

5.0 Analysis of Long-Term Impacts

CEQA requires the discussion of the cumulative impacts, growth-inducing impacts, and significant irreversible environmental changes of a project. The following sections address these issues as they relate to implementation of the Rancho Santa Margarita General Plan.

5.1 CUMULATIVE IMPACTS

The California Environmental Quality Act Guidelines define cumulative effects as “two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts” (Section 15355). The Guidelines further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present and reasonably foreseeable future projects. The Guidelines allow for the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

- List Method – A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.
- Regional Growth Projections Method – A summary of projections contained in an adopted general plan or related planning document or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (Section 15130).

The Rancho Santa Margarita General Plan establishes policy to guide future development within the City and implementation is long-term in nature. The Regional Growth Projections Method is appropriate methodology in evaluating cumulative impacts because it provides general growth projections for the region and considers long-term growth.

Regional Growth Projections

The most recent set of growth projections are provided in *Orange County Projection 2000*, an extensive analysis of the regional economic and demographic conditions. *OCP-2000* provides estimates and forecasts of employment, population, and housing for the period 2000-2025. These forecasts serve as a basis for growth forecasts made by the Southern California Association of Governments (SCAG) adopted with the Regional Comprehensive Plan and Guide (RCPG) and the Regional Transportation Plan.

OCP-2000 population and housing projections for 2000, 2010, and 2020 are available by City, Countywide, and by Regional Statistical Areas (RSA). The incorporated City of

5.0 Analysis of Long-Term Effects

Rancho Santa Margarita and the Northeast Future Planned Community are located in RSA C-43. This RSA includes the cities of Lake Forest, Mission Viejo, portions of San Juan Capistrano and San Clemente, as well as unincorporated portions of Southern Orange County. According to the OCP-2000, the population of Rancho Santa Margarita is expected to increase about 9 percent from 2000 to 2020 while the number of housing units is expected to increase by about 4 percent. However, as explained in Section 3.2, Population and Housing, the OCP-2000 population estimates for year 2000 were apparently low when compared to 2000 Census numbers. Modified projections estimate both the population and number of housing units in the City to increase by about 4.1 percent between 2000 and 2020. In comparison, both population and housing units in RSA C-43 are anticipated to increase by 38 percent between 2000 and 2020.

RSA C-43 generally defines the geographic scope of the cumulative analysis of the issues considered in this EIR.

Cumulative Impacts

Land Use/Planning

As future development occurs in the City and RSA C-43 (NCCP Southern Subregion) sensitive biological resources will be impacted. As the Southern Subregion NCCP program continues throughout the planning stages, cities and the county will participate in the process. The City of Rancho Santa Margarita has large open space areas to preserve sensitive resources and the General Plan requires the Northeast Future Planned Community to incorporate a significant portion of open space in the specific plan area. The Southern Subregion NCCP program has not yet been adopted, but the City of Rancho Santa Margarita is participating in the NCCP process; implementation of the General Plan will not result in a significant cumulative impact on land use in the region.

Population/Housing

Continued development in south Orange County will result in housing unit and population increases in the region. As described in the regional growth projections above, the City of Rancho Santa Margarita is expected to have a 4 percent increase in both housing units and population by 2020. In comparison, the RSA C-43 is expected to have an increase in both categories of 38 percent. The small increase in population within the City is not considered a significant addition to population in the region. Development pursuant to the General Plan of the Northeast Future Planned Community area is anticipated to result in 1,775 persons and 612 dwelling units. These estimates account for less than 2 percent of the population and housing unit increases in RSA C-43 over the next 20 years. In addition, implementation of the Rancho Santa Margarita General Plan will not result in the displacement of persons or housing as all future development will occur on land that is currently vacant.

Aesthetics

Implementation of the Rancho Santa Margarita General Plan within the City will result in development on vacant parcels. These parcels are located in areas of the City and were designated for urban uses in the Planned Community documents. These documents included design guidelines to ensure all development minimizes negative aesthetic impact and enhances the character of the community.

The majority of development pursuant to the General Plan will occur in the Northeast Future Planned Community. This land is currently vacant, with a portion used for nurseries. Residential and public facility uses pursuant to the Land Use Element will alter this natural landscape and introduce light and glare into the area. However, when development of this area occurs, a significant portion will be retained as open space to preserve bluffs and other important views. Review of development proposals in this area will include evaluation of important visual resources, including the portion of Trabuco Canyon Road that is designated as a viewscape corridor in the County General Plan, and potential impacts from light and glare. Since this Future Planned Community area is visible to only a small portion of the City, the General Plan will not result in a cumulatively significant impact.

Transportation/Traffic

The traffic analysis for the General Plan indicates that the circulation system will have one significant impact: Santa Margarita Parkway from Alicia Parkway to Avenida Empresa. As development occurs within the City and the southern Orange County region, traffic volumes within the regional circulation system will increase. The General Plan includes an implementation program to monitor the operation of major streets, including Santa Margarita Parkway and reduces the project-level impact to a less-than-significant level. The Foothill Transportation Corridor was sized to accommodate projected growth in the area as specified by adopted plans, including the CMP prepared by OCTA, and OCP 2000 forecast. The General Plan does not intensify uses relative to the adopted plans, and furthermore, it is consistent with those plans. It will support the Emergency Preparedness Plan to ensure that evacuation routes will not be impacted by future growth and new evacuation routes are established to accommodate emergency access for new developments. The General Plan will not result in a cumulatively considerable traffic impact.

Air Quality

Air pollutant levels in the South Coast Air Basin regularly exceed state and federal air quality standards. The development projected for the region will generate increased emission levels from transportation and stationary sources. Potential cumulative air quality impacts will be partially reduced by the implementation of the SCAQMD Air Quality Management Plan and policies and programs contained in local General Plans, including those in the Rancho Santa Margarita Conservation/Open Space Element. However, since the combined emissions from uses in the City and other cities in the

5.0 Analysis of Long-Term Effects

southern Orange County subregion and the Basin will continue to exceed the State and federal standards, cumulative impact will be significant and unavoidable.

Noise

Anticipated regional development in southern Orange County will generate short-term noise during the construction of individual development projects. Increased development densities will increase traffic volumes and associated long-term noise levels. Implementing local noise ordinances, constructing buildings according to State acoustical standards, and proper land use planning will reduce cumulative impacts on noise-sensitive land uses. Implementation of the General Plan will not result in a significant cumulative impact on noise.

Biological Resources

As development continues to occur in southern Orange County, sensitive biological resources will be impacted. Cumulative impacts to biological resources may occur as a result of direct and indirect impacts from construction activities adjacent to sensitive biological resources. Direct and indirect impacts to biological resources associated with the implementation of the General Plan will generally be reduced to a less-than-significant level through Implementation Programs including biological surveys of vacant areas in the Northeast Future Planned Community and consultation with regulatory agencies if drainage features are on-site. In addition, Rancho Santa Margarita is participating in the planning stages of the Southern Subregion NCCP program. As a result of the Implementation Programs, implementation of the General Plan will not result in a significant cumulative impact to biological resources in RSA C-43.

Cultural Resources

Previous development has destroyed or damaged many archaeological sites in the planning area. As development continues to occur, additional archaeological and paleontological resources will be impacted. Cumulative impacts to cultural resources may occur as a result of direct impact from construction activities. Impacts associated with the implementation of the General Plan will generally be reduced to a less-than-significant levels through Implementation Programs, including professional cultural resource surveys of all undeveloped property prior to grading. As a result of the Implementation Programs, implementation of the General Plan will not result in a significant cumulative impact to cultural resources.

Geology/Soils

Future development in the City and RSA C-43 (including the Northeast Future Planned Community) will increase the number of people exposed to earthquakes and other geologic hazards. Future development will also be constrained by steep slopes, unstable soils, and landslides. Erosion rates will be accelerated by earthwork for new construction. Cumulative impacts related to geologic conditions can be mitigated by

implementation of local grading ordinances, standard structural regulations and public safety policies and programs in local General Plans, including the Rancho Santa Margarita Safety Element. Geotechnical studies will be required for any future development projects to identify constraints and develop acceptable engineering parameters. Therefore, implementation of the General Plan will not result in a significant cumulative geology/soils impact.

Hydrology/Water Quality

As development proceeds in the San Juan Creek Watershed Management Area, which includes RSA C-43, the amount of pollutants in runoff will increase and impact surface water and groundwater quality. The amount of impervious surfaces will increase as development proceeds and erosion and sedimentation of surface water will occur during grading and construction activity. The San Diego Regional Water Quality Control Board (SDRWQCB) has issued an Order for those Orange County jurisdictions within the SDRWQCB area. This Order sets forth a variety of requirements to develop stormwater management programs that identify, monitor, control and prevent polluted runoff during all three development stages: planning, construction, and existing use. This Order includes Best Management Practices as well as education about the impacts of urban runoff. Implementation Programs, including the SDRWQCB requirements reduce water quality impacts to a less-than-significant level. Implementation of the General Plan will not result in a significant cumulative impact on water quality.

Development pursuant to the General Plan in the Northeast Future Planned Community will impact the stormdrain system. However, per the Implementation Programs, storm drain facilities must be provided during development of the area to ensure that adequate service is available and to reduce the risk of flooding. Therefore, implementation of the General Plan will not result in a significant cumulative impact on stormdrains.

Hazards & Hazardous Materials

The number of people exposed to wildland fires in the City and the region will increase as more development takes place in the urban/natural space interface areas. The cumulative impact of regional development on public safety is potentially significant, but can be reduced to less-than-significant levels through cooperation with the Orange County Fire Authority and use of the Uniform Fire Code. Implementation of the proposed General Plan will not result in a significant cumulative impact as the enforcement of fire protection regulations will reduce significant wildland fire hazards.

Public Services

Development in the project area and the region will require additional fire, police, school, and library services. Land use planning must address increases in public services as development is approved. Implementation Programs in the General Plan include reviewing development proposals for consistency with service facility requirements established in approved development plans. Sound local planning to accommodate future

5.0 Analysis of Long-Term Effects

growth, along with implementation programs in the General Plans of local jurisdictions will reduce the potential cumulative impact on public services to a less-than-significant level. The proposed project will not result in a significant cumulative public services impact.

Utilities/Service Systems

Demand for water, sewer, solid waste and energy services will increase in the project area and the region as development continues to occur in southern Orange County. Continued correspondence with these service providers will ensure that significant impacts on water, sewer, and solid waste systems can be avoided. With the Implementation Programs, the General Plan will not result in a significant cumulative utilities/service systems impact.

Recreation

Use of recreational facilities will increase in the City and RSA C-43 as the population in southern Orange County continues to grow. Using parkland to resident ratios ensures that sufficient space for recreational needs is set-aside during development. Joint-use agreements with school districts allow maximum use of facilities, as well as converting passive parkland into active parkland. No changes to O'Neill Regional Park are included in the Land Use Element. Implementation Programs in the General Plan include working with homeowners associations to enhance and increase active parkland in the City. Therefore, the proposed project will not result in a significant cumulative impact on recreation.

5.2 GROWTH INDUCING IMPACTS

CEQA Guidelines (Section 15126.2[d]) require that an EIR discuss the growth-inducing impact of the project. Growth-inducement includes, "ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas)."

The proposed General Plan will allow an increase of 687 dwelling units and a corresponding increase of 1,989 persons at buildout in the year 2020. New residents will relocate to Rancho Santa Margarita as a result of the construction of new residential units. The majority of these units, 612 of the 687, will be located in the Northeast Future Planned Community area. The estimated population for the project area at the time of buildout in the year 2020 is 49,403 living in 17,608 dwelling units. This is an increase of 4.1 percent for population and 4.1 percent for housing units, which is consistent with regional projections. These estimates account for less than 2 percent of the population and housing unit increases in RSA C-43 over the next 20 years.

The majority of development pursuant to the General Plan will occur in the Northeast Future Planned Community, which is currently undeveloped. New development in this area will require the installation of additional infrastructure such as roadways, water systems, and sewage disposal to serve the area. The extension of this infrastructure could facilitate additional growth, but the growth induced by the additional utilities would be confined to the project area and would not cause a significant growth-inducing impact to the region. The Foothill Transportation Corridor was sized to accommodate projected growth in the area as specified by adopted plans, including the CMP prepared by OCTA, and OCP 2000 forecast. The General Plan does not intensify uses relative to the adopted plans, and furthermore, it is consistent with those plans.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Development allowed according to the General Plan will result in the consumption of non-renewable energy resources which will have an irreversible effect on such resources. The proposed General Plan will result in development of urban uses in areas that are currently vacant. Once developed, reverting to a less urban use or open space is highly infeasible. Development in the project area according to the proposed General Plan will also constrain future land use options.

Several irreversible commitments of limited resources would result from implementation of the proposed General Plan. The resources include, but are not limited to the following: lumber and other related forest products; sand, gravel, and concrete; asphalt; petrochemical construction materials; steel, copper, lead and other metals; and water consumption. Buildout of the General Plan represents a long-term commitment to the consumption of fossil fuel oil, natural gas and gasoline. These increased energy demands relate to construction, lighting, heating and cooling of residences, and transportation of people within, to and from the project area.

5.4 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL IMPACTS

Implementation of the General Plan will result in a significant unavoidable project-level and cumulative air quality impact. Implementation of the mitigation measures and General Plan policies identified in Section 3.5 of this EIR will reduce air quality impacts to the extent feasible. However, because the City is located in an air basin that is a non-attainment area for state and federal standards, increased emission generation will significantly impact regional air quality.

5.5 AREAS OF NO SIGNIFICANT IMPACT

The CEQA Guidelines (Section 15128) require a statement indicating the reasons that various possible significant effects were determined not to be significant and were

5.0 Analysis of Long-Term Effects

therefore not discussed in the EIR. Such a statement is contained in the attached copy of the Initial Study in Appendix A for the following areas:

- Agricultural Resources
- Air Quality: Compatibility with Applicable Air Quality Plan; Objectionable Odors
- Geology and Soils: Alquist-Priolo Earthquake Fault Zoning Map; Septic Tanks
- Hazards and Hazardous Materials: Transport, Use, or Disposal of Hazardous; Release of Hazardous Materials; Hazardous Materials within ¼ Mile of a School; Hazardous Materials Sites pursuant to Government Code Section 65962.5; Airport Land Use Plan; Private Airstrip
- Hydrology and Water Quality: Groundwater; Seiche, Tsunami, or Mudflow
- Land Use and Planning: Divide an Established Community; Conflict with Any Land Use Plan
- Noise: Groundborne Vibration; Airport Land Use Plan; Private Airstrip
- Population and Housing: Displace Housing; Displace People
- Transportation/Traffic: Air Traffic Patterns; Alternative Transportation Policies