

3.7 Biological Resources

This section examines whether implementation of the General Plan will cause a substantial adverse effect on biological resources in Rancho Santa Margarita and the Northeast Future Planned Community. This section also examines potential impacts to wildlife corridors and the Natural Community Conservation Plan administered by the County of Orange. The information contained in this section is summarized from the Assessment of Existing Biological Resource and Project Impacts prepared for the Rancho Santa Margarita General Plan by Michael Brandman Associates (January 2002). This report is contained in Appendix F of this EIR. The potential impact of the General Plan on the Natural Community Conservation Plan is addressed in Section 3.1, Land Use.

ENVIRONMENTAL SETTING

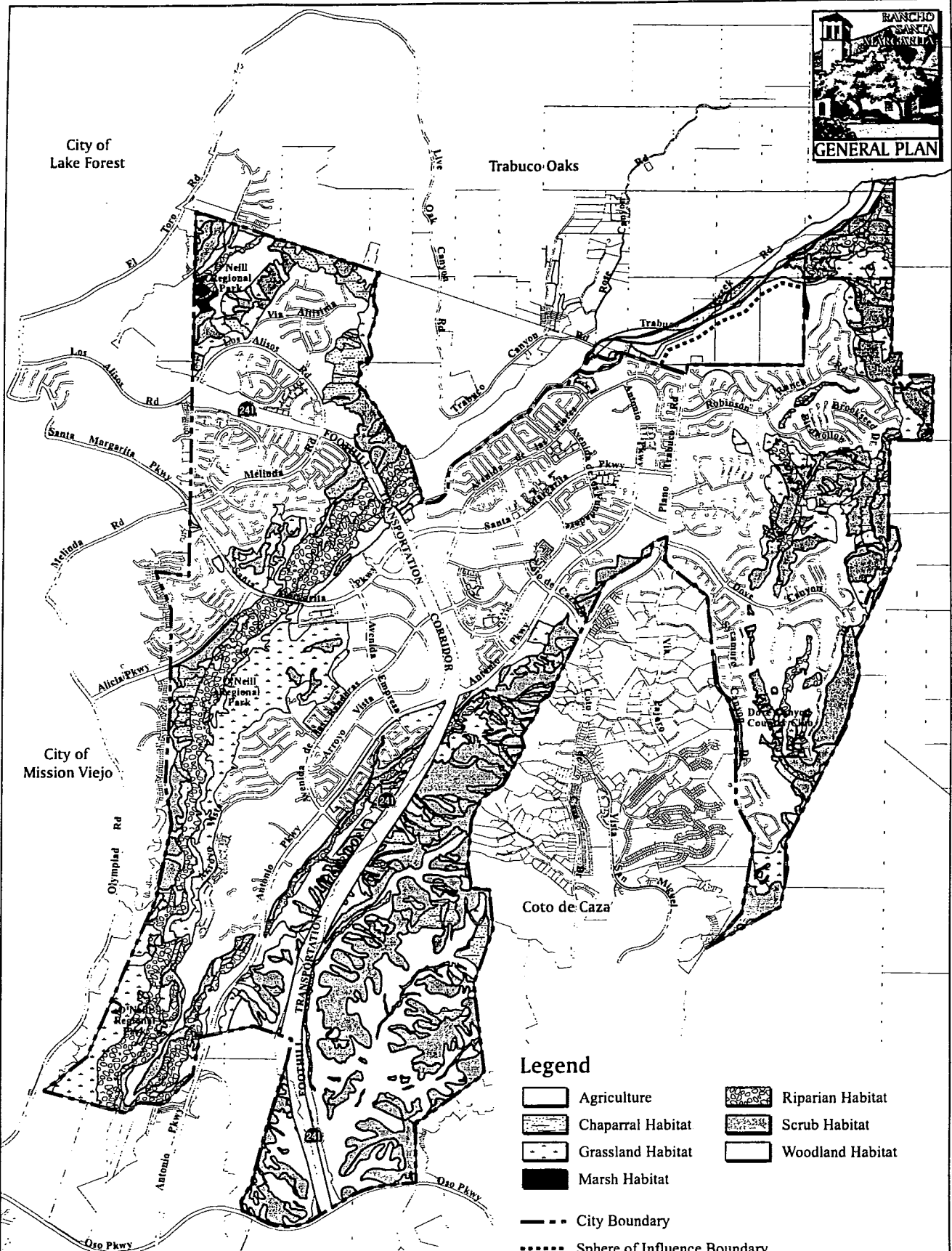
The City of Rancho Santa Margarita contains a combination of developed areas dominated by residential and commercial buildings, roads, golf courses and other human made features and designated open space areas containing undeveloped native vegetation. Within the developed areas are extensive non-native landscape plantings. Four areas of native vegetation are within the City: O'Neill Regional Park, both sides of the Foothill Transportation Corridor in the southern portion of the City, the area east/northeast of Dove Canyon, and the area northeast of Robinson Ranch.

Natural Communities

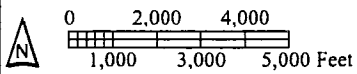
Seven vegetation communities are located in the City of Rancho Santa Margarita: urban/developed, agriculture, chaparral, non-native grasslands, marsh habitat, riparian habitat, scrub habitat (including coastal sage scrub), and woodland habitat. Figure 14 depicts the location of these vegetation communities.

While the urban/development and disturbed vegetation communities are located within developed areas of the City, non-native grasslands are located along the upper edges of Trabuco Canyon in the O'Neill Regional Park area and within areas of Tijeras Canyon. This plant community is commonly found adjacent to coastal sage scrub, oak woodlands, and urban/developed areas within the City. Native coastal sage scrub vegetation occurs in the open space and regional open space areas of the City. Chaparral habitat is limited in its distribution within the City. The Southern coast live oak riparian forest vegetation community is generally located in the two riparian areas in the City: Trabuco Creek and Tijeras Creek.

Due to the number of different vegetation communities located within the City, a large number of different plant and wildlife species are also present. Common tree species found throughout the developed portions of the City include sycamore, eucalyptus, pine, date palm, magnolia, alder, and Peruvian pepper trees. Some reptiles have adapted to urban habitats. The most common avian species are house finch, American crow, black



Sources: Orange County Land Base, 2001;
Cotton/Bridges/Associates, 2001.



Legend

- Agriculture
- Chaparral Habitat
- Grassland Habitat
- Marsh Habitat
- Riparian Habitat
- Scrub Habitat
- Woodland Habitat
- City Boundary
- Sphere of Influence Boundary
- Future Planned Community Boundary

Figure 14
Vegetation Communities

phoebe, western kingbird, Northern mockingbird, and house. Coastal sage scrub habitat in the City provides suitable habitat for a number of reptile species. Trabuco Creek provides a water source and a movement corridor for wildlife species. The riparian area is important as wildlife habitat providing a source of diversity for surrounding areas.

Sensitive Plant Species

Sensitive biological resources are habitats or individual species that receive special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The California Department of Fish and Game (CDFG), the United States Fish and Wildlife Service (USFWS), and special groups like the California Native Plant Society (CNPS) maintain watch lists of such resources.

Sensitive plant communities that occur within the City include coastal sage scrub, southern coast live oak riparian forest, and southern sycamore-alder riparian forest. These plant communities can be found in two main locations within the City limits, O’Neill Regional Park and Tijeras Canyon. The sensitive plant communities are located in designated open space areas and are not contained within any of the proposed development areas. The Northeast Future Planned Community is located immediately adjacent to the oak riparian and coastal sage scrub habitats.

Table 9 lists ten sensitive plant species identified as potentially occurring in the vicinity of the City.

**Table 9
Sensitive Plant Species Potentially Occurring in the General Plan
Project Area**

Common Name	Status			Blooming Period	Preferred Habitat	Known Presence/Potential Habitat/Potential on Site
	USFWS	CDFG	CNPS			
Hall's monardella	--	--	1B	June-August	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley & foothill grassland.	No recorded occurrence in the City or vicinity. Suitable grassland habitat present. Moderate potential for occurrence.
Heart-leaved pitcher sage	--	--	1B	April-July	Closed-cone coniferous forest, chaparral, cismontane woodland.	No recorded occurrence in the City or vicinity. Suitable chaparral present. Moderate potential for occurrence.
Intermediate mariposa lily	--	--	1B	May-July	Coastal scrub, chaparral, grassland on rocky, open slopes.	Recorded occurrences within the vicinity. Suitable habitat present; high potential to occur.

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Common Name	Status			Blooming Period	Preferred Habitat	Known Presence/Potential Habitat/Potential on Site
	USFWS	CDFG	CNPS			
Many-stemmed dudleya	--	--	1B	May-July	Clay soils in chaparral, grasslands, and coastal sage scrub.	Recorded occurrences within the vicinity. Suitable habitat present; high potential to occur.
San Miguel savory	--	--	4	March-May	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland.	No recorded occurrences in the City or vicinity. Suitable habitat present. Moderate potential for occurrence.
Santa Monica Mountains dudleya	FT	-	1B	March-June	Chaparral, coastal scrub.	No recorded occurrences in the City or vicinity. Suitable habitat present. Moderate potential for occurrence.
Santiago Peak phacelia	--	--	1B	May-June	Closed-cone coniferous forest, chaparral. Known only from orange and riverside counties.	No recorded occurrences in the City or vicinity. Suitable habitat present. Low potential for occurrence due to limit distribution.
Southern tarplant	--	--	1B	June-November	Marshes and swamps (margins), valley and foothill grassland, vernal pools. From southern California and Baja Calif.	Recorded occurrences within the vicinity. Suitable grassland habitat present; high potential to occur.
Sticky dudleya	--	--	1B	May-June	Coastal scrub, coastal bluff scrub, chaparral. Endemic to southern California.	No recorded occurrences in the City or vicinity. Suitable habitat present. Moderate potential for occurrence.
Thread-leaved brodiaea	FT	CE	1B	March-June	Cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	No recorded occurrences within the vicinity. Suitable grassland habitat present; moderate potential to occur.
U.S. Fish and Wildlife Service FT Federal Threatened California Department of Fish and Game CE California Endangered			California Native Plant Society 1B Plants rare, threatened, or endangered in California and elsewhere. 4 Plants of limited distribution.			

Source: Michael Brandman Associates, January 2002

As can be seen from Table 9, the potential exists for one federally listed threatened species (Santa Monica Mountains dudleya) and one federally listed threatened and state-listed endangered species (Thread-leaved brodiaea) to occur in the City. Both of these species have a moderate potential for occurrence.

Sensitive Wildlife Species

Table 10 lists 15 sensitive wildlife species identified as occurring in the vicinity of the City. The classifications of all species are also provided. Four wildlife species that are federally listed as endangered and one federally listed threatened species have the potential to occur or are present within the project site (arroyo toad, San Diego fairy shrimp, Riverside fairy shrimp, least Bell's vireo, and coastal California gnatcatcher). The California gnatcatcher is the only federally listed species recorded to occur within the City.

Table 10
Sensitive Wildlife Species Potentially Occurring in the
General Plan Project Area

Common Name	Status		Suitable Habitat	Known Presence/Potential Habitat/Potential on Site
	USFWS	CDFG		
Riverside Fairy Shrimp	FE		Endemic to w riverside & San Diego Co in areas of tectonic swales/earth slump basins in grassland & coastal sage scrub.	No vernal pools are recorded to occur within the City. No suitable habitat; not likely to occur.
San Diego Fairy Shrimp	FE		Endemic to San Diego county mesas.	No vernal pools are recorded to occur within the City. No suitable habitat; not likely to occur.
Arroyo Chub	none	CSC	Los Angeles basin and south coastal streams.	Suitable habitat occurs within the City. Known occurrence within the vicinity of the City. High potential for occurrence.
Western Spadefoot	none	CSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Suitable habitat present. No recorded occurrence within the City. Known occurrence within the vicinity. High potential for occurrence.
Arroyo Toad	FE	CSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Suitable habitat occurs within the City. Known occurrence within the vicinity of the City. High potential for occurrence.
Two-Striped Garter Snake	none	CSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Suitable habitat occurs within the City. Known occurrence within the vicinity of the City. High potential for occurrence.

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Common Name	Status		Suitable Habitat	Known Presence/Potential Habitat/Potential on Site
	USFWS	CDFG		
Orange-Throated Whiptail	--	CSC	Coastal sage scrub, chaparral, and hardwood with sandy areas.	Known recorded occurrences within the vicinity of the site. Suitable habitat present; high potential to occur.
San Diego Horned Lizard	none	CSC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate condition	Known recorded occurrences within the vicinity of the site. Suitable habitat present; high potential to occur.
Coastal Cactus Wren	--	CSC	Resident in southern California coastal sage scrub. Requires tall cactus.	Known recorded occurrences within the City. Suitable habitat present; Considered present.
Coastal California Gnatcatcher	FT	--	Obligate resident of coastal sage scrub.	Known recorded occurrences within the City. Suitable habitat present; Considered present.
Least Bell's Vireo	FE MNBMC	SE	Riparian or dry river bottom usually containing willows.	No recorded occurrences within the immediate vicinity of the site. Suitable habitat present; moderate potential to occur.
Cooper's Hawk	none	CSC	Woodland, chiefly of open, interrupted or marginal type.	No recorded occurrences within the City. Suitable nesting habitat present. High potential for occurrence.
Golden Eagle	none	CSC	Rolling foothill or coast-range terrain, where open grassland turns to scattered oaks, sycamores, or large digger pines.	No recorded occurrences within the City. Suitable foraging habitat present. High potential for occurrence.
Northern Harrier	none	CSC	Coastal salt marsh and fresh-water marsh. Nest and forage in grasslands, from salt grass in desert sink to mtn cienagas.	Recorded occurrences within the City. Suitable foraging and nesting habitat. Considered present.
Tri-colored Blackbird	MNBMC	CSC	Highly colonial species, most numerous in the central valley & vicinity. Largely endemic to California.	No recorded occurrences within the immediate vicinity of the site. Suitable habitat present; moderate potential to occur.
U.S. Fish and Wildlife Service		California Department of Fish and Game		
FE	Federal Endangered	CSC	California Species of Concern	
FT	Federal Threatened	SE	State Endangered	
MNBMC	Migratory Nongame Birds of Management Concern			

Source: Michael Brandman Associates, January 2002

Jurisdictional Areas

Two areas within the City have been determined as “Waters of the U.S.” and areas of wetlands. Both of these areas fall under the jurisdiction of the United States Army Corp of Engineers (USACE) and California Department of Fish and Game (CDFG). The main drainage features within the City limits include Trabuco and Tijeras Creeks. Several small tributaries are also present within the open space areas in the City. These two main drainage areas contain a definable bed and bank system with associated riparian habitat or vegetation.

Regional Connectivity/Wildlife Movement Corridors

Historically, the City provided open space with free movement in all directions. Trabuco and Tijeras Creeks are moderate size drainage systems and provide suitable cover for species movement. Most of this land has been preserved in open space areas with only limited development of commercial, industrial, residential, and recreational uses. Wildlife movement on a regional basis has continued within the open space areas despite the recent development of the City. Two main areas within the City are considered to be movement corridors on a regional basis, Trabuco Canyon and the coastal sage scrub habitat located in the eastern portion of the City.

THRESHOLDS USED TO DETERMINE LEVEL OF IMPACT

The impacts to biological resources are assessed using significance criteria, which implement Section 21001 (c) of the Public Resources Code, which states the following goal: “Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...”. Implementation of the General Plan will result in a significant impact if it has a substantial adverse effect on endangered species, threatened species, sensitive habitat or wildlife corridors.

The following definitions are used in establishing the significance criteria for biological resources:

“Endangered” means that the species is listed as endangered under state or federal law.

“Threatened” means that the species is listed as threatened under state or federal law.

“Sensitive habitat” refers to habitat for plants and animals (1) which plays a special role in perpetuating species using the habitat on the project site, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.

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“Substantial effect” means significant loss or harm of a magnitude which, based on current scientific data and knowledge, (1) would cause a species or a native plant or animal community to drop below self-perpetuating levels on a statewide or regional basis or (2) would cause a species to become threatened or endangered.

ENVIRONMENTAL IMPACT

Rancho Santa Margarita contains important ecological and biological resources such as Tijeras and Trabuco Creeks, O’Neill Regional Park, 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. To work towards conserving these important resources for future generations and to preserve the quality of life in the community, the General Plan includes a Conservation/Open Space Element that addresses ecological and biological resources. This Element includes the following goal and policies:

Goal 1: *Protect and enhance the significant 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, lake 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.

Natural Communities

The proposed development pursuant to the Rancho Santa Margarita General Plan will have minimal impacts on local biological resources. Natural vegetation communities occurring within the proposed development sites are limited to designated open space areas and are not planned for development. All vacant lots west of Antonio Parkway that are planned for development are contained within previously disturbed areas. The vacant lot in the northeastern portion of the project site contains mostly nonnative landscape vegetation and would be considered an urban/developed plant community.

The largest area for future development is located in the Northeast Future Planned Community, currently containing active nurseries and portions of Porter Ranch. The

majority of the area is considered urban/developed with respect to the nursery operations and associated nonnative landscape species. Sensitive plant communities are present within the immediate vicinity of this area. Since the actual configuration of the land uses associated with the planned community has not yet been developed, natural communities, such as coastal sage scrub and southern coast live oak riparian forest, may potentially be impacted in the Future Planned Community. This is considered a potentially significant impact.

The major impacts to common plant species with implementation of the General Plan involve the elimination of nonnative weedy and ornamental vegetation. Project implementation may result in the direct loss of common plant species typically associated with disturbed habitats. These species are commonly abundant on a regional basis. The loss of common plant species is considered to be adverse but not a significant impact.

The major impacts to wildlife involve the elimination of disturbed open space and nonnative vegetation cover. Small mammals and birds that occupy the disturbed areas will be forced to migrate to other suitable habitat. Project implementation may result in the direct loss of common wildlife species typically associated with disturbed habitats. These species are commonly abundant on a regional basis. The loss of common wildlife species is considered to be adverse but not a significant impact. Displaced wildlife species will likely find shelter in adjacent land areas, but will not affect the population on a regional basis.

Sensitive Plant Species

No federally or state listed threatened or endangered plant species are likely to occur within the vacant parcels of the city or the Northeast Future Planned Community. Three 1B-listed plant species listed by the California Native Plant Society (CNPS), many-stemmed dudleya, three-leaved brodiaea, and intermediate mariposa lily, have a high potential to occur within the vicinity. Since the actual configuration of the land uses associated with the Northeast Future Planned Community has not yet been determined, impacts to sensitive plant species are considered potentially significant.

Sensitive Wildlife Species

One federally-listed threatened wildlife species and two species that are considered Species of Concern by the California Department of Fish and Game have been recorded to occur within the city. In addition, ten other wildlife species considered to be species of concern have a high potential for occurrence within Rancho Santa Margarita. The Federal Endangered Species Act (FESA) prohibits the "take" of a threatened or endangered species, unless otherwise permitted.

No suitable habitat exists within the vacant lots in the City, and therefore, impacts to sensitive fauna are considered to be less than significant in these areas. Since the actual configuration of the land uses associated with the Northeast Future Planned Community has not yet been determined, potential direct or indirect impacts to threatened,

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endangered, or otherwise sensitive wildlife species or any habitat occupied by these species within the planned community are considered potentially significant.

Nesting Birds

Raptor nests are typically found within the Eucalyptus windrows and other wooded areas within the city limits. Raptor species are probably foraging in open space areas within or adjacent to Rancho Santa Margarita. The urban/developed areas of the city generally exhibit poor foraging habitat due to the extensive development. The open space areas within the city provide excellent foraging habitat as well as suitable nesting and perching locations.

Breeding season of raptors and other migratory birds typically runs from February through late June. Disturbing or destroying active raptor and/or migratory bird nests is a violation of the Migratory Bird Treaty Act. Potential impacts to raptor nests and breeding migratory birds are considered significant.

Jurisdictional Areas

Two main jurisdictional areas are located within Rancho Santa Margarita (Trabuco and Tijeras Creeks). Any impact to Waters of the United States and associated riparian habitat and wetlands is considered to be a significant impact. Due to the nature of a General Plan, specific project impacts have not been determined. However, based on the current site conditions of the vacant lots west of Antonio Parkway, no jurisdictional areas in these locations will be impacted and, therefore, impacts are considered less than significant. The Northeast Future Planned Community and the vacant lot east of Antonio Parkway have not been assessed for any jurisdictional areas due to access issues. In the event that jurisdictional areas occur within these sites, impacts will be considered significant.

Regional Connectivity/Wildlife Movement Corridors

Wildlife movement through Rancho Santa Margarita will likely occur through current open space areas. Impacts to wildlife movement corridors are considered significant under current FESA regulations. The vacant lot areas west of Antonio Parkway are landlocked by urban development and will not be within a designated movement corridor. The vacant lot east of Antonio Parkway contains urban development on two sides and is not considered to be within a movement corridor. Development of these areas will have no significant impacts with respect to wildlife movement corridors. The Northeast Future Planned Community is located immediately adjacent to a regional corridor (Trabuco Canyon). Due to the nature of a General Plan, specific project impacts have not been determined, however, it is unlikely that the proposed planned community will have any impacts to a regional wildlife movement corridor. Impacts to wildlife movement corridors due to the implementation of the General Plan are considered to be less-than-significant.

MITIGATION MEASURES

Natural Communities

The City will implement Implementation Programs LU-10, COS-1 and COS-9 that work to reduce impacts on natural communities. Implementation LU-10 requires preparation of a Specific Plan addressing the Northeast Future Planned Community area prior to annexation of the area to the City. This Plan will describe where development in the area will occur and corresponding environmental documentation will determine potential impacts on biological resources. Assessing development proposals for potential impacts to natural resources (including natural communities and wildlife corridors) pursuant to the California Environmental Quality Act (CEQA) is described in Implementation Program COS-1. This program also requires appropriate mitigation for all significant impacts. Implementation Program COS-9 requires the use of drought resistant plant species (native species where possible) in landscaping for private and public areas, including parks. This will assist in maintaining natural communities in the project area.

Sensitive Plant Species

The City will implement Implementation Programs LU-10, COS-1 and COS-2 to minimize development impacts on sensitive plant species. Please refer to the Natural Communities mitigation discussion for explanations of LU-10 and COS-1. Implementation Program COS-2 requires development proposals to consult with regulatory agencies (including the United States Fish and Wildlife Service and California Department of Fish and Game) if the project may result in a potential take or substantial loss of occupied habitat for any threatened or endangered species.

Sensitive Wildlife Species

The City will implement Programs LU-10, COS-1, COS-2 and COS-3 to reduce potential impacts on sensitive wildlife species. Please refer to Natural Communities and Sensitive Plan Species mitigation discussions for explanations of Programs LU-10, COS-1 and COS-2. Implementation Program COS-3 requires mitigation for proposed projects where the potential for active raptor and migratory bird nests exists.

Jurisdictional Areas

The City will implement Implementation Programs LU-10, COS-1 and COS-2 in order to identify and mitigate impacts on jurisdictional areas. Program COS-2 requires consultation with regulatory agencies, including the U.S. Army Corps of Engineers if existing drainage features (Trabuco and Tijeras Creeks) are located within a project site.

LEVEL OF IMPACT AFTER MITIGATION

Natural Communities

Through the use of the Implementation Programs LU-10, COS-1 and COS-9, the potential for substantial adverse effects on natural communities in the Northeast Future Planned Community is reduced to a less-than-significant level.

Sensitive Plant Species

Implementation Programs LU-10, COS-1 and COS-2 will reduce the impact on sensitive plant species in the Northeast Future Planned Community to a less-than-significant-level.

Sensitive Wildlife Species

Through the use of Implementation Programs LU-10, COS-1, COS-2 and COS-3, the potential for substantial adverse effects on sensitive wildlife species, including active raptor and migratory bird nests, will be reduced to a less-than-significant level.

Jurisdictional Areas

Implementation Programs LU-10, COS-1 and COS-2 will reduce the potential impacts on jurisdictional areas (Trabuco and Tijeras Creeks) to a less-than-significant level.