

3.2 Biological Resources

A biological survey was conducted for the proposed project site and the off-site improvement area by REC Consultants, and results were recorded in a biological technical report, provided in Appendix E of this SEIR. Biological resources were investigated by REC through field surveys and literature review. The project site was intensively surveyed for plants and animals in 2002 and 2003 and an offsite impact area was surveyed in 2007. Focused surveys for the federally listed Quino checkerspot butterfly (*Euphydryas editha quino*) and the coastal California gnatcatcher (*Polioptila californica californica*) were conducted in 2002. At the request of County personnel, additional series of focused sensitive plant and animal surveys were conducted in 2003. Specific survey dates are listed in the biological technical report.

3.2.1 Existing Conditions

The project site is located in an area that has been substantially altered by residential development, except for resources on the project site and planned open space in association with the Pointe development to the east. These open space areas are completely encircled by development within the communities of La Mesa, Spring Valley, and La Presa. The nearest large area of natural habitat is located south and southeast of the project site, where the Sweetwater River and National Wildlife Refuge provided substantial areas of protected habitat that are not connected to the project area.

Figure 3-1, *Biological Resources Map*, depicts the extent and locations of the various on-site vegetation communities and observed sensitive species. During REC's site surveys, 225 plant species (including 74 non-native species) were observed onsite. Wildlife observed included thirteen mammal species, fifty-nine bird species, eleven reptile species, and numerous invertebrates. The biological technical report (see Appendix E) lists all plants and wildlife species observed.

Six habitats occur on the project site, including coastal sage scrub, developed land, disturbed land, Eucalyptus woodland, non-native grassland, and southern willow scrub. Diegan coastal sage scrub covers 94% of the project site and comprises about 167.17 acres. Developed land is limited to a former OWD water tank site which covers approximately 0.99 acre. Disturbed areas consist of larger dirt roads onsite and an area of bare compacted soil associated with a nearby home. Small amounts of exotic weedy species occur in these areas occupying 6.48 acres onsite. Eucalyptus woodland habitat occupies the northeastern corner of the site and covers approximately 0.50-acre. The northwestern corner of the site includes a small area of non-native grassland habitat and occupies 1.95 acres. Southern willow scrub habitat occurs onsite in two locations along the northern drainage totaling 0.43-acre. The proposed off-site improvement area for Montemar Drive contains non-native grassland and developed habitat.

3.2.2 Guidelines for the Determination of Significance

The Project would have a significant adverse biological effect if any of the following would occur as a result of a Project-related component. Would the Project:

- Conflict with any local policies or ordinances protecting biological resources, including but not limited to, the County's Biological Mitigation Ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

- Have a substantial adverse effect, either directly or indirectly (such as by edge effect), or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS).
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident wildlife corridors or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Result in cumulatively considerable biological impacts through loss of on-site habitat in conjunction with regional loss of habitat from other nearby projects.

3.2.3 Analysis of Project Effects and Determination as to Significance

- *Would the Project conflict with any local policies or ordinances protecting biological resources, including but not limited to, the County's Biological Mitigation Ordinance?*

The County of San Diego MSCP Subarea Plan and its implementing document, the Biological Mitigation Ordinance (BMO), identify sensitive biological resources and thresholds for significance. In the MSCP, habitats are classified in different tier levels based on scarcity or sensitivity. Impacts to habitat in Tiers I, II, and III are considered significant and require mitigation under the BMO. The BMO also identifies and categorizes sensitive species; impacts to any of these species may be considered significant and require mitigation.

A. Habitat Impacts

Habitat impacts resulting from implementation of the Highlands Ranch Project are summarized in *Table 3-11, Habitat Impacts*, (including off-site impacts associated with road improvements). Impacts are shown on *Figure 3-2, Impacts to Biological Resources*. Project implementation would directly result in on-site impacts to 69.91 acres of coastal sage scrub, 0.36-acre of non-native grassland, 0.67 acres of developed habitat, and 4.99 acres of disturbed habitat. In addition, implementation of the Project would impact habitat off-site, including 1.68 acres of non-native grassland and 1.18 acres of developed land, as depicted on *Figure 3-3, Off-Site Impacts to Biological Resources*. On-site impacts to coastal sage scrub and non-native grassland and off-site impacts to non-native grassland would be considered significant, because these habitats are considered sensitive by the BMO (**Significant Direct Impacts 3.2-A, 3.2-B, and 3.2-C**). Impacts to developed and disturbed (Tier IV habitats) would not be considered significant, because these land cover classes are not considered sensitive by the BMO. In addition, implementation of the proposed Project has the potential to result in significant temporary noise impacts on sensitive habitat during construction activities. Please refer to EIR Section 3.4, *Noise*, for a discussion of temporary noise impacts, and

for a list of mitigation measures provided to ensure that impacts are reduced to a level below significance.

The Project has the potential to directly and indirectly affect additional habitat in the short-term during Project construction if construction activities inadvertently extend beyond the identified permitted limits of disturbance (**Significant Direct and Indirect Impact 3.2-D**). Also, the Project has the potential to indirectly impact additional habitat acreage in the long-term through edge effects and incursion of trespassing people and domestic animals, although the site is already heavily used by local people and pets. Also, pedestrian use of trails that pass through the biological open space could potentially result in indirect impacts to habitats, such as accumulation of litter. Compliance with the proposed fencing plan, as depicted in EIR Figure 1-10, *Open Space and Fencing Plan*, would reduce to a level below significance indirect impacts associated with intrusion of domestic animals and people into on-site open space areas.

Although Project lighting would have the potential to indirectly impact on-site open space areas, the County's Light Pollution Code (Division 9 of the County Code) would require the shielding of all Project lighting, and would further restrict the type of lighting to low pressure sodium or lighting sources which emit less than 4050 lumens (if directed away from adjacent properties). Project compliance with the Light Pollution Code would be assured through future County review of building permits and improvement plans; therefore, a significant indirect impact due to Project lighting would not occur.

As part of the Project, a Habitat Management Plan (HMP) has been prepared (refer to SEIR Appendix E). The purpose of the HMP is to: 1) Guide stewardship of habitats and species; 2) provide management of biological resources when indirect impacts from the project are detected; 3) Serve as a guide for appropriate public uses of the project site; 4) Serve to update the descriptive inventory of fish, wildlife and native plant habitats which occur on or use the site; and 4) Provide an overview of the property's operation, maintenance, and personnel that are required to implement the plan. Indirect impacts to on-site habitat would be minimized through compliance with the HMP; however, in the event that the provisions of the HMP were not implemented, a significant indirect impact to sensitive habitat could occur (**Significant Indirect Impact 3.2-E**).

Changes in hydrology resulting from lawn irrigation upslope of natural habitat could also indirectly impact native habitat. Yard runoff may promote growth of opportunistic exotics, which could outcompete native species. Yard runoff may also result in erosion if not controlled. However, rim ditches are proposed at the outer edges of the developed areas that should prevent these potential indirect impacts. Potential erosion from stormwater runoff would be prevented through use of riprap dissipaters to prevent stormwater runoff from entering the open space. A stormwater plan has been developed for the proposed Project and can be reviewed in detail in section 3.3, *Hydrology and Water Quality* of this SEIR.

B. Sensitive Plant Species Impacts

The BMO requires that avoidance of sensitive plants must be considered in project design, and that impacts to Narrow Endemic and County Group A and B plant species must be avoided to the maximum extent practicable. Impacts to sensitive plant species were reduced through Project design, but not avoided. The BMO states that where complete avoidance is not feasible, encroachment may be authorized depending on the sensitivity of the individual species and the size of the population, but encroachment should not exceed 20% of the population onsite. Where impacts are allowed, in-

kind mitigation is required at a ratio of 1:1 to 3:1, depending on the sensitivity of the species and population size, as determined by the biological analysis. Plant species in Groups C and D are required to be protected by using the design requirements and habitat-based mitigation requirements set forth in the BMO. Implementation of the proposed Project would directly impact two Group A species, two Group B species and one Group D species as discussed below. Indirect impacts also have the potential to occur due to edge effects, the incursion of trespassing people and domestic animals, and changes in hydrology resulting from lawn irrigation upslope of natural habitat.

Table 3-11 HABITAT IMPACTS

Habitats	Total Acreage (Onsite and Offsite)	Impacted Acreage Onsite	Impacted Acreage Offsite	Total Impacted Acreage
Coastal Sage Scrub (Tier II)	167.17	69.90	0.00	69.91
Developed (Tier IV)	2.17	0.67	1.18	1.85
Disturbed (Tier IV)	6.48	4.99	0.00	4.99
Eucalyptus Woodland (Tier IV)	0.50	0.00	0.00	0.00
Non-native Grassland (Tier III)	3.63	0.36	1.68	2.04
Southern Willow Scrub (Tier I)	0.43	0.00	0.00	0.00
TOTAL	180.38	75.93	2.86	78.79

SOURCE: REC Consultants, September 2007

○ Group A Plants

Variiegated Dudleya (*Dudleya variegata*), a narrow endemic species, occurs in the southwestern section of the site. The proposed Project would directly impact approximately 12.8% (2,425 plants) of the total onsite variegated Dudleya population. This impact would be considered significant (**Significant Direct Impact 3.2-F**).

San Diego goldenstar (*Muilla clevelandii*) occurs in the northern central section of the site. The proposed Project would directly impact approximately 6.0% (849 plants) of the San Diego goldenstar population onsite. This impact would be considered significant (**Significant Direct Impact 3.2-G**).

○ Group B Plants

Coast barrel cactus (*Ferocactus viridescens* var. *viridescens*) is located in a number of larger clusters in the southwestern section of the site, as well as in smaller groups and singly throughout the south-facing and west-facing slopes and on the hilltops. The proposed Project would directly impact 17.9% (170 plants) of the barrel cacti onsite; this impact would be considered significant (**Significant Direct Impact 3.2-H**).

Munz's sage (*Salvia munzii*) occurs onsite in areas of Munz's sage-dominated coastal sage scrub, and in smaller numbers within the typical coastal sage scrub. Because of the large numbers and extensive coverage of this species, impacts were calculated in terms of acres of impact to Munz's sage scrub. Munz's sage scrub occupies approximately 19.96 acres onsite.

The proposed Project would impact approximately 3.23 acres, or 16.7%; this impact would be considered significant (**Significant Direct Impact 3.2-I**).

o Group D Plants

Western Dichondra (*Dichondra occidentalis*) grows in scattered locations throughout the central and eastern sections of the site. This Group D species is fairly common in coastal regions of the County, but has a limited distribution overall. It is not rare or endangered, nor likely to become so. The proposed Project would impact approximately 85.6% of the onsite western Dichondra population.

San Diego sunflower (*Viguiera laciniata*) is a common component of the coastal sage scrub onsite. It is especially abundant on the south-facing and west-facing slopes, but also occurs on the north-facing slopes. The Project would impact 70 acres of scrub habitat containing this shrub. This Group D species is common over the southern coastal regions of the County, but has a limited distribution overall. It is not rare or endangered, nor likely to become so.

Impacts to these Group C and D plants do not substantially reduce the viability of the population or species, but the Project results in a substantial reduction of the onsite population, and therefore the impact is considered significant (**Significant Direct Impact 3.2-J**). Mitigation for impacts to C and D plants are generally accomplished through habitat based mitigation.

Approximately 50 **southwestern spiny rush** (*Juncus acutus ssp. leopoldii*) plants occur onsite in the southern willow scrub habitat. The onsite plants would not be impacted by the proposed Project.

C. Sensitive Wildlife Species Impacts

Project implementation would directly impact the observed locations of two sensitive reptiles (coastal rosy boa and orange-throated whiptail), two sensitive birds (California gnatcatcher and southern California rufous-crowned sparrow), and one sensitive small mammal (San Diego black-tailed jackrabbit). In addition, although the observed locations of the coast horned lizard and Bell's sage sparrow would not be directly impacted by the Project, these species would be directly and significantly impacted through loss of habitat.

Coastal rosy boa is a Federal Species of Concern that has suffered from loss of habitat and collection. The observed location of one coastal rosy boa would be directly impacted by the proposed Project; this loss of habitat and possible loss of one coastal rosy boa is significant (**Significant Direct Impact 3.2-K**).

Orange-throated whiptail is a California Species of Special Concern that is threatened by loss of habitat and possibly competition to its preferred food source (termites) by exotic ants. The observed location of one orange-throated whiptail would be directly impacted by the proposed Project, and it is likely that other individuals would also be directly impacted. The loss of orange-throated whiptail habitat and possible loss of at least one orange-throated whiptail is significant (**Significant Direct Impact 3.2-L**).

Coastal California gnatcatcher has suffered from loss, degradation, and fragmentation of coastal sage scrub in southern California and northern Baja California. Declining numbers of the coastal subspecies prompted its listing as Federally Threatened in 1993. The Project would directly impact the observed locations of nine gnatcatchers: three pairs, two juveniles, and one individual adult. Although the gnatcatchers themselves may survive by moving to other areas, the direct loss of territory and habitat of these nine birds is a significant impact (**Significant Direct Impact 3.2-M**).

Coast horned lizard is a California Species of Special Concern that has suffered declining numbers due to loss of habitat, over-collecting, and competition to its preferred food source (native harvester ants) by the introduction of exotic ants. The Project would not directly and significantly impact the observed locations of the coast horned lizard, but would directly impact and significantly impact the species through loss of habitat (**Significant Indirect Impact 3.2-N**).

Bell's sage sparrow is a California Species of Special Concern that has suffered from a fragmentation and loss of habitat and does not persist in isolated patches of habitat. The Project would not directly and significantly impact the observed locations of the Bell's sage sparrow, but would directly impact and significantly impact the species through loss of habitat (**Significant Indirect Impact 3.2-O**).

Southern California rufous-crowned sparrow is a Species of Special Concern and the loss of the observed locations of eight southern California rufous-crowned sparrows, in addition to the loss of habitat for this species, would be significant (**Significant Direct Impact 3.2-P**).

San Diego black-tailed jackrabbit is a Species of Special Concern and the loss of the observed locations of five black-tailed jackrabbits, and the loss of habitat for this species, would be significant (**Significant Direct Impact 3.2-Q**).

The proposed Project also could indirectly impact other California gnatcatchers, rufous-crowned sparrows, and black-tailed jackrabbits observed outside the limits of direct impact, as well as other sensitive species documented to occur onsite, through habitat reduction and fragmentation, edge effects, and domestic animal interference. Indirect impacts were previously identified as **Significant Indirect Impact 3.2-E**.

Potential introduction of non-native ants into the preserved portions of the site could be an indirect impact to certain reptiles such as coast horned lizard that rely on native ants for food, because non-native ants can displace native ant species. These non-native ants typically occur in irrigated areas. According to current research on the issue, non-native ants fail to invade dry, exposed areas. Because the outer 50 feet of the proposed LBZ/FMZ and the preserved open space would not be permanently irrigated, it is anticipated that the outer 50 feet would serve as a moisture buffer and the open space onsite would remain dry. Therefore, potential introduction of non-native ants is not expected to be a significant indirect impact.

The California gnatcatchers living onsite are already adapted to a substantial level of edge effect, because the site and the few small adjacent undeveloped areas are surrounded by development. Project edge effects have been reduced by at least 20% through Project redesign. In addition, available research indicates that California gnatcatchers may not be sensitive to generalized edge effects. Based on research documented in the biological technical report (see Appendix E), it is

concluded that the Project's general edge effect and impact of habitat fragmentation on California gnatcatchers would be less than significant. However, gnatcatchers remaining onsite would be vulnerable to increased predation by domestic cats from the new residential development.

D. Raptor Foraging and Nesting Impacts

Raptors observed on or over the site included American kestrel, Cooper's hawk, northern harrier, red-shouldered hawk, red-tailed hawk, sharp-shinned hawk, and turkey vulture. Northern harriers nest on the ground, but are unlikely to nest onsite because they are not known to be adapted to suburban conditions. American kestrels are not likely to nest onsite because they prefer tall sycamore and oaks, or palms and human-made structures in more urbanized situations. Turkey vultures are also unlikely to nest onsite because they typically nest in crevices among granite boulders in rugged rocky hills which are not present on the site. Red-shouldered hawks, red-tailed hawks, Cooper's hawks, and sharp-shinned hawks observed on or over the site could nest in the eucalyptus woodland in the northeastern corner of the site. All are adapted to suburban situations. Because the eucalyptus woodland would be preserved in open space, nesting of these four species would not be directly impacted. However, indirect impacts may occur during construction (**Indirect Impact 3.2-R**).

The project site would reduce foraging habitat for northern harrier, which onsite consists of the loss of 0.36 acre of non-native grassland on-site and 1.68 acres of non-native grassland off-site. The loss of 0.36 acre on-site and 1.68 acres off-site is not significant given the extensive foraging area that is preserved around Sweetwater Reservoir to the south. The remaining raptors may forage throughout the scrub, but scrub is generally a lower quality foraging area for most raptors. The Project impacts approximately 69.9 acres, or 42% of this lower quality foraging area. Because of the extensive higher value non-native grassland foraging areas available to the south of the site, the loss of 69.9 acres of scrub foraging area onsite, while significant, is considered mitigated along with the Project's habitat mitigation by preservation at a 1.5 to 1 ratio (**Indirect Impact 3.2-S**).

- ***Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The Project is located within the Metro-Lakeside-Jamul Segment of the County's MSCP Subarea Plan, and is subject to the requirements of the BMO as discussed above. The BMO sets forth the criteria for avoiding impacts to biological resource core areas (BRCAs) and to sensitive plant and animal populations. To determine permissible impact levels and preservation requirements, the site's BRCA status was evaluated according to the BMO criteria. A property is considered a BRCA if it meets one or more of the following criteria:

1. The land is shown as pre-approved mitigation area on the wildlife agencies' pre-approved mitigation map. *The Highlands Ranch property is not within a pre-approved mitigation area, and therefore does not meet this criterion.*
2. The land is located within an area of habitat which contains biological resources that support or contribute to the long term survival of sensitive species, which determination is based upon a biological analysis approved by the Director, and is adjacent or contiguous to preserved habitat that is within the pre-approved mitigation area on the wildlife agencies pre-approved mitigation map. *The Highlands Ranch site has contributed to the long-term*

survival of several sensitive species, but, with the exception of The Pointe San Diego biological open space to the east and small undeveloped areas to the north and west, it is surrounded by development, and is not adjacent to any “preserved habitat that is within the pre-approved mitigation area on the wildlife agencies pre-approved mitigation map”; therefore the site does not meet this criterion.

3. The land is part of a regional linkage/corridor. A regional linkage/corridor is either (a) land which contains topography which serves to allow for the movement of all sizes of wildlife and is used by wildlife, including large animals on a regional scale; and contains adequate vegetation cover providing visual continuity as to encourage the use of the corridor by wildlife; or (b) it has been identified as the primary linkage/corridor between the northern and southern regional populations of the California gnatcatcher in the population viability analysis for the California gnatcatcher, MSCP Resource Document volume II. *The Highlands Ranch site is not a regional linkage/corridor because the topography and site location adjacent to development do not support a regional connection; therefore, it does not meet this criterion.*
4. The land is shown on the Habitat Evaluation Map as very high or high and links significant blocks of habitat, except that land which is isolated or links small, isolated patches of habitat and land that has been affected by existing development to create adverse edge effects shall not qualify as Biological Resource Core Area. *The Highlands Ranch site is shown on the Habitat Evaluation Map as very high or high quality habitat, and is adjacent to biological open space to the east, but both the open space to the east and the undeveloped land to the north and west are relatively small and surrounded by development. These adjacent undeveloped areas qualify as “small, isolated patches of land”. In addition, the undeveloped land to the north and west is not preserved. Therefore, the site does not link significant blocks of habitat and does not meet this criterion.*
5. The land consists of or is within a block of habitat greater than 500 acres in area of diverse and undisturbed habitat that contributes to the conservation of sensitive species. *The Highlands Ranch site is not within a block of habitat greater than 500 acres in area; therefore, it does not meet this criterion.*
6. The land contains a high number of sensitive species and is adjacent or contiguous to surrounding undisturbed habitats, or contains soil derived from the following geological formations which are known to support sensitive species: Gabbroic rock, Metavolcanic rock, Clay, or Coastal sandstone. *The Highlands Ranch site is adjacent to undisturbed habitat, and it does support a high number of sensitive species; site soils are primarily of metavolcanic origin (San Miguel-Exchequer), which is known to support a number of sensitive species. Therefore, the site meets this criterion.*

Because the site meets BRCA criterion 6, it must be considered a BRCA. The BMO sets forth the criteria for avoiding impacts to BRCAs. Impacts are discussed above and significant impacts are identified as **Significant Direct Impacts 3.2-A through 3.2-R**.

- *Would the Project have a substantial adverse effect, either directly or indirectly (such as by edge effect), or through habitat modifications, on any species identified as candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the*

California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS)?

As discussed previously, Project implementation would directly impact the observed locations of seven sensitive animal species: coastal rosy boa, orange-throated whiptail, California gnatcatcher, southern California rufous-crowned sparrow, coast horned lizard, Bell's sage sparrow, and San Diego black-tailed jackrabbit. Impacts to these wildlife species are identified as **Significant Direct Impacts 3.2-K through 3.2-Q**. Implementation of the proposed Project also would directly impact two Group A species, two Group B species and two Group D species: variegated Dudleya, San Diego goldenstar, coast barrel cactus, Munz's sage, western dichondra, and San Diego sunflower. Impacts to these plant species are identified as **Significant Direct Impacts 3.2-D through 3.2-J**.

- *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS?*

Southern willow scrub (0.43-acre), a riparian habitat, is present in the northeastern portion of the project site. The proposed Project would not impact this habitat. As discussed previously, implementation of the Project would result in impacts to coastal sage scrub and non-native grassland. Impacts to these habitats would be considered significant and are identified as **Significant Direct and Indirect Impacts 3.2-A through E**.

- *Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The proposed Project would not impact any federally protected wetlands. A drainage occurs in the southeastern portion of the project site, which would be retained as open space as part of the Project. A wetland buffer consisting of upland habitat would be provided around onsite jurisdictional wetlands and waters associated with the onsite drainage. The buffer would be a minimum of 50 feet wide adjacent to riparian habitat, and 25 feet wide adjacent to channels without riparian habitat.

- *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident wildlife corridors or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Although the project site does support a relatively high number of sensitive species, it occurs in an area that has already been substantially altered by residential development. Planned open space associated with the adjacent Pointe San Diego development to the east will be contiguous with Highlands Ranch open space, but the Pointe San Diego open space is not contiguous with other connective open space. Based on a review of a 300 scale aerial photograph of the site and surrounding area, taken in 2000, the project site and small undeveloped adjacent areas are almost completely encircled by development. The nearest large area of natural habitat is located to the south and southeast of the project site, where the Sweetwater River and National Wildlife Refuge provide substantial protected habitat, but connection between the site and these areas has already been eliminated through extensive development. However, based on evidence of site use by large mammals such as deer, coyote, and bobcat, the site may serve as a local wildlife corridor from The

Pointe across the project site to Spring Valley on the northwest. These larger animals may move across the site along the northwestern drainage and existing trails.

Because many existing wildlife trails and the entire onsite section of the northeastern drainage would remain after Project development, the Project is not expected to result in significant impacts to use of the site as a wildlife corridor by large mammals. In addition, it is unlikely that the portion of the site proposed for development (high and exposed amid suburban development) is of significant value to large mammals. The general loss of habitat would be compensated for through mitigation for impacts to sensitive vegetation communities (on-site preservation and off-site purchase). Therefore, the Project is not expected to result in significant impacts to large mammals.

According to the "Population Viability Analysis for the California Gnatcatcher within the MSCP Study Area" (Ogden 1993), found in Attachment I of the BMO, Dictionary Hill serves as an important adjunct group to the Lower Sweetwater/San Miguel Mountains core reserve despite being surrounded by development. Based on review of the Sweetwater Authority Sweetwater Reservoir/Vegetation and Species Map (Ogden 1995) and other local maps, a distance of approximately 4,600 feet (0.9 mile) separates the southeast corner of the site from the nearest open coastal sage scrub on the east side of the Sweetwater Reservoir, to the east of the site. Isolated areas of coastal sage scrub also occur on the northern shore of the reservoir, approximately 5,700 feet (1.1 miles) from the southern edge of the site. The large open space with extensive coastal sage scrub is between 6,500 feet (1.2 miles) and 10,500 feet (2.0 miles) away, on the south side of the reservoir.

Although California gnatcatchers may typically disperse over short distances through natural habitat, they have also demonstrated an ability to disperse greater distances over developed land. Dictionary Hill is close enough to other larger areas of coastal sage scrub to prevent complete isolation. Therefore, it appears that Dictionary Hill does serve as both an important adjunct to the core gnatcatcher reserve and a corridor, in the BMO sense, for California gnatcatchers and other birds.

The proposed Project could indirectly impact California gnatcatchers, rufous-crowned sparrows, and other birds through habitat reduction and fragmentation, edge effects, and domestic animal interference.

The gnatcatchers living onsite are already adapted to a substantial level of edge effect, because the site and the few small adjacent undeveloped areas are surrounded by development. Five sources addressing edge effects and habitat fragmentation on California gnatcatchers were reviewed (no others were found). Of these, only one article (Crooks et al. 2004) suggested that gnatcatchers are sensitive to urbanization. Research on the effects of habitat fragmentation on the breeding-bird assemblage in San Diego coastal sage scrub (Lovio 1996) indicated that California gnatcatchers are not extremely sensitive to habitat fragmentation. Bolger et al. (1997) studied the spatial patterns of resident breeding bird abundance at a landscape scale in an urbanizing landscape in coastal San Diego County, and ranked species along a landscape response gradient from "edge/fragmentation reduced" to "edge/fragmentation enhanced". Their research classified the California gnatcatcher as an "edge/fragmentation insensitive" species, indicating that distribution of the gnatcatchers was not reduced near edges of natural habitat or in fragmented habitat. Atwood's study of edge effects on California gnatcatchers on the Palos Verdes Peninsula (Atwood 1998) indicated that gnatcatchers observed in his five year study were not sensitive to edge effects. The species account for California gnatcatcher in the San Diego Bird Atlas states that it does not appear to be especially sensitive to

habitat fragmentation at the landscape scale (P. Mock in Unitt 2004). Based on this survey of available literature, it can be concluded that the Project's general edge effect and impact of habitat fragmentation on California gnatcatchers would be less than significant.

3.2.4 Cumulative Impact Analysis

- *Would the Project result in cumulatively considerable biological impacts through loss of on-site habitat in conjunction with regional loss of habitat from other nearby projects?*

Cumulative impacts to biological resources may occur due to the implementation of numerous projects within the same region. Because the impacts of a given project may prove to be significant when considered together with other past and present projects, and reasonably foreseeable future projects, it is important to consider the cumulative effects that regional growth may have on biological resources.

Cumulative study areas were selected for sensitive animals, sensitive plants, and sensitive habitats. A sensitive animal cumulative study area of a two mile radius from the center of the Highlands Ranch property was selected because two miles is considered the upper limit of the normal dispersal distance for adult California gnatcatchers, and they are the most sensitive wildlife species known to occur onsite.

A sensitive plant study area of a two-mile radius from the center of the Highlands Ranch site also was selected based on the borders of the ecoregion, predicted occurrence of variegated Dudleya, coast barrel cactus, San Diego goldenstar, and Munz's sage and based on the location of similar soils, topography, and environmental setting in the region. All four of these species are predicted to occur within a two-mile radius of the Highlands Ranch site.

A sensitive vegetation study area of a two mile radius from Highlands Ranch was selected based on the borders of the ecoregion, encroachment of urban lands, and predicted similarity of soils, topography, and vegetation components within this radius.

Based on the information for the cumulative projects listed in *Table 1-5*, cumulative impacts to the sensitive animals, plants and habitats common to the Highlands Ranch Project and projects within a two-mile radius were evaluated, as summarized below in *Table 3-12*. *Table 3-12* summarizes impacts to the most sensitive biological resources that could potentially be impacted on a cumulative basis (i.e., California gnatcatcher, variegated Dudleya, coast barrel cactus, San Diego goldenstar, Munz's sage, coastal sage scrub, and non-native grassland). Some pending projects on file with the County and within the two-mile radius are undergoing extended Initial Studies, and the potential impacts of those projects on biological resources are not yet known. A complete listing of all projects considered in the cumulative effects analysis are contained as an appendix to the biological technical report attached as Appendix E to this SEIR. A summary of anticipated cumulatively significant impacts resulting from the projects listed in *Table 3-12* is provided below:

- The cumulative projects would impact approximately 26 California gnatcatchers. The Project's contribution would be 9 individuals, or 35% of the total cumulative impact. This would not be cumulatively considerable because of ongoing mitigation occurring in the vicinity in accordance with the MSCP, and because the Project would provide mitigation in

accordance with the MSCP. The Project does not occur within the critical habitat area(s) determined by the U.S. Fish and Wildlife Service, nor in a Pre-approved Mitigation Area (PAMA), designated by the MSCP. In conjunction with the MSCP, core habitat is preserved, thereby insuring the long-term survival of the species. Because the MSCP requires off-site mitigation to be within PAMA and on-site mitigation to have good preserve design, cumulative effects are greatly reduced.

- The cumulative projects would impact approximately 2,425 individuals of variegated Dudleya. The Project's contribution would amount to 100% of the total cumulative impact. Therefore, there is no added cumulative impact.
- The cumulative projects would impact approximately 170 individuals of coast barrel cactus. The Project's contribution would amount to 100% of the total cumulative impact. Therefore, there is no added cumulative impact.
- The cumulative projects would impact approximately 849 individuals of San Diego goldenstar. The Project's contribution would amount to 100% of the total cumulative impact. Therefore, there is no added cumulative impact.
- The cumulative projects would impact approximately 3.33 acres of Munz's sage. The Project's contribution would amount to 100% of the total cumulative impact. Therefore, there is no added cumulative impact.
- The cumulative projects would impact approximately 262.45 acres of coastal sage scrub. The Project's contribution would amount to 69.91 acres, or 27% of the total cumulative impact. This would not be cumulatively considerable because of ongoing mitigation occurring in the vicinity in accordance with the MSCP, and because the Project would provide mitigation in accordance with the MSCP.
- The cumulative projects would impact approximately 93.65 acres of non-native grassland. The Project's contribution would amount to 0.36 acre on-site and 1.68 acres off-site, or 2.1% of the total cumulative impact. This would not be cumulatively considerable because of ongoing mitigation occurring in the vicinity in accordance with the MSCP, because the Project would provide mitigation in accordance with the MSCP. In conjunction with the MSCP, core habitat within PAMA is targeted for preservation, including adequately sized blocks with linkages. Because MSCP requires off-site mitigation to be within PAMA and on-site mitigation to have good preserve design, cumulative effects are greatly reduced. The Project provides mitigation in accordance with the MSCP, thereby reducing cumulative impacts within the MSCP Subregion by preserving and mitigating in the most important areas for long term viability and preserve connectivity. The Project's impact is too small to be considerable.

Cumulative impacts would be offset by the preservation of habitat associated with the Highlands Ranch Project and other projects in conformance with the MSCP and BMO. As described by the 1998 MSCP implementing agreement, "the MSCP is a comprehensive, long-term habitat conservation plan for the Covered Species which addresses the needs of multiple species and the preservation of natural vegetation communities. The MSCP addresses the potential impacts of urban growth, natural habitat loss and species endangerment and creates a plan to mitigate for the potential loss of Covered Species and their habitat due to the direct and indirect impacts of future development

of both private and public lands within the MSCP Area.” As long as each project within the Subarea complies with the MSCP Subarea Plan, cumulative impacts would be below a level of significance. Although The Pointe San Diego project’s EIR identified a significant and unmitigable impact to California gnatcatcher, that project was approved prior to the MSCP. Projects approved in compliance with the MSCP can now rely on the MSCP for mitigation of regional impacts for Covered Species such as California gnatcatcher. Therefore, although the proposed Project, in combination with the other projects in the general area, would result in cumulative impacts, these cumulative impacts would be below a level of significance with required compliance to the MSCP and BMO.

Table 3-12 SUMMARY OF BIOLOGICAL RESOURCES CUMULATIVE ANALYSIS

Project Number	Project Name	Biological Impacts							
		Coastal sage scrub	Non-native grassland	variegated Dudleya (<i>Dudleya variegata</i>)	coast barrel cactus (<i>Ferocactus viridescens</i>)	San Diego goldenstar (<i>Muilla clevelandii</i>)	Munz's sage (<i>Salvia munzii</i>)	California gnatcatcher (<i>Polioptila californica</i>)	Other
S-03-074, TM-5170	Mt. Miguel Commerce Community	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	No Impact	Impact to disturbed lands and 0.43-acre of jurisdictional wetlands
Implementing Action: STP-01-072, LP-02-049	Casa de Oro Travel	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact
TM-4870	Upland Street Subdivision	1.6 acres	2.7 acres	No Impact	No Impact	No Impact	No Impact	No Impact	Impacts to 0.55-acre of developed lands and 0.95-acre of orchards and vineyards.
TM-5092, HLP 97-011	Rancho S.D. Town Center	0.25 acres	No Impact	No Impact	No Impact	No Impact	No Impact	Significant indirect impact due to noise.	Impacts to 1.14 acres of riparian forest, 0.52-acre southern riparian scrub, 0.6-acre mulefat scrub, 0.3-acre unvegetated channel and 0.25-acre disturbed wetland. Loss of raptor nesting habitat. Impacts to Sweetwater River due to indirect effects such as human intrusion, siltation from erosion, storm water pollution, noise, lighting, and predation.
SPA 88-001	The Pointe San Diego Specific Plan	190.0 acres	89.5 acres Impacts to grasslands included loss of an Otay tarplant population.	No Impact	No Impact	No Impact	No Impact	Significant impact to 17 pair due to habitat loss. No feasible mitigation was available for loss of gnatcatcher.	The conversion of 308.4 acres to development including the loss of a maximum of 297.6 acres of upland habitat and 10.8 acres of wetland habitat. Also, fragmentation of wildlife habitat.

Project Number	Project Name	Biological Impacts							
		Coastal sage scrub	Non-native grassland	variegated Dudleya (<i>Dudleya variegata</i>)	coast barrel cactus (<i>Ferocactus viridescens</i>)	San Diego goldenstar (<i>Muilla clevelandii</i>)	Munz's sage (<i>Salvia munzii</i>)	California gnatcatcher (<i>Polioptila californica</i>)	Other
Implementing Actions: TM-5281, TM-5296, TM-5297, SPA-01-003	Pointe Mountaintop Condos, Lake Pointe Luxury Apartments, Lakeview Phases I and II	No Additional Impacts	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact	No Additional Impact
TM-5200	Simpson Farms	Yes; extent undetermined	Yes; extent undetermined	No Impact	No Impact	No Impact	No Impact	Yes; extent undetermined	Impact information is not yet available
TPM-20589, WE-0998	Hugley	No Impact	0.5-acre	No Impact	No Impact	No Impact	No Impact	No Impact	Conservation easement required for 0.44-acre of wetlands and a wetland buffer.

3.2.5 Mitigation Measures

Significant Direct Impact 3.2-A: *The Project would directly impact a total of 69.91 acres of coastal sage scrub.*

3.2-A: The impacts to 69.91 acres of coastal sage scrub will be mitigated at a ratio of 1.5:1 providing for the preservation of a total of 104.9 acres of Tier II (coastal sage scrub) habitat within the MSCP Subregion, in compliance with the Biological Mitigation Ordinance.

The conditions of approval will require that prior to issuance of grading permits or improvement plans and prior to approval of the Final Map, the applicant shall (a) grant an open space easement to the County of San Diego preserving 96.3 acres of coastal sage scrub as shown on the Open Space Exhibit or Tentative Map, and (b) provide for the approval of the County DPLU Director evidence that 8.6 acres of Tier II habitat credit has been secured in a County approved mitigation bank within the MSCP Subregion.

Significant Direct Impact 3.2-B: *The Project would directly impact a total of 0.36-acre of non-native grassland on-site.*

3.2-B: Mitigation for on-site impacts to 0.36 acres of non-native grassland will be preservation of comparable habitat at a ratio of 0.5:1 providing for the preservation of a minimum of 0.18 acres of Tier III (non-native grassland) habitat, in compliance with the Biological Mitigation Ordinance.

The conditions of approval will require that prior to issuance of grading permits or improvement plans and prior to approval of the Final Map, the applicant shall grant an open space easement to the County of San Diego which preserves approximately 1.6 acres of non-native grassland as shown on the Open Space Exhibit or Tentative Map.

Significant Direct Impact 3.2-C: *The Project would directly impact a total of 1.68 acres of non-native grassland off-site.*

3.2-C Mitigation for off-site impacts to 1.68 acres of non-native grassland will be preservation of comparable habitat at a ratio of 0.5:1 providing for the preservation of a minimum of 0.84 acres of Tier III (non-native) grassland habitat, in compliance with the Biological Mitigation Ordinance.

The conditions of approval will require that prior to issuance of grading permits or improvement plans and prior to approval of the Final Map, the applicant shall grant an open space easement to the County of San Diego which preserves approximately 1.6 acres of non-native grassland as shown on the Open Space Exhibit or Tentative Map.

Significant Short-term Direct and Indirect Impact 3.2-D: *Short-term direct and indirect impacts to sensitive habitats, plants and wildlife species have the potential to occur during Project construction.*

3.2-D: Mitigation for inadvertent damage to the preserve area during construction will be (1) maintaining conspicuous temporary fencing to mark the limits of grading, and (2)

employing a project biologist to monitor clearing and grading activities and to provide education to the construction superintendent regarding the sensitivity of the onsite biological resources and the need to prevent any direct construction impacts.

Project Design Elements which reduce the potential for impacts include maintaining compliance with the Stormwater Management Plan and Grading Ordinance, monitoring contractor conduct for site cleanliness (to avoid attracting predators), keeping construction maintenance and storage activities away from the preserve, minimizing night lighting near the preserve, and reporting to the County weekly.

Significant Indirect Impact 3.2-E: *Indirect impacts to sensitive habitats, plants and wildlife species may occur due to edge effects, human intrusion and domestic animals.*

3.2-E: Mitigation for indirect impacts to sensitive habitats, plants and wildlife species will be (1) permanent fencing between the development and the preserve boundary to reduce the potential for unauthorized human and domestic animal access, (2) dedicating a limited building zone easement to reduce the risk of fire fuel modification requirements in the preserve, and (3) funding and implementation of a Habitat Management Plan (HMP) that will provide stewardship for the preserve, monitoring and remediation of Project-related indirect impacts in the preserve, and reporting on the status of the preserve, and naming the County as a third party beneficiary to the HMP fund.

Significant Direct Impact 3.2-F: *The Project would directly impact approximately 12.8% (2,425 plants) of the onsite variegated Dudleya population (18,945 plants).*

3.2-F: Mitigation for direct impacts to variegated dudleya will be (1) avoidance of 80% of the population onsite, and (2) additional mitigation at a 2:1 mitigation ratio, in accordance with the Biological Mitigation Ordinance. In addition, the MSCP species management directives to conduct species-specific monitoring and protect the species from edge effects have been incorporated into the Project's HMP [Measure 3.2-E(3)].

The conditions of approval will require (1) avoiding 80% of the onsite population; (2) preservation of an additional 7.2 percent (1,360 plants) of the onsite population; and (3) off-site mitigation of 3,490 variegated Dudleya plants, or other acreage deemed acceptable by the Director of the County Department of Planning and Land Use (which can be included in the total coastal sage scrub mitigation acreage as required by Mitigation Measure No. 3.2-A), to be purchased in a pre-approved mitigation bank within the MSCP Subregion..

Significant Direct Impact 3.2-G: *The Project would directly impact approximately 6.0% (849 plants) of the onsite San Diego goldenstar population (14,150 plants).*

3.2-G: Mitigation for direct impacts to San Diego goldenstar will be (1) avoidance of 80% of the population onsite, and (2) additional mitigation at a 2:1 mitigation ratio, in accordance with the Biological Mitigation Ordinance. In addition, the MSCP species management directive to protect the species from edge effects has been incorporated into the Project's HMP [Measure 3.2-E(3)].

The conditions of approval will require (1) avoiding 80% of the onsite population, and (2) preservation of an additional 14 percent (1,981 plants) of the on-site population.

Significant Direct Impact 3.2-H: *The Project would directly impact 17.9% (170 plants) of the onsite coast barrel cactus population (950 plants).*

3.2-H: Mitigation for direct impacts to coast barrel cactus will be (1) avoidance of 80% of the population onsite, and (2) additional mitigation at a 1:1 mitigation ratio, in accordance with the Biological Mitigation Ordinance. In addition, the MSCP species management directives to protect the species from edge effects, unauthorized collection, and to require fire management to avoid a too frequent fire cycle have been incorporated into the project's HMP [Measure 3.2-E(3)].

The conditions of approval will include (1) avoiding 80% of the onsite population; (2) preservation of an additional 2.1 percent (20 plants) of the on-site population; and (3) off-site mitigation of 150 coast barrel cactus plants, or other acreage deemed acceptable by the Director of the County Department of Planning and Land Use (which can be included in the total coastal sage scrub mitigation acreage as required by Mitigation Measure No. 3.2-A), to be purchased in a pre-approved offsite mitigation bank within the MSCP Subregion.

Significant Direct Impact 3.2-I: *The Project would impact approximately 3.3 acres, or 16.7% of the onsite population of Munz's sage (20 acres).*

3.2-I: Mitigation for direct impacts to Munz's sage will be (1) avoidance of 80% of the population onsite, and (2) additional mitigation at a 1:1 mitigation ratio in accordance with the Biological Mitigation Ordinance.

The conditions of approval will include (1) avoiding 80% of the onsite population; (2) preservation of an additional 3.3 percent (0.7 acres) of the on-site population; and (3) off-site mitigation of 2.7 acres of habitat dominated by Munz's sage, or other acreage deemed acceptable by the Director of the County Department of Planning and Land Use (which can be included in the total coastal sage scrub mitigation acreage as required by Mitigation Measure No. 3.2-A), to be purchased in a pre-approved offsite mitigation bank within the MSCP Subregion.

Significant Direct Impact 3.2-J: *The Project would impact approximately 85.6% of the onsite western Dichondra population.*

Mitigation for direct impacts to western Dichondra is mitigated on a habitat basis in compliance with Mitigation Measure No. 3.2-A. This is because Dichondra is fairly common in the region, but of limited distribution. Because habitat-based mitigation will occur in the MSCP subarea, it will also benefit this species and will mitigate this impact.

Significant Direct Impact 3.2-K: *The Project would impact the observed location of one coastal rosy boa and habitat for the species.*

Mitigation for direct impacts to coastal rosy boa is mitigated on a habitat basis in compliance with Mitigation Measure No. 3.2-A. This is because rosy boa, while not common, is widespread where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact.

Significant Direct Impact 3.2-L: *The Project would impact the observed location of one orange-throated whiptail and habitat for the species.*

Mitigation for direct impacts to orange-throated whiptail is mitigated on a habitat basis in compliance with Mitigation Measure 3.2-A. This is because this whiptail is fairly common where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact. In addition, the MSCP species management directive to protect the species from edge effects has been incorporated into the project's HMP [Measure 3.2-E(3)].

Significant Direct Impact 3.2-M: *The Project would impact the observed locations of nine coastal California gnatcatchers: three pairs, two juveniles, and one individual adult, and territory and habitat for the species.*

3.2-M: Mitigation for direct impacts to California gnatcatcher will be (1) purchase of offsite habitat containing 9 California gnatcatcher individuals, to be secured in a County approved mitigation bank within the MSCP Subregion and (2) implementation of Mitigation Measure 3.2-A(1) which includes preservation of 93.3 acres of coastal sage scrub onsite, currently providing habitat for 19 California gnatcatchers. Mitigation for indirect construction impacts will be (3) the MSCP-required restriction of brushing and clearing of occupied habitat between March 1 and August 15 and (4) providing for a monitoring biologist to be responsible for locating the birds in the clearing area and flushing them from the impact footprint at non-breeding times. Long-term indirect impacts will occur with permanent fencing, dedication of a limited building zone, and the projects HMP [Mitigation Measure 3.2-E(3)]. MSCP species management directives apply that require measures to reduce edge effects and minimize disturbance during the nesting period, fire management to avoid a too frequent fire cycle and maintain habitat quality have been incorporated into the project's HMP.

Significant Direct Impact 3.2-N: *The Project would directly impact habitat for the coast horned lizard.*

Mitigation for direct impacts to coast horned lizard is mitigated on a habitat basis in compliance with Mitigation Measure 3.2-A. This is because coast horned lizard, while not common, is widespread where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact. In addition, the MSCP species management directives to protect the species from edge effects, including the spread of Argentine ants, has been incorporated into the project's HMP [Measure 3.2-E(3)].

Significant Direct Impact 3.2-O: *The Project would directly impact habitat for the Bell's sage sparrow.*

Mitigation for direct impacts to Bell's sage sparrow is mitigated on a habitat basis in compliance with Mitigation Measure 3.2-A. This is because sage sparrow, while not common, is widespread where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact. Mitigation Measures 3.2-M(3) and (4) will also benefit this species by reducing the potential for short-term direct impacts from construction.

Significant Direct Impact 3.2-P: *The Project would impact the observed locations of eight southern California rufous-crowned sparrows and habitat for this species.*

Mitigation for direct impacts to southern California rufous-crowned sparrow is mitigated on a habitat basis in compliance with Mitigation Measure 3.2-A. This is because this sparrow is generally widespread where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact. In addition, the MSCP species management directive to encourage open phases of coastal sage scrub has been incorporated into the project's HMP [Measure 3.2-E(3)]. Mitigation Measures 3.2-M(3) and (4) will also benefit this species by reducing the potential for short-term direct impacts from construction.

Significant Direct Impact 3.2-Q: *The Project would impact the observed locations of five San Diego black-tailed jackrabbits and habitat for this species.*

Mitigation for direct impacts to black-tailed jackrabbit is mitigated on a habitat basis in compliance with Mitigation Measure No. 3.2-A. This is because jackrabbit, while not common, is widespread where adequate blocks of habitat are present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will benefit this species and will mitigate this impact.

Significant Indirect Impact 3.2-R: *The Project has the potential to indirectly impact nesting raptors (red-shouldered hawks, red-tailed hawks, Cooper's hawks, and sharp-shinned hawks) during construction in the eucalyptus woodland located in the northeastern corner of the site.*

3.2-R: Mitigation for indirect impacts to nesting raptors will be a prohibition on grading or clearing allowed within 500 feet of the eucalyptus woodland habitat between February 15 and July 15. This measure can be waived by the Director of Planning and Land Use if pre-grading surveys show that no active raptor nests are present.

Significant Direct Impact 3.2-S: *The Project would directly impact foraging habitat for the northern harrier and other raptors.*

Mitigation for direct impacts to northern harrier and other raptors is mitigated on a habitat basis in compliance with Mitigation Measure 3.2-A. This is because raptor foraging habitat is widespread where adequate blocks of habitat is present in the region. Because habitat-based mitigation will occur according to MSCP preserve design criteria, it will provide raptor foraging habitat and will

mitigate this impact. Mitigation Measures 3.2-M(3) and (4) will reduce the potential for short-term direct impacts from construction.

3.2.6 Conclusions

With implementation of the above mitigation measures, impacts to biological resources would be reduced to a level below significant. Implementation of the proposed mitigation measures would ensure compliance with the local policies and ordinance protecting biological resources (BMO and MSCP), and would ensure adequate protection of the impacted habitats and sensitive species such that their populations and distributions would remain at self-sustaining levels.



LEGEND

HABITATS

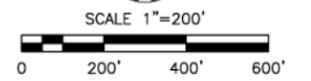
- Coastal Sage Scrub (CSS)(32500)
- ⊙ Disturbed Coastal Sage Scrub (CSSd)(32500)
- ⊙ Developed (DEV)(12000)
- ⊙ Disturbed (DIS)(11300)
- ⊙ Eucalyptus Woodland (EW)(11100)
- ⊙ Non-native Grassland (NNG)(42200)
- ⊙ Southern Willow Scrub (SWS)(63320)

OTHER HABITAT FEATURES

- Wetland Buffer
 - RPO, ACOE Waters of the US, and CDFG Jurisdictional Drainage
- (Rock outcrops occur throughout site, too numerous to map)

SENSITIVE SPECIES

- ◆ Bell's Sage Sparrow (*Amphispiza belli belli*)
 - ◆ California Gnatcatcher - single (*Psaltriparus californicus californicus*)
 - ◆ California Gnatcatcher - pair (*Psaltriparus californicus californicus*)
 - ◆ California Gnatcatcher - family of four (*Psaltriparus californicus californicus*)
 - Coastal Rosy Boa (*Charina trivirgata roseofusca*)
 - × Coast Horned Lizard (*Phrynosoma coronatum*)
 - ▲ Orange-Throated Whiptail (*Cnemidophorus hyperythrus*)
 - ▼ San Diego Black-Tailed Jackrabbit (*Lepus californicus benettii*)
 - × Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)
 - Coast Barrel Cactus - # of plants (*Ferocactus viridescens var. viridescens*)
 - Munz's Sage (# of plants where counted) (*Salvia munzii*)
 - San Diego Goldenstar area - # of plants (*Mulla clevelandii*)
 - Southwestern Spiny Rush - # of plants (in SWS) (*Juncus acutus ssp. leopoldii*)
 - Western Dichondra - # of plants (*Dichondra occidentalis*)
 - Variegated Dudleya cluster - # of plants (*Dudleya variegata*)
 - Variegated Dudleya & Coast Barrel Cactus Cluster - # of each plant
- UNMAPPED SENSITIVE SPECIES**
- Cooper's Hawk - 3 observed over site (*Accipiter cooperii*)
 - Northern Harrier - 2 observed over site (*Circus cyaneus*)
 - Sharp-shinned Hawk - 3 observed over site (*Accipiter striatus*)
 - San Diego Sunflower - common in southern and western CSS (*Viguiera tinctoria*)



Source: REC Environmental



LEGEND

HABITATS

- Coastal Sage Scrub (CSS)(32500)
- Disturbed Coastal Sage Scrub (CSSd)(32500)
- Developed (DEV)(12000)
- Disturbed (DIS)(11300)
- Eucalyptus Woodland (EW)(11100)
- Non-native Grassland (NNG)(42200)
- Southern Willow Scrub (SWS)(63320)

OTHER HABITAT FEATURES

- Wetland Buffer
- RPO, ACOE Waters of the US, and CDFG Jurisdictional Drainage
(Rock outcrops occur throughout site, too numerous to map)

SENSITIVE SPECIES

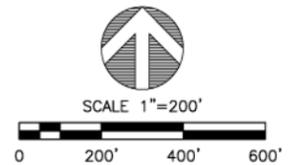
- ◆ Bell's Sage Sparrow (*Amphispiza belli belli*)
- California Gnatcatcher - single (*Palaipolia californica californica*)
- California Gnatcatcher - pair (*Palaipolia californica californica*)
- ◆ California Gnatcatcher - family of four (*Palaipolia californica californica*)
- Coastal Rosy Boa (*Charina trivirgata roseifusca*)
- × Coast Horned Lizard (*Phrynosoma coronatum*)
- ▲ Orange-Throated Whiptail (*Cnemidophorus tigris*)
- ▼ San Diego Black-Tailed Jackrabbit (*Lepus californicus benettii*)
- × Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)
- Coast Barrel Cactus - # of plants (*Ferocactus viridescens var. viridescens*)
- Munz's Sage (# of plants where counted) (*Salvia munzii*)
- San Diego Goldenstar area - # of plants (*Mulla clevelandii*)
- Southwestern Spiny Rush - # of plants (in SWS) (*Juncus acutus ssp. leopoldii*)
- Western Dichondra - # of plants (*Dichondra occidentalis*)
- Variegated Dudleya cluster - # of plants (*Dudleya variegata*)
- Variegated Dudleya & Coast Barrel Cactus Cluster - # of each plant

UNMAPPED SENSITIVE SPECIES

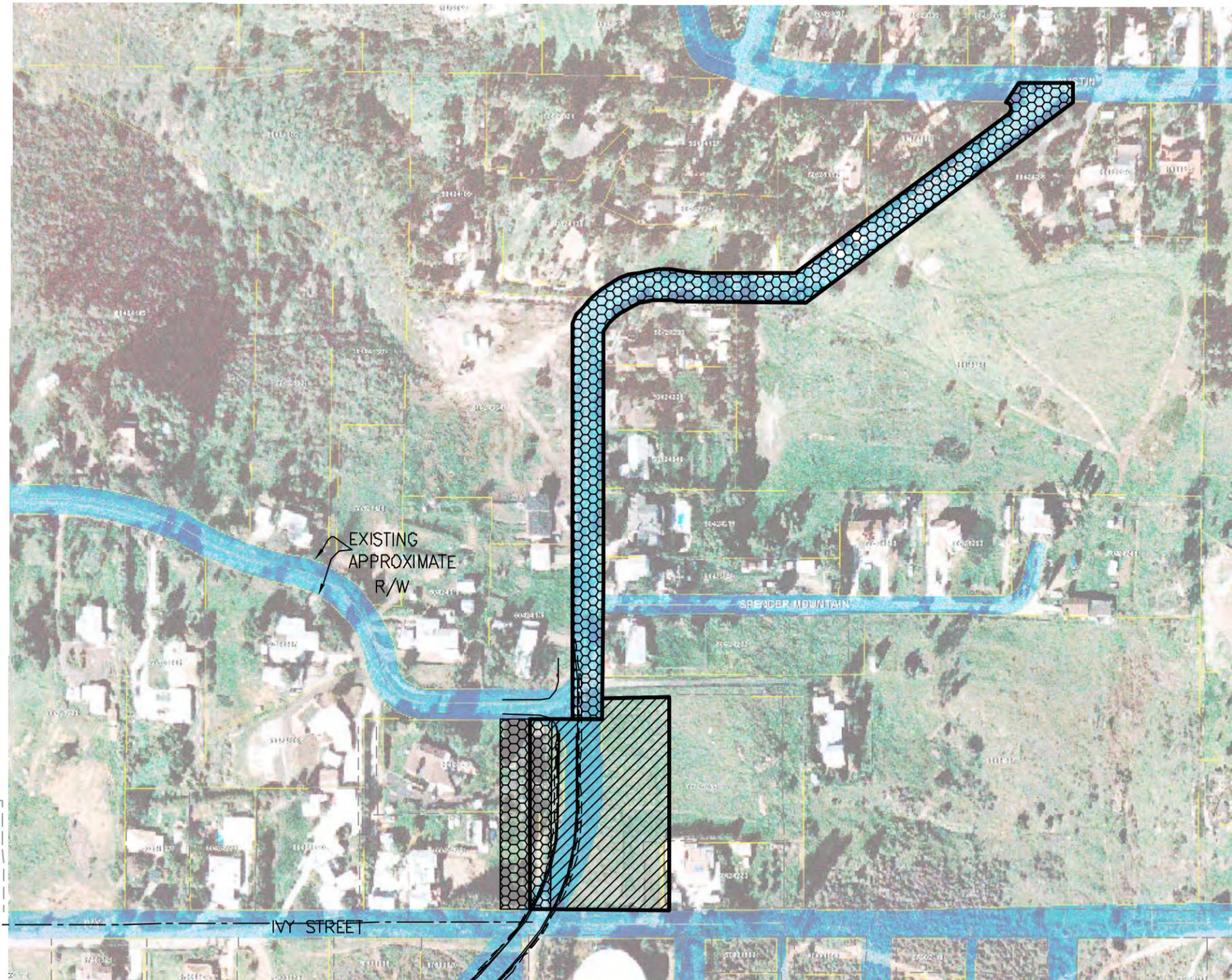
- Cooper's Hawk - 3 observed over site (*Accipiter cooperii*)
- Northern Harrier - 2 observed over site (*Circus cyaneus*)
- Sharp-shinned Hawk - 3 observed over site (*Accipiter striatus*)
- San Diego Sunflower - common in southern and western CSS (*Viguiera fasciata*)

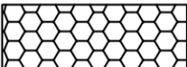
OTHER

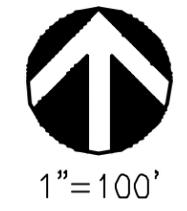
- LIMIT OF IMPACT
- FUEL MODIFICATION ZONE
- COMBINED LIMITED BUILDING ZONE AND FUEL MODIFICATION ZONE
- SUBDIVISION BOUNDARY
- PROPOSED SLOPE
- EXISTING CONTOUR
- STORM DRAIN STRUCTURE
- GRAVITY SEWER
- SEWER FORCE MAIN
- WATER
- DAYLIGHT CUT OR FILL
- RIPRAP ENERGY DISSIPATOR



Source: REC Environmental



-  STUDY AREA
-  NON-NATIVE GRASSLAND
-  URBAN/DEVELOPED



Source: REC Environmental