programs to retrofit existing development with energy efficient lighting, air conditioning and heating systems. Energy will be conserved in public buildings and the provision of electric charging vehicle areas will be encouraged in new public and private developments.

## Cultural Resources

Rancho Santa Margarita contains many cultural and historic resources within its boundaries. Many of the City's most important archaeological resources are located within O'Neill Park (managed by the County). One of these resources includes the old Trabuco Adobe site which is regarded by many as the single most important historical location within the City of Rancho Santa Margarita. Other important cultural resources within the City include prehistoric archaeological sites relating to Native American tribes, many of which appear to date from 6,000 B.C. to 500 A.D. As the City ages, there could be the potential for additional historic resources to be identified.





The City will review future development proposals and comply with all notification and consultation requirements to ensure that cultural and historic resources are conserved in compliance with this Plan and the requirements of the California Environmental Quality Act.



## **Greenhouse Gas Emissions (GHGs)**

Greenhouse gas emissions (GHGs) have been identified by the State as an environmental issue of concern. GHGs produced by human activity contribute to the greenhouse effect, and are generated from both direct and indirect sources. Direct GHG emissions include emissions from construction activities, area sources, and mobile sources. Indirect sources of GHGs consist of electricity consumption and water supply. The City will participate and contribute to efforts that reduce greenhouse gas emissions to levels consistent with State goals.

