

2.0 Environmental Setting

This section briefly describes the regional setting of Rancho Santa Margarita and the project area. More detailed discussion of the environmental setting for each category of potential impact is included in this environmental impact analysis in Section 3.0.

Rancho Santa Margarita is located in eastern Orange County, about ten miles northeast of the Pacific Ocean, in the foothills of the Santa Ana Mountains. The City is bordered by the city of Mission Viejo on the west, the Cleveland National Forest on the east, and unincorporated areas on the north and south. The community is divided by the Foothill Transportation Corridor (SR-241) which extends to the north connecting with North County cities such as Yorba Linda and Anaheim. A planned future extension of this corridor to the south will connect to San Clemente and offer access to San Diego County.

In November 1999, area voters opted to incorporate the Rancho Santa Margarita Planned Community and the neighboring Robinson Ranch, Dove Canyon, Trabuco, and Rancho Trabuco, Planned Communities. The newly formed City of Rancho Santa Margarita incorporated on January 1, 2000, with a population of 47,214, becoming the 33rd city in Orange County.

The majority of Rancho Santa Margarita is developed, and limited vacant land is available for future new development. Substantial vacant land is available for future development in the Northeast Future Planned Community, which is partially within the City's sphere of influence. The majority of the City is comprised of open space land uses including parks, golf courses, and regional open space. The second most prevalent land use is residences, the majority of which are single-family units. Commercial uses represent the third most common use and are concentrated in the center of the City.

Rancho Santa Margarita has a well-planned, well-developed circulation network consisting of arterial roadways and local streets. No deficiencies currently exist on the circulation network. The Foothill Transportation Corridor (SR-241) provides regional access to the City, and a commercial airport is located approximately 15 miles to the west. Established public transit service connects the City to the nearby communities of Mission Viejo, Lake Forest, and Laguna Niguel, and many of the Planned Communities that comprise the City were developed with pedestrian and bicycle trails.

Topographically, the City consists of a series of low hills along the western drainages, rising to ridges of moderate to steep relief in northern part of the city and area east of the city. Elevations within the City range from approximately 200 feet in the southern areas to 800 feet near the northeastern areas.

Two water courses traverse the project area, Trabuco Creek and Tijeras Canyon Creek. Trabuco Creek, the larger water course, drains from Cleveland National Forest, runs parallel to the border of the Northeast Future Planned Community, through unincorporated county land and through O'Neill Regional Park. The ultimate receiving

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body of water for Trabuco Creek is the San Juan Creek in the City of San Juan Capistrano. Tijeras Canyon Creek drains from the open space area east of the Antonio Parkway/Foothill Transportation Corridor intersection to Trabuco Creek south of Rancho Santa Margarita.

The City of Rancho Santa Margarita and the Northeast Future Planned Community are located in the Orange County Southern Subregion of the Coastal Sage Scrub Natural Community Conservation Planning (NCCP) program. The purpose of the NCCP program is to have a broad-based approach to ecosystem conservation for the protection and perpetuation of biological diversity. The NCCP program establishes an areawide reserve area for protection of multiple species. The County of Orange, California Department of Fish and Game, U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service are the lead agencies in the Orange County Southern Subregion. The lead agencies are in the process of preparing a subregional preserve plan (NCCP) and special area management plan/master streambed alteration agreement that would integrate wetlands and endangered species permits. The City of Rancho Santa Margarita is participating in this process.

The climate of the area is characterized by warm, dry summers and mild winters. Most rain falls between the months of November and March. Winds around Rancho Santa Margarita are generally cyclic, with an onshore breeze blowing from the southwest and west during the day, with a weak off-shore breeze at night. Occasionally, these cyclical breezes are interrupted by strong, dry, warm desert winds (Santa Anas) from the north/northwest.

Rancho Santa Margarita is located within the South Coast Air Basin, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Both federal and State governments have set health-based ambient air quality standards for six pollutants: sulfur dioxide, lead, carbon monoxide, fine particulate matter, nitrogen dioxide, and ozone. The Basin fails to meet the air quality standards for four of the six pollutants: carbon monoxide, fine particulate matter, nitrogen dioxide, and ozone. The Southern California Air Quality Management Plan has been adopted for the Basin to attain these standards by year 2010. Rancho Santa Margarita, like other cities in the basin, is required to implement programs to reduce pollutants originating within its borders.

Noise is defined as an undesirable sound and is considered an environmental pollutant that can be damaging to human hearing. Street and toll road traffic is the primary cause of noise in the City. Refer to Section 3.6 of this EIR for a discussion of noise contours and land use compatibility. Along major arterial roadways, walls, fences, and setbacks provide a means of shielding residents from traffic noise. Thus, land use compatibility problems due to noise are minimal.

Rancho Santa Margarita has one of the most colorful and interesting cultural history of any interior community in Orange County. There are no historical architectural resources in the planning area but paleontological resources have been recorded. Within City

limits, more than 30 archaeological sites have been recorded, many of which are situated in O'Neill Park. A number of these sites have been damaged or destroyed by modern development. Thus, consideration for cultural resources is a factor in development of the City.

The City participates in the National Flood Insurance Program. The FEMA 100-year and 500-year map shows that the only major flooding problems for the City are located along the Trabuco Creek and Tijeras Canyon Creek areas. No homes or structures are located within the 100-year or 500-year flood zones within the City.

Rancho Santa Margarita is subject to both wild and urban fires. Given the large portion of land that remains as open space with rugged topography with highly flammable native vegetation, wildland fires is a significant risk. Extreme fire severity zones are located in the northwest, west, and northeast areas of the City. The Orange County Fire Authority (OCFA) has responsibility for wildfire suppression on all private land in Rancho Santa Margarita. Any proposed development plans are reviewed by the OCFA to determine if fuel modification plans or other preventative measures are required. The City contracts with the Orange County Fire Authority for fire protection service and the Orange County Sheriff's Department for police protection service within the incorporated boundaries. Both providers are currently meeting response time standards.

Rancho Santa Margarita public schools are operated by two K-12 districts: Capistrano Unified School District (CUSD) and Saddleback Valley Unified School District (SVUSD). CUSD serves the south and west portions of Rancho Santa Margarita with two schools, both of which are overcrowded, and the District has limited or no space for additional growth within its existing sites. SVUSD serves the north and east portions of Rancho Santa Margarita with five schools which are adequate to accommodate the existing student population.

The Orange County Public Library (OCPL) system serves the project area with the Rancho Santa Margarita Branch Library, located at 30902 La Promesa, near the corner of Alma Aldea in the Town Center. The OCPL has adopted the standard of providing 1.5 books and 0.2 square feet of library space per capita. Currently, the Rancho Santa Margarita Branch Library exceeds the OCPL standard for size and number of books.

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, along with the extensive open space system. Rancho Santa Margarita currently has 22 developed parks that range in size from the 0.5 acre Dove Canyon Trail Rest Area to the 13.6 acre Ike Arnold park in the Robinson Ranch Planned Community. O'Neill Regional Park serves both as an overnight camping facility and offers day/picnic use. Recreational opportunities include an equestrian campground, an arena, and 18 miles of riding trails. The Lago Santa Margarita Beach Club is a 12.6 acre constructed lake surrounded by 16.8 acres of parks, trails, and a lakeside beach.

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The project area is served by two water districts: Trabuco Canyon Water District (TCWD) and Santa Margarita Water District (SMWD). TCWD serves the eastern part of Rancho Santa Margarita (Robinson Ranch, Trabuco Highlands, Dove Canyon, Rancho Cielo, Walden Communities) and the Northeast Future Planned Community area. TCWD has a variety of water sources, including ground water, imported (two sources), local surface, and recycled. The remaining portions of the incorporated City are served by SMWD, which predominantly relies on imported water from the State Water Project, the Colorado River Aqueduct, or water transfers. Both Districts have reliable water sources for the next 20 years.

Wastewater collection and treatment systems for the project area are provided by the TCWD and SMWD. The wastewater service areas are the same as the water service boundaries. TCWD owns and operates one sewage treatment plant, the Robinson Ranch Wastewater Reclamation Plant (RRWRP), which had an average flow in the year 2000 of 700,000 gallons per day (gpd) but is rated for 850,000 gpd by the Regional Water Quality Control Board. The TCWD Master Plan calls for a projected ultimate flow of approximately 1.3 million gallons per day at build-out (year 2030). SMWD operates three sewage treatment plants within its service area. Rancho Santa Margarita is served by the Chiquita Wastewater Reclamation System. The current (year 2002) capacity of the plant is 6 million gallons per day (mgd), while the actual wastewater flows average 4.5 mgd. This reclamation plant is a phased project, which could ultimately reach a capacity of 15 mgd.

The City contracts with Waste Management, a private waste hauler, to collect and dispose of the City's solid waste. The County of Orange Integrated Waste Management Department (IWMD) operates all landfills in Orange County. These facilities consist of three Class III sanitary landfills, Olinda Alpha (Brea), Frank R. Bowerman (Irvine), and Prima Deshecha (San Juan Capistrano). The City's solid waste is disposed of at the Prima Deshecha landfill which is scheduled to close in the year 2040.