## 3.1.3 Biological Resources

This section identifies the existing biological resources on the project site and surrounding area. General mitigation measures for potential impacts to sensitive resources are also identified. The Biological Resources Technical Study (2010) and the Wetland Survey (2009) were prepared by Vincent N. Scheidt and are included in Appendices F.1 and F.2 of the Draft Environmental Impact Report (EIR). The analysis follows the *County of San Diego Guidelines for Determining Significance* and the *Report Format Requirements for Biological Resources* (June 2009).

### *3.1.3.1 Existing Conditions*

The project site was surveyed on foot and all plants, animals, and habitats encountered were identified in the field study. A directed Stephen's Kangaroo Rat Habitat Evaluation was completed, as were directed searches for other sensitive species known from the vicinity. Drainage areas were examined for the presence of Resource Protection Ordinance (RPO) and jurisdictional United States Army Corp of Engineers (USACE), California Department of Fish and Game (CDFG), Regional Water Quality Control Board (RWQCB) wetland indicators, and all on-site vegetation and adjoining off-site vegetation was mapped. All plant and animal species observed on-site are listed in Tables 3.1.3-1 and 3.1.3-2.

The following discussion summarizes the applicable regulations and existing biological resources on-site, including vegetation and wildlife, and then discusses those biological resources which are considered to be "sensitive resources" under appropriate regulations (sensitive habitats, plants, and animals).

Applicable Resource Conservation Plans and Ordinances

The following regulations define and provide protection to certain types of sensitive biological resources, as follows:

***Resource Protection Ordinance (RPO).*** The purpose of the RPO is to protect sensitive resources and prevent their degradation and loss. The sensitive resources protected by the RPO include wetlands, wetland buffer areas, sensitive habitat lands, and unique vegetation communities, which are defined as follows:

Lands having one or more of the following attributes are defined as "wetlands":

- At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
- The substratum is predominantly undrained hydric soils; or
- An ephemeral or perennial stream is present, whose substratum is predominately non-soil, and such lands contribute to the biological functions or values of wetlands in the drainage system.

"Wetland buffer" areas include lands that provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community. Buffer widths shall be 50 to 200 feet from the edge of the wetland, as appropriate, based on above factors. Where oak woodland occurs adjacent to the wetland, the wetland buffer shall include the entirety of the oak habitat (not to exceed 200 feet in width).

> "Sensitive habitat lands" include those that support unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants, including the area which is necessary to support a viable population of any of these species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning corridor.
>
> "Unique vegetation community" refers to associations of plant species which are rare or substantially depleted. These may contain rare or endangered species, but other species may be included because they are unusual or limited due to a number of factors, including: (a) they are only found in the San Diego region; (b) they are a local representative of a species or association of species not generally found in San Diego County; or (c) they are outstanding examples of the community type as identified in the CDFG listing of community associations.

***Natural Community Conservation Program (NCCP).*** The project is located within the Southern California Coastal Sage Scrub NCCP area which was designed because many species that are listed as sensitive, threatened, or endangered by federal and state resource agencies are associated with coastal sage scrub. This program enables jurisdictions, through agreements with the state and federal agencies, to benefit from interim take provisions established in the USFWS Special Rule [4(d) Rule]. The interim take refers to the authorization for removal of coastal sage scrub and/or any incidental impacts to target species during the time that a jurisdiction, such as the County of San Diego, prepares a Subregional NCCP. The County already has a Subregional and Subarea NCCP (the Multiple Species Conservation Program) covering some of the unincorporated lands. The County is currently working on draft proposals for two additional Subregional Plans, one in North County and one in East County. Until such time as plans are approved for those areas, the County must follow the Coastal Sage Scrub NCCP Process Guidelines (November 1993). Section 3.a of the Conservation Guidelines states:

> "During the interim period, subregional and subarea planning should strive to protect areas of higher long-term conservation value—defined by extent of coastal sage scrub habitat, proximity of that habitat to other habitat, value as landscape linkages or corridors, or presence of target species or other species of concern—until a subregional plan can be put in place. Development pressure should be directed toward areas that have lower long-term conservation value. Such habitat areas are smaller in extent, are more isolated, have limited value as landscape linkages, and support comparatively fewer individuals of target species. Planning should ensure that all interim habitat losses are adequately mitigated and should contribute to the interim subregional mitigation program that will be subsumed in the long-term subregional NCCP as specified in the Process Guidelines."

This project does **not affect coastal sage scrub** and will not affect biological resources in areas mapped as "high value" or "very high value" on the habitat evaluation model, therefore, development of the project site is considered to be in conformance with the NCCP.

As a part of the NCCP, a draft North County Multiple Species Conservation Plan (NCMSCP) has been submitted to USFWS and CDFG in support of applications for permits and authorizations for incidental "take" of listed, threatened or endangered species or other species of concern (County of San Diego 2008). The NCMSCP is under development and has not been approved at this time. The NCMSCP is being created as a practical, science-based conservation approach to protect and contribute to the recovery of sensitive species within the planning area, while providing for continued economic growth and prosperity for land owners, agricultural operators, businesses, and residents. The NCMSCP will serve as a multiple species Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act (ESA), as well as satisfying the NCCP for that area. Development of the project

site is consistent with the draft NCMSCP because it is not proposed pre-approved mitigation area (PAMA).

***Bonsall Community Plan.*** The Bonsall Community Plan includes goals and policies that address biological resources. The applicable policies are presented in Table 3.1.3-3.

Vegetation

The biological resources on-site include four habitat types: orchards and vineyards, southern coast live oak riparian forest, disturbed habitat, and urban/developed areas. Figures 3.1.3-1a and 3.1.3-1b depict the vegetation types and distribution on the project site.

Orchards and Vineyards

The majority of the project property (90.9 acres) supports an active orchard. This active orchard represents 98 percent of the 92.8-acre site. This habitat is indicated by avocado, orange, and lemon groves, with occasional orchard weeds such as scarlet pimpernel, common horseweed, Russian thistle and sow thistle in the understory beneath the trees. A small amount of non-native grassland mapped on the site in 2001 was subsequently replaced with agricultural products consisting of lime and avocado trees and ornamental flowers.

*Disturbed Habitat*

A disturbed drainage (Drainage 1) traverses the southwestern portion of the project site within a portion of proposed Lots 1 through 5 (1.85 acres) (Figure 3.1.3-1a). Weedy, upland species are the dominant cover and include ripgut brome, perennial mustard, tree tobacco, Indian fig, curly dock, bristly ox-tongue, and wild radish. Facultative hydrophytic species, such as sedge and curly dock were occasionally observed in this area, but not to the extent that they would qualify this agricultural drainage as a wetland. The central portion of the drainage supports a few scrubby southwestern willows. However, these trees do not constitute a discrete habitat type and are considered part of the disturbed habitat for analysis purposes.

The majority of this drainage does not support a bed and bank, ordinary high water mark (OHWM), hydric soils, or hydrophytic vegetation. Species within the disturbed drainage area include wild heliotrope, California dock, sedge, and other low-growing species.

*Urban/Developed*

Developed areas are present on-site in the form of roads, and off-site in several areas surrounding the property. Two paved roads surround the property boundary. Via Ararat forms the western property boundary near proposed Lots 6, 7 and 8, and Mount Ararat forms the southern boundary near proposed Lots 1, 5, and 6.

*Wetlands Survey*

A wetland survey of the project site was completed by Vincent Scheidt (2009).The wetland survey is attached as Appendix F2 to this Draft EIR. This wetland survey established that the project site does not contain any County RPO wetlands or any USACE wetlands.

*On-Site*

A natural drainage just touches the northeastern corner of proposed Lot 16 and continues off-site to parallel the northern and eastern property boundaries for a short distance. The on-site portion of the drainage consists of a shallow, low-lying area that supports a variety of mostly upland weeds and is about 0.2 acre in size. This area is being maintained as part of the agriculture that is present directly to the west in the form of a stand of silver dollar gum trees. During the 2009 field visit, a leaking irrigation pipe was observed in this area, which explains some of the vegetation observed. This low-lying area does not exhibit signs of bed and bank or OHWM and it is not dominated by hydrophytic vegetation. The on-site portion of the drainage is not RPO or USACE wetland. It is considered a portion of the CDFG streambed.

*Off-Site*

Off-site to the north and east of Lot 16, the off-site drainage is vegetated with southern coast live oak riparian forest. Indicators in this habitat type include mature coast live oaks, arroyo willows over an understory of desert grape and others. This section of the off-site drainage that supports southern coast live oak riparian forest also supports an incised channel that is approximately 6 feet wide. The floodway of this drainage is located off-site and does not extend into the project site. The off-site portion of the drainage is RPO and USACE wetland, and CDFG streambed.

Plants

A total of 73 species of plants were detected in association with the project site (Table 3.1.3-1). These represent species common in this part of San Diego County, and most are associated with disturbed areas, or groves. All of the plants detected on the property are locally-common species, and no federal- or state-listed endangered, threatened, or sensitive species or endemic species were identified on this site during any of the field surveys.

Wildlife

A total of 12 animal species were detected in association with the project site. A complete list of wildlife associated with the project site is presented in Table 3.1.3-2. These represent species common in this part of San Diego County and most are associated with disturbed areas or groves. All the animals detected on the property are locally-common species, and no federal- or state-listed endangered, threatened, or sensitive species or endemic species were identified on the project site during any of the site visits. One wide-ranging sensitive species, turkey vulture, was detected flying over the site. No turkey vultures were found on-site. Additionally, a survey for Stephen's kangaroo rat was conducted for the project. The survey did not identify any Stephen's kangaroo rat on-site.

Sensitive Resources

Sensitive or special-interest plant and wildlife species are those habitats which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive habitats, as identified by these same groups, are those which generally support plant or wildlife species considered sensitive by these resource protection agencies or groups. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by nonnative species, or a combination of all of these factors. Sources used for the determination of sensitive biological resources

include: U.S. Fish and Wildlife Service (USFWS) (USFWS 2001); CDFG (CDFG 1999a, 1999b, 2000, and 2001); and California Native Plant Society (CNPS) (CNPS 2001).

Sensitive Habitats

None of the plant communities found on the project site are considered sensitive in the County pursuant to the *Guidelines for Determining Significance–Biological Resources* (June 2009).

Sensitive Plant Species

Sensitive or special-interest plant species are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive plant species are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. A complete list of sensitive plant species known to occur in the general vicinity of this property are listed in Table 3.1.3-4. As shown, the sensitive plant species known to occur in the general vicinity have a low potential to occur on the project property.

No rare, threatened, endangered, or sensitive plants were detected on the project site. Given the existing agricultural operations conducted on 90.9 acres of the 92.8 project site and the disturbed habitat on the balance of the site, none are anticipated.

Sensitive Wildlife Species

A complete list of sensitive wildlife species that have the potential to occur in the project vicinity is presented in Table 3.1.3-5.

Fifty wildlife sensitive species known to occur in the project area have the potential within the project site. Of the 50 species with the potential to occur, only 25 have a moderate potential to occur on-site, with only the turkey vulture observed. The 25 species with a moderate potential to occur on-site are: monarch butterfly, coastal western whiptail, silvery legless lizard, San Diego ringneck snake, two strip garter snake, Yuma myotis, small-footed myotis, Townsend's big-eared bat, pallid bat, pocketed free-tailed bat, big free-tailed bat, greater western mastiff bat, western red bat, San Diego black-tailed jackrabbit, Dulzura California pocket mouse, sharp-shinned hawk, grasshopper sparrow, great blue heron, red-shouldered hawk, black-shouldered kit, horned lark, yellow-breasted chat, loggerhead shrike, western bluebird, common barn-owl.

The two-stripe garter snake, common barn-owl, Townsend's big-eared bat, San Diego black-tailed jackrabbit are all listed as Federal Species of Concern and California Special Concern Species. The grasshopper sparrow is listed as Federal Species of Concern. The pallid bat is listed as a California Species of Special Concern. The one observed species, turkey vulture, is listed a County Sensitive Species.

Turkey Vulture

A single mature turkey vulture was observed flying across the edge of the property during the site survey. Nesting habitat was not present on-site or nearby, nor does the site constitute a significant foraging or roosting area for this large bird. This distinctive species remains common in San Diego County, particularly in agricultural areas, where the birds gather to feed on dead animals. Turkey vulture is federally-protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty

Act (MBTA). This species is of some interest in San Diego County, as numbers decline as a result of the conversion from an agrarian to an urban society.

Stephen's Kangaroo Rat Habitat Evaluation

Stephen's kangaroo rat is a state- and federally-listed threatened species, subject to protection under both the federal and state Endangered Species Acts. Due to the historical presence of non-native grassland on the project site, a Stephen's kangaroo rat survey was conducted. Surveying for this completely nocturnal species involved searching the site for characteristic scats, diggings, and burrows. This was completed as a part of the baseline biology survey of the property. Numerous California ground squirrel and Valley pocket gopher burrows were seen, and other small rodents probably occur on-site. However, no signs of any Stephen's kangaroo rat individuals were detected. Because no individuals were detected at the time of survey, the likelihood that Stephen's kangaroo rat is a resident species is considered extremely low and recruitment is considered unlikely. Given the surrounding land use (orchards) and distance to known species populations, the project site is considered unoccupied by Stephen's kangaroo rat.

Wildlife Corridors

No regional wildlife corridors are located on-site (Scheidt 2010). However, the canopy of the off-site southern coast live oak riparian forest qualifies as a local wildlife corridor, and this corridor crosses the northeastern corner of proposed Lot 16, although the southern coast live oak riparian forest is located off-site. This canopy is used by avifauna and possibly other wildlife. Also, some wildlife uses the understory of the groves to move between open areas.

### *3.1.3.2 Analysis of Project Effects and Determination of Significance*

Guidelines for the Determination of Significance

For the purposes of this EIR, a significant impact to sensitive species would occur as a result of project implementation if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on a candidate, sensitive, or special status species listed in local or regional plans, policies, or regulations, or by the CDFG or USFWS.

2. Have a substantial adverse effect on any riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means.

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional or state habitat conservation plan.

6. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

Rationale for Selection of Guidelines

The aforementioned significance criteria are based upon Appendix G of the State *CEQA Guidelines*, County regulations, state and federal laws and regulations, and other County guidance, as described below.

Guideline No. 1 addresses the loss of animal or plant species listed as federally or state endangered or threatened, Species of Special Concern, or listed as County Sensitive. Such impacts are discussed in State *CEQA Guidelines* Appendix G.

The USACE and CDFG regulate impacts to wetlands, as addressed in Guideline Nos. 2 and 3.

Guideline No. 4 is intended to protect such areas due to their critical role in species survival and incorporate use of the site-specific factors, pursuant to the principals established by the conservation biology community. *CEQA Guidelines* Appendix G indicates that a project could have a significant impact if it would "interfere substantially with the movements of any native resident, or migratory fish or wildlife species or with established native resident or migratory wildlife corridors."

Guideline No. 5 is intended to address applicable goals and requirements under an applicable HCP. In the case of this project, the applicable HCP is the MSCP,

Guideline No. 6 is intended to protect both the function and value of habitat from project-related development, as well as maintain a high species diversity and/or abundance within provided open space area.

Analysis (Guideline 1 – Sensitive Species)

Plants

Based upon multiple field surveys of the project site, no sensitive or protected plant species were observed on the project site. Additionally, sensitive plant species known to occur in the project vicinity are considered to have a low potential to occur on-site. Therefore, implementation of the project does not have the potential to impact any sensitive or protected plant species.

Wildlife

One sensitive animal species, the turkey vulture, was observed flying adjacent to the project site. No turkey vultures were identified on the project site. Nesting habitat for the turkey vulture is not present on-site or nearby and the project site does not constitute a significant foraging or roosting area for this large bird and, therefore, implementation of the project would have a less than significant impact on turkey vulture.

The southern coast live oak riparian forest located off-site of the northern corner of Lot 16 could support sensitive species and/or provide areas for raptor nesting and foraging. However, the project has been designed to avoid impacts to this off-site area.

Lot 16 includes a minimum 100-foot Agricultural Open Space easement which is currently tree crop agriculture. This easement is approximately 150 feet away from the off-site oak riparian forest habitat. Therefore, in addition to prohibiting structures that would require fuel management, an adequate wetland buffer is included within the ongoing agricultural activities. This provides enough distance to reduce most noise impacts that would arise from construction on this lot. However, in an abundance of caution, grading activities on Lot 16 will be assessed for potential to impact sensitive riparian bird breeding should sensitive birds be present. Therefore, as part of the design features for the project (Table 1-1), site brushing, grading, and/or the removal of vegetation on Lot 16 from 1 January to 31 August will require a pre-construction nesting survey to preclude sensitive nesting birds in the adjacent riparian areas. If the pre-construction survey indicates the presence of sensitive birds, then a noise report shall be prepared and submitted to the County and shall include measures to reduce noise during construction in the occupied habitat to maintain noise at or below the standard noise levels of 60 dB(A), or the noise producing construction activities shall be prohibited until after the breeding season.

In summary, implementation of the project will not result in any direct or indirect impact to sensitive or protected species or habitat.

Analysis (Guideline 2 – Riparian Habitats and Sensitive Natural Communities)

Based upon the field survey, no riparian or other sensitive natural communities were observed on-site. Furthermore, the project has been designed to avoid impacts to southern coast live oak riparian forest located off-site to the northeast of proposed Lot 16. This area will be protected from off-site fire clearing by a dedicated Agricultural Open Space easement, to extend no less than 100 feet inwards from the property boundary in the vicinity of the off-site southern coast live oak riparian forest. The Agricultural Open Space easement will prohibit the construction of any habitable structures that might require off-site fire clearing into the southern coast live oak riparian forest. The project also includes the implementation of all necessary BMPs, both during and post construction, in order to preclude potential indirect impacts to the southern coast live oak riparian forest caused by grading and home occupation. Therefore, the project as designed will not impact riparian habitats or sensitive natural communities and no mitigation is required.

Implementation of the Fire Protection Plan (Firewise 2010) will require approximately 0.6-acre of off-site clearing adjacent to proposed Lots 20 and 21. A 60-foot easement for fire clearing is proposed to ensure these off-site areas are maintained. Vegetation within these off-site areas is agricultural and as of October 2009 is planted with young citrus trees (blood oranges). This vegetation is not considered sensitive (Pardee 2009 and Scheidt 2009c). Thus, thinning per the requirements of the Fire Protection Plan would not be a significant impact.

Analysis (Guideline 3 – Protected Wetlands)

The project site does not support any federally protected wetlands, as defined by Section 404 of the Clean Water Act (CWA) or any County RPO wetlands. Furthermore, the project as designed places the state and federal “waters” on-site within the Agricultural Open Space easement, where they will not be impacted by grading, home construction, or the placement of fill or any other material. Therefore, the project as designed will not impact federal wetlands or state and federal “waters.”

Analysis (Guideline 4 – Wildlife Corridors)

As discussed above, regional wildlife corridors are not present on-site. However, the northeastern corner of proposed Lot 16 is part of a local wildlife corridor associated with the off-site southern coast live oak riparian forest. This local wildlife corridor connects on-site and off-site areas and is used by birds and possibly other wildlife. Also, some wildlife uses the understory of the groves to move between open areas. The majority of the local wildlife corridor associated with the southern coast live oak riparian forest is actually off-site and will not be impacted by the project. The on-site portion of the corridor will be minimally impacted by the project, as it will be placed within an Agricultural Open Space easement that will prohibit the construction of habitable structures in this area. Therefore, the function of this habitat as a local wildlife corridor will be preserved by the project as designed. In addition to the agriculture maintained within the Agricultural Open Space easement, an additional 35.9 acres of agriculture is anticipated to remain on the project site within future home lots. Therefore, direct project impacts to wildlife corridors will be less than significant. Indirect impact to wildlife corridors are also expected to be less than significant, as residential lots will be set back a minimum of 100 feet from the drainage on the site through implementation of the Agricultural Open Space easement. This would provide an adequate buffer from noise and light associated with the future residential uses. Therefore, indirect impacts would be less than significant.

Analysis (Guideline 5 – Applicable Plans and Policies)

Resource Protection Ordinance

RPO wetlands are not present on-site, although RPO wetlands are present off-site to the northeast, within the adjoining southern coast live oak riparian forest. The project, as designed, will not impact the off-site RPO wetlands, as it includes the dedication of an Agricultural Open Space easement to preclude the need for off-site fire clearing in this area, as well as all BMPs necessary to prevent potential indirect impacts to the off-site wetlands caused by grading and occupation of the new homes. Therefore, the project complies with the RPO, which prohibits impacts to RPO wetlands and wetland buffers, and no impact is identified.

Natural Communities Conservation Planning Act/North County Multiple Species Conservation Program

None of the species identified for protection under the proposed NCMSCP are present on the project site. Additionally, according to the draft NCMSCP Conservation Analysis Map, the project site is not located within a proposed pre-approved mitigation area (PAMA) (County of San Diego 2007b). Therefore, the project would not interfere with the conservation and mitigation strategy of the NCCP or the proposed NCMSCP and no impact is identified.

Because natural vegetation is not present on the project site, the property is not relevant for reserve planning. Therefore, development of the project site is not inconsistent with the Southern California coastal sage scrub NCCP Guidelines, and no impact is identified.

Bonsall Community Plan

An analysis of the project's consistency with the applicable conservation goals and policies of the Bonsall Community Plan is included in Table 3.1.3-3 of the EIR. As shown in Table 3.1.3-3, the project is consistent with the goals and policies that are applicable to the project.

Analysis (Guideline 6 – Reduction of Wildlife Populations)

Implementation of the project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

Turkey vulture is the only sensitive animal species that was detected during project biological surveys, with a single specimen observed flying across the edge of the property. No turkey vultures were found roosting or nesting on the project site during any of the site surveys, nesting habitat for this species is not present on-site or nearby and the site does not constitute a significant foraging or potential roosting area for this large, wide-ranging species. Therefore, the project's impacts to turkey vulture are less than significant. The project's impact to approximately 34.3 acres of orchards and vineyards is not significant because no sensitive plant or animal species are dependent on these habitat-types. Therefore, project impacts to wildlife populations will be less than significant.

### *3.1.3.3 Cumulative Impact Analysis*

Guideline for the Determination of Significance

For the purposes of this EIR, a significant biological resources impact would occur as a result of project implementation if the project would:

- Have impacts that are individually limited, but cumulatively considerable.

The proposed project and the other cumulative projects in this area are subject to a Planning Agreement for the planning and preparation of the North and East MSCPs and to the Southern California Coastal Sage Scrub NCCP. These programs require the County to identify projects that may affect biological resources in areas mapped as "high value" and "very high value" on the habitat evaluation model and make findings demonstrating that connectivity between areas with high habitat values be maintained, that impacts are mitigated and minimized, and that the likelihood of survival and recovery of listed species in the wild are not reduced. Through these programs, potential cumulative impacts to biological resources from adjacency of development are generally less than significant.

Since the project's potential for biological impacts are to agricultural drainages and wildlife movement corridors, the cumulative biological impact analysis focuses on these resource types. A list of projects was assembled by reviewing County files in order to establish a biological resources cumulative study area. The cumulative study area generally includes projects that could impact drainages in the same watershed as the project that are in the project vicinity because these are the areas where wildlife generally migrate and use as movement corridors. Additionally, any cumulative projects in the study area that could impact orchards were identified. Orchards can provide areas for wildlife movements. Based upon these parameters, the following projects are included in the biological resources cumulative analysis: the proposed project (TM 5267), Stehly (Camino Quieto 20799), McNulty Minor Subdivision (TPM 20763), Woodhead (TPM 20541), Dabbs TPM, Pfaff (TPM 21016), Brisa Del Mar (TM 5492), Rawhide Ranch, Dressen (TPM 2072), Mustafa (TPM 20811), Champagne Lakes (ER 70-212-02), Fitzpatrick (TPM 20842), Polo Club (MUP 92-019-M2), Hukari (TPM 20830), Nira Kohl (TPM 20319), and Marquart Ranch (TM 5410). See Figure 1-7 for a location of the cumulative projects.

Wetlands

Table 3.1.3-6 lists the projects that were identified as having the potential to impact wetlands. As noted on Table 3.1.3-6, Stehly (Camino Quieto) does not have a wetland on the project site. The McNulty subdivision supports wetland, but proposes a biological open space easement to avoid any impacts to this resource. The Woodhead project also proposes a biological open space easement to avoid impacts to both drainage and wetland areas on the project site. The Dabbs project site supports non-native grasslands, mixed chaparral, and coastal sage scrub and rare listed plants and does not have potential wetland impacts. Similarly, the Pfaff project does not have any wetland impacts. The Brisa Del Mar project is still under environmental review, and impacts to wetlands may occur. However; mitigation for potential wetlands impacts would occur in a manner to ensure "no net loss" of habitat, since this is mandated by federal and state law, and the County RPO ordinance. The Rawhide Ranch project has mitigated its potential impacts to biological resources to less than significant through the dedication of an on-site biological open space easement and the purchase of credits in the mitigation bank. Southern coast live oak on the Rawhide Ranch site will be protected within a biological open space easement. The Mustafa site supports wetlands; however, they will be protected in a biological open space easement and would not be impacted. The Champagne Lakes project will avoid impacts to on-site wetlands through the dedication of a proposed biological open space easement. Similarly, the Fitzpatrick project will avoid impacts to on-site southern willow scrub through the provision of a biological open space easement and buffer. The Polo Club project results in impacts to 1.6 acres of oak riparian forest, 3.3 acres of southern riparian forest and 1.6 acres of southern willow scrub. However, impacts to these wetland habitats will be reduced to less than significant through both on-site and off-site preservation and the implementation of appropriate habitat creation and restoration plans. Thus, all of the projects considered in the biological resources cumulative analysis will avoid impacts to wetlands by protecting them in an open space easement, or areas that are impacted will be mitigated through a combination of on-site and off-site habitat creation and conservation. Thus, there is no net loss of wetlands and cumulative wetland impacts would not be cumulatively considerable.

Wildlife Movement

Agricultural trees can provide passage for wildlife. Table 3.1.3-7 represents the cumulative projects that will require removal of agricultural trees. Figure 1-7 shows the location of each of these cumulative projects. These project include: Stehly (impact to 11 acres of citrus and avocado); Marquart Ranch (impact to 10 acres of avocado); Dabbs (impact to 9 acres of citrus and row crops); Hukari (impact to 3 acres of avocado trees), Nira Kohl (impact to 4 acres of avocado trees); Woodhead (4 acres of avocado trees); Dressen (2 acres of citrus and avocado); McNulty (2 acres of orchards/vineyards). The proposed project and the cumulative projects are expected to retain the majority of the existing agricultural resources. Therefore, the project will impact 34.3 acres of citrus and avocado trees.

As shown in Table 3.1.3-7, the proposed project, in conjunction with the other cumulative projects that will remove orchards, results in a total loss of up to 73.3 acres of orchards, as well as 150 individual trees. This loss does not represent a significant cumulative impact, since projects in the NCMSCP planning area are required to adopt NCCP findings preserving connectivity between areas of high habitat value. Each of the cumulative projects will retain viable orchards and vineyards on their project site that wildlife will continue to use and extensive agricultural uses will still characterize the cumulative study area. As discussed in Section 2.2.3 of this EIR, planned projects in the 8,000-acre study area will result in the loss of approximately one percent of agricultural uses leaving approximately 7,887 acres of agricultural uses in the study area available for wildlife movements. Therefore, the cumulative projects will not have cumulatively considerable impacts to wildlife movement.

Sensitive Species

The project site and vicinity has only a small potential to impact turkey vulture foraging habitat because the area is primarily planted with tree crops and there are few clearings for foraging. In addition, nesting and roosting habitat are not known to occur on-site or nearby. Therefore, the vicinity does not support locally or regionally significant habitat for this large, wide-ranging species. Other projects in the vicinity with the potential to impact turkey vulture include: McNulty Minor Subdivision, Woodhead, Dabbs, Pfaff, Brisa del Mar, Rawhide Ranch, Mustafa, Fitzpatrick, Polo Club, and Champagne Lakes. However, as discussed above, all of these projects either avoid impacts to sensitive species via the protection of habitats that support sensitive species in biological open space, or include off-site mitigation to reduce impacts to less than significant. Therefore, the cumulative projects will not have cumulatively considerable impact to turkey vultures.

Reduction of Wildlife Populations

The project has the potential to impact the populations of some resident wildlife species. This impact is individually less than significant because no native habitat remains on-site. All of the other projects in the vicinity have reduced their potential to impact wildlife populations since all of these projects either avoid impacts to wildlife populations via the protection of habitats with the potential to support significant wildlife populations in biological open space, or include mitigation to ensure that their impacts will be less than significant. In addition, since these projects are subject to the Planning Agreement for the MSCP Planning Areas and to the NCCP Act, key project areas must be identified and key findings must be made to ensure that cumulative projects will not reduce the likelihood of survival of species in the wild or connectivity between areas with high habitat values. Therefore, the cumulative projects identified here will not have a cumulatively considerable impact on wildlife populations.

### *3.1.3.4 Significance of Impacts Prior to Mitigation*

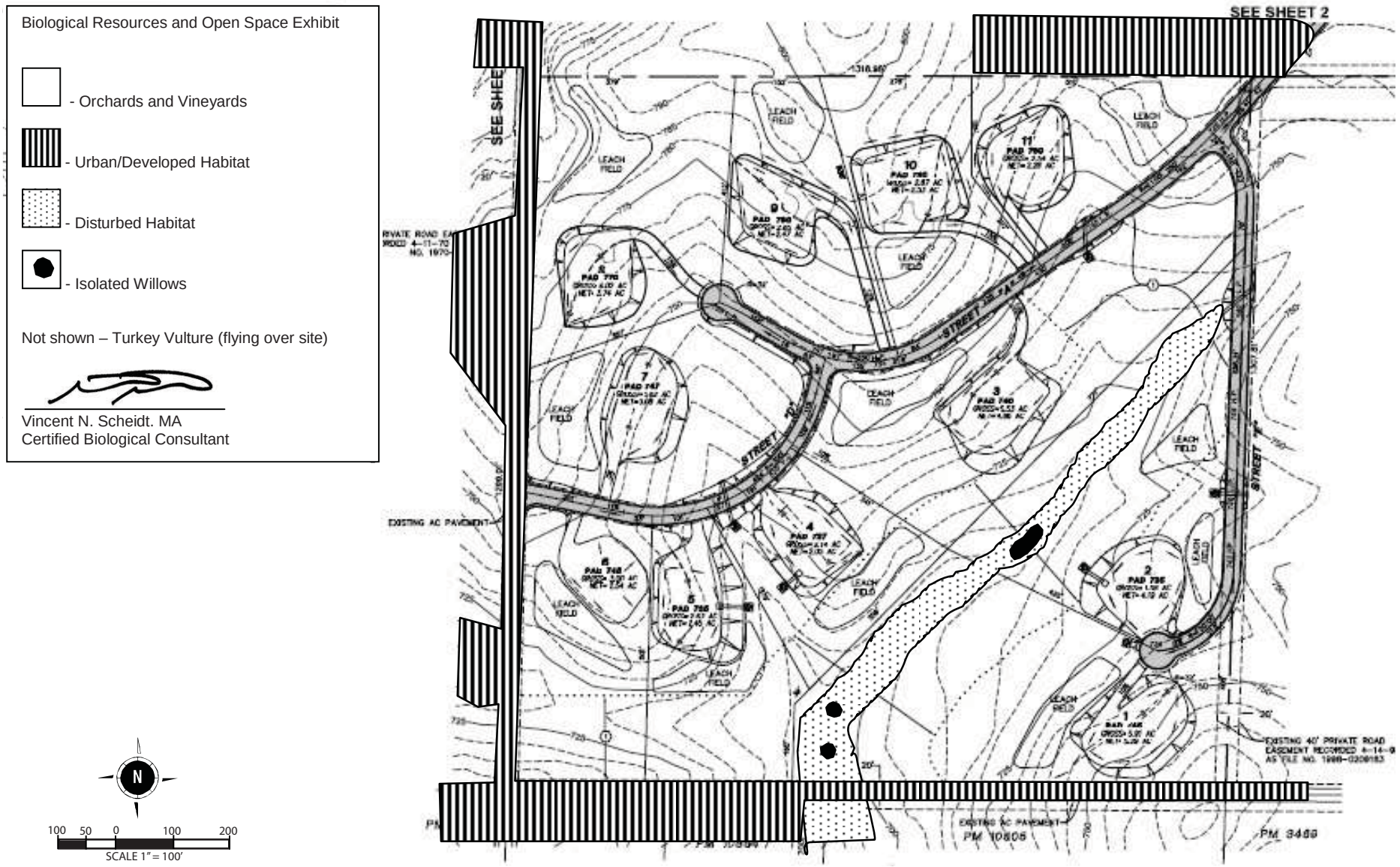
Based upon the analysis presented in Sections 3.13.2 and 3.1.3.3 of the EIR, the project will not result in any significant project- or cumulative-level impacts to biological resources.

Cumulative impacts related to wetlands would be less than significant, since the project considered in the cumulative analysis either avoid impacts to wetlands or have mitigated impacts to a less than significant level. Impacts to orchards, which can provide a place for wildlife passage, would not be considered cumulatively significant since these projects do retain orchards on-site, in spite of the impacts noted.

### *3.1.3.5 Conclusion*

Based upon the analysis presented in Sections 3.1.3.2 and 3.1.3.3 of the EIR, the project has less than significant project- and cumulative-level impacts to biological resources.

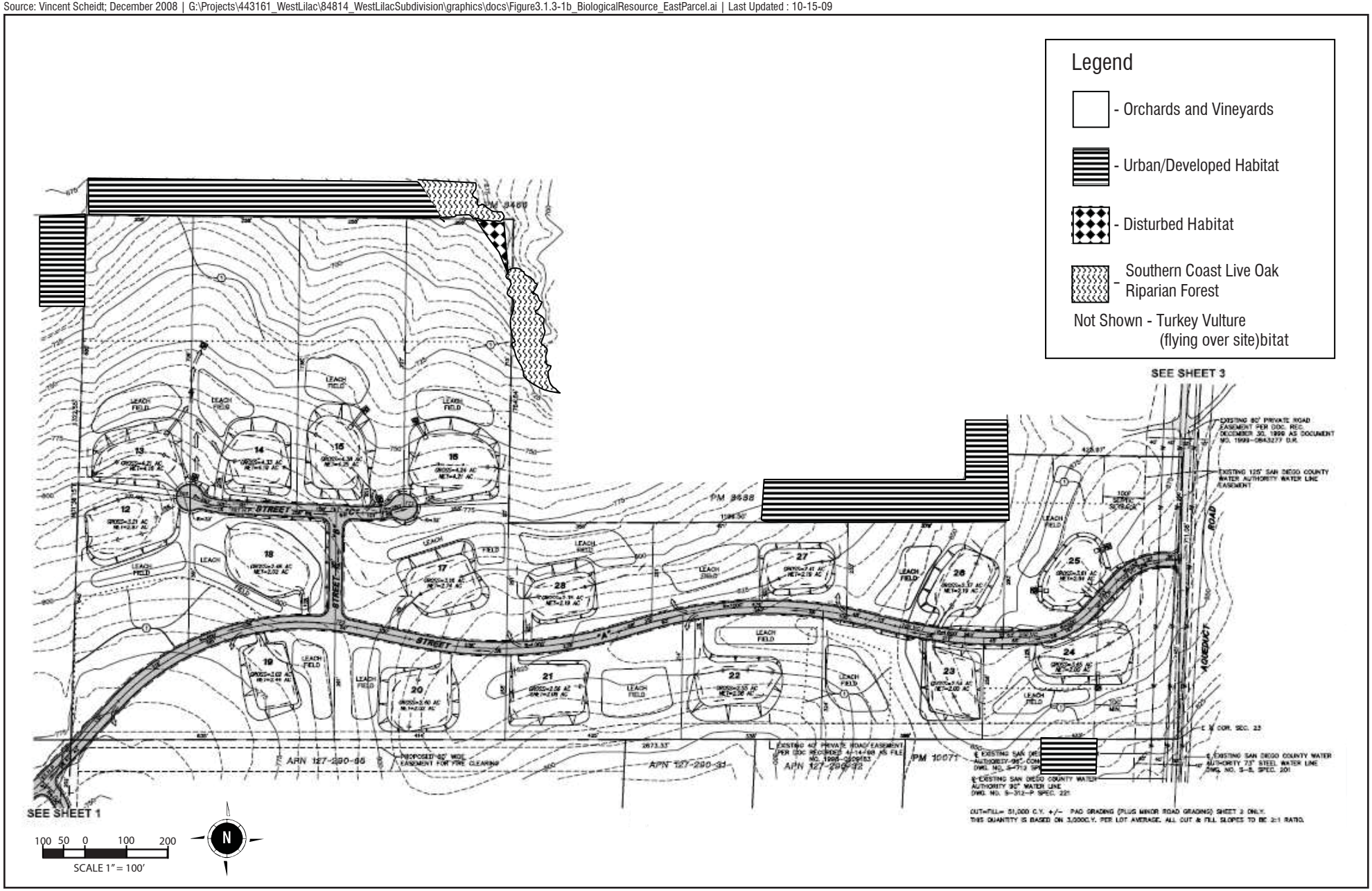
Source: Vincent Scheidt; December 2008 | G:\Projects\443161_WestLilac\84814_WestLilacSubdivision\graphics\docs\Figure3.1.3-1a_BiologicalResources_WestParcel.ai | Last Updated : 10-15-09




# Biological Resources (West Parcel)

**FIGURE 3.1.3-1a**

Source: Vincent Scheidt; December 2008 | G:\Projects\443161_WestLilac\84814_WestLilacSubdivision\graphics\docs\Figure3.1.3-1b_BiologicalResource_EastParcel.ai | Last Updated : 10-15-09




# Biological Resources (East Parcel)

**FIGURE 3.1.3-1b**

**TABLE 3.1.3-1**
**Plant Species Observed on the Project Site**

| | |
|---|---|
| *Acacia dealbata* | Silver Wattle |
| *Aesculus californica* | California Buckeye |
| *Amaranthus albus** | White Tumbleweed |
| *Amaranthus* sp. | Tumbleweed |
| *Anagallis arvensis** | Scarlet Pimpernel |
| *Anigozanthos* sp.* | Kangaroo Pod |
| *Artemisia californica* | California Sagebrush |
| *Baccharis glutinosa* | Mule Fat |
| *Baccharis pilularis* | Coyote Brush |
| *Brachypodium distachyon** | Purple False-brome |
| *Brassica geniculata** | Perennial Mustard |
| *Brassica* sp.* | Mustard |
| *Bromus diandrus** | Ripgut Brome |
| *Bromus mollis** | Soft Brome |
| *Bromus rubens** | Foxtail Brome |
| *Camissonia bistorta* | Southern Sun Cup |
| *Chamaesyce maculate** | Spotted Spurge |
| *Chamaesyce* sp. | Spurge |
| *Chenopodium murale** | Goosefoot |
| *Chloris* sp.* | Chloris |
| *Cirsium vulgare** | Bull Thistle |
| *Citrus limon** | Lemon |
| *Citrus sinensis** | Orange |
| *Citrus* sp.* | Lime |
| *Conyza Canadensis** | Common Horseweed |
| *Cortaderia sp.** | Pampas Grass |
| *Cynodon dactylon** | Bermuda Grass |
| *Cyperus alternifolius** | Umbrella sedge |
| *Cyperus* sp. | Sedge |
| *Epilobium* sp. | Fireweed |
| *Eremocarpus setigerus* | Dove Weed |
| *Eriogonum fasciculatum* | Flat-top Buckwheat |
| *Erodium cicutarium** | Red-stem Stork's-bill |
| *Eucalyptus globulus** | Blue Gum |
| *Festuca megalura** | Foxtail Fescue |
| *Foeniculum vulgare** | Wild Anise |
| *Hedypnois cretica** | Hedypnois |
| *Heliotropium curvassavicum* | Wild Heliotrope |
| *Heterotheca grandiflora** | Telegraph Weed |

| | |
|---|---|
| *Lactuca serriola** | Wild Lettuce |
| *Lantana* sp.* | Lantana |
| *Lonicera subspicata* | Wild Honeysuckle |
| *Lotus scoparius* | Deer weed |
| *Lotus* sp. | Lotus |
| *Malosma laurina* | Laurel Sumac |
| *Malva parviflora** | Cheeseweed |
| *Melilotus albus** | White Sweet Clover |
| *Melilotus indicus** | Indian Sweet Clover |
| *Melilotus* sp.* | Sweet Clover |
| *Mesembryanthemum edule** | Hottentot Fig |
| *Nicotiana glauca** | Tree Tobacco |
| *Opuntia ficus-indica** | Indian Fig |
| *Phalaris* sp.* | Canary Grass |
| *Panicum capillare** | Western Witch Grass |
| *Persea elicate** | Avocado |
| *Picris echioides** | Bristly Ox-tongue |
| *Polygonum arenastrum** | Yard Knotweed |
| *Polypogon monspeliensis** | Rabbitfoot Grass |
| *Protea sp.* | Protea |
| *Quercus agrifolia* | Coast Live Oak |
| *Raphanus sativus** | Wild Radish |
| *Rumex salicifolius* | California Dock |
| *Rumex crispus* | Curly Dock |
| *Salix lasiolepis* | Arroyo Willow |
| *Salix gooddingii* | Southwestern Willow |
| *Salix* sp. | Willow |
| *Salsola pestifer** | Russian Thistle |
| *Solanum americanum* | White Nightshade |
| *Sonchus asper** | Sow Thistle |
| *Sonchus oleraceus** | Sow Thistle |
| *Stephanomeria virgata* | Stephanomeria |
| *Tamarix* sp.* | Salt Cedar |
| *Typha latifolia* | Cattails |

*Denotes non-native species

**TABLE 3.1.3-2**
**Animal Species Observed on the Project Site**

| | |
|---|---|
| **Birds** | |
| *Archilochus anna* | Anna's Hummingbird |
| *Archilochus* sp. | Hummingbird |
| *Carpodacus mexicanus* | Housefinch |
| *Cathartes aura* | Turkey Vulture |
| *Pipilo crissalis* | California Towhee |
| *Sayornis nigricans* | Black Phoebe |
| *Zenaida macroura* | Mourning Dove |
| **Mammals** | |
| *Spermophilus beecheyi* | California Ground Squirrel |
| *Thomomys bottae* | Valley Pocket Gopher |
| **Reptiles** | |
| *Uta stansburiana* | Side-blotched Lizard |
| **Insects** | |
| *Papilio rutulus* | Western Tiger Swallowtail |
| *Pontia protodice* | Common White |

**TABLE 3.1.3-3**
**Consistency with Bonsall Community Plan (Biological Resources)**

| Plan | Goal/Policy | Proposed Project Compatibility |
|---|---|---|
| Bonsall Community Plan Conservation Goal 1 | Promote an ecological approach to the preservation, conservation and management of all natural resources within the Bonsall plan area. | **The proposed project is consistent with this goal.** There are no natural resources on the site. A wetland buffer to an off-site wetland has been provided. |
| Bonsall Community Plan Conservation Policy 3 | Promote types and patterns of development which prevent the destruction of important native plant communities or the habitat of any endangered, threatened or other sensitive species including but not limited to: riparian habitat, coastal sage scrub, oak woodlands. | **The proposed project is consistent with this policy.** There are no natural resources on the site. A wetland buffer to an off-site wetland has been provided. |
| Bonsall Community Plan Floodplains and Watercourses Policy 3 | Provide adequate setbacks from all watercourses and drainages to protect property, improve water quality, provide buffer for riparian habitat and wildlife, and enhance aesthetic quality of the riparian environment. | **The proposed project is consistent with this policy.** The drainage found on the project site is provided an adequate minimum 50-foot setback. Additionally, stormwater management for the project proposes the use of bio-filters to mange project stormwater runoff. |
| Bonsall Community Plan Open Space Policy 2 | Integrate open space dedications in private developments with surrounding uses to maximize a functional open space/recreation and wildlife management system. | **The proposed project is consistent with this policy.** There are no natural resources on the site. An Agricultural Open Space easement for a wetland buffer to an off-site wetland has been provided to protect the existing tree crop agriculture that exists there. |
| Bonsall Community Plan Open Space Policy 3 | Encourage projects to incorporate open space areas as integral parts of project site designs in order to preserve environmental resources, provide recreation for residents, and create buffers to maintain neighborhood identities. | **The proposed project is consistent with this policy.** The project, as designed, places the state and federal waters on-site within an Agricultural Open Space easement, where they will not be impacted by grading, home construction, or the placement of fill or any other material. Existing tree crop agriculture will provide. |
| Bonsall Community Plan Vegetation and Wildlife Goal 2 | Whenever possible, protect all sensitive lands and habitat as identified by federal, state, and county guidelines such as oak and willow riparian, coastal and Diegan sage scrub, native grasslands, and wetlands. | **The proposed project is consistent with this goal.** There are no sensitive lands or habitats on the site. |
| Bonsall Community Plan Vegetation and Wildlife Policy 1 | Preserve the integrity, function and long-term viability of environmentally sensitive habitats within the Bonsall Plan Area by integrating preservation of these | **The proposed project is consistent with this policy.** There are no environmentally sensitive habitats on the site. Therefore, the project does not conflict with Vegetation and Wildlife Policy 1. |

| Plan | Goal/Policy | Proposed Project Compatibility |
|---|---|---|
| | areas into the project design. Special protection shall be afforded oak and willow riparian, other wetland areas, and Coastal and Diegan sage scrub habitats. | |
| Bonsall Community Plan Vegetation and Wildlife Policy 6 | Provide adequate setbacks from all watercourses and drainages to protect property, improve water quality, provide buffer for riparian habitat and wildlife, and enhance aesthetic quality of the riparian environment. | **The proposed project is consistent with this policy.** No riparian habitat is located on the site. A wetland buffer to an off-site wetland has been provided. Wildlife will continue to move through the tree crop agricultural areas. |
| Bonsall Community Plan Vegetation and Wildlife Policy 9 | Encourage the protection of coastal sage scrub, oak woodlands, and riparian habitat and other types of wetlands from loss or modification. Road crossings or other disturbances of riparian habitat or other wetlands should be allowed when: (1) avoidance alternatives have been considered and determined infeasible, (2) all efforts have been made to minimize harm, and (3) mitigation will be provided. | **The proposed project is consistent with this policy.** There are no sensitive habitats on the site. A wetland buffer to an off-site wetland has been provided. |
| Bonsall Community Plan Vegetation and Wildlife Policy 10 | Preserve and encourage wildlife corridors including buffer areas which are essential to the long-term viability of wildlife populations through an open space easement, public acquisition, or other appropriate means. The width of the easement will depend on the type of wildlife using the corridor and the natural topography, plus an appropriate (as determined by a certified wildlife biologist) buffer on either side of the corridor, where feasible. | **The proposed project is consistent with this policy**. The northeastern corner of proposed Lot 16 is part of a local wildlife corridor associated with the off-site southern coast live oak riparian forest. This local wildlife corridor connects on-site and off-site areas and is used by avifauna and other wildlife. Also, some wildlife uses the understory within the groves to move between open areas. The majority of the local wildlife corridor associated with the southern coast live oak riparian forest is actually off-site and will not be impacted by the project as designed. The on-site portion of the corridor will be minimally impacted by the project, as it will be placed within an Agricultural Open Space easement that will prohibit the construction of habitable structures in this area. Therefore, the function of this habitat as a local wildlife corridor will be preserved by the project as designed. |

**TABLE 3.1.3-4**
**Sensitive Plant Species Known to Occur with the Project Vicinity**

| Species | Habitat | Potential to Occur on Project Site |
|---|---|---|
| *Adolphia californica* San Diego adolphia | Coastal Sage Scrub, Grassland | Low* |
| *Brodiaea orcuttii* Orcutt's brodiaea | Grassland, Riparian, Oak Woodland Chamise Chaparral, Vernal Pools | Low* |
| *Clarkia delicata* Campo clarkia | Oak Woodland | Low* |
| *Harpagonella palmeri* Palmer's Grappling Hook | Coastal Sage Scrub, Grassland, Chamise Chaparral | Low* |
| *Ophioglossum californicum* California adder's tongue fern | Mixed Chaparral, Grassland, Vernal Pools | Low* |
| *Piperia cooperi* Cooper's rein orchid | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Montane Meadow, Coastal or Desert Dune | Low* |
| *Pipera litopetala* Narrow-petaled rein orchid | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Montane Meadow, Coastal of Desert Dune | Low* |
| *Quercus engelmannii* Engelmann oak | Riparian, Oak Woodland | Low* |

*The potential is low due to the past removal of native vegetation for orchard growing.

**TABLE 3.1.3-5**
**Sensitive Animal Species Known to Occur with the Project Vicinity**

| Common Name | Scientific Name | Federal/State Status | Habitat | Potential On-Site [1] |
|---|---|---|---|---|
| **INSECTS** | | | | |
| Monarch butterfly | *Danaus plexippus* | | Grassland, Oak Woodland, Montane Meadow | Medium |
| **AMPHIBIANS** | | | | |
| Arroyo toad | *Bufo microscaphus californicus* | Federally Endangered | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Montane Meadow | Low |
| California red-legged frog | *Rana aurora draytoni* | Federally Threatened | Riparian, Freshwater marsh, Montane Meadow, Lakes and Bays | Low |
| **REPTILES** | | | | |
| San Diego banded gecko | *Coleonyx variegates abbottii* | | Coastal Sage Scrub, Grassland, Chamise Chaparral | Low |
| San Diego horned lizard | *Phrynosoma coronatum blainvillei* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Chamise Chaparral, Mixed Conifer | Low |
| Orange-throated whiptail | *Cnemidophorus hyperythrus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Chamise Chaparral | Low |
| Coastal western whiptail | *Cnemidophorus tigris multiscutatus* | | Mixed Chaparral, Oak Woodland, Riparian, Chamise Chaparral | Medium |
| Silvery legless lizard | *Anniella pulchra pulchra* | | Coastal Sage Scrub, Grassland, Riparian, Coastal or Desert Dune | Medium |
| Coastal rosy boa | *Charina trivirgata roseofusca* | | Coastal Sage Scrub, Mixed Chaparral, Oak Woodland, Chamise Chaparral | Low |
| San Diego ringneck snake | *Diadophis punctatus similis* | | Coastal Sage Scrub, Mixed Chaparral, Riparian, Oak Woodlands, Chamise Chaparral, Mixed Conifer, Closed Cone Forest | Medium |
| South Coast garter-snake | *Thamnophis sirtalis ssp.Novum* | | Riparian, Freshwater Marsh | Low |
| Two-stripe garter snake | *Thamnophis hammondii* | | Riparian, Freshwater Marsh | Medium |

| Common Name | Scientific Name | Federal/State Status | Habitat | Potential On-Site [1] |
|---|---|---|---|---|
| **MAMMALS** | | | | |
| Yuma myotis | *Myotis yumanensis* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Freshwater Marsh, Salt or Alkali Marsh, Vernal Pools, Montane Meadow, Lakes and Bays | Medium |
| Small-footed myotis | *Myotis ciliolabrum* | | Mixed Chaparral, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Wash, Montane Meadow | Medium |
| Townsend's big-eared bat | *Corynorhinus townsendii* | | Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Montane Meadow | Medium |
| Pallid bat | *Antrozous pallidus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow | Medium |
| Pocketed free-tailed bat | *Nyctinomops femorosaccus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow, Freshwater Marsh, Salt or Alkali Marsh, Vernal Pools, Lakes and Bays | Medium |
| Big free-tailed bat | *Nyctinomops macrotis* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow, Freshwater Marsh, Salt or Alkali Marsh, Vernal Pools, Lakes and Bays | Medium |
| Greater western mastiff bat | *Eumops perotis californicus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper, Desert Scrub, Desert Wash, Montane Meadow, Freshwater Marsh, Salt or Alkali Marsh, Vernal Pools, Lakes and Bays | Medium |
| Western red bat | *Lasiurus blossevillii* | | Riparian, Oak Woodland, Mixed Conifer, Closed Cone Forest, Montane Meadow | Medium |

| Common Name | Scientific Name | Federal/State Status | Habitat | Potential On-Site [1] |
|---|---|---|---|---|
| San Diego black-tailed jackrabbit | *Lepus californicus bennetti* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest | Medium |
| Dulzura California pocket mouse | *Chaetodipus californicus femoralis* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer | Medium |
| Stephen's kangaroo rat | *Dipodomys stephensi* | Federally Endangered, State Threatened | Coastal Sage Scrub, Grassland | Low |
| San Diego desert woodrat | *Neotoma lepida intermedia* | | Coastal Sage Scrub, Riparian, Oak Woodland, Chamise Chaparral | Low |
| Southern grasshopper mouse | *Onychomys torridus ramona* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Chamise Chaparral | Low |
| American badger | *Taxidea taxus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Pinon- Juniper, Desert Scrub, Desert Wash, Montane Meadow | Low |
| Southern mule deer | *Odocoileus hemionus* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Pinon- Juniper, Desert Scrub, Desert Wash, Montane Meadow, Riparian, Closed Cone Forest | Low |
| **BIRDS** | | | | |
| Cooper's Hawk | *Accipiter cooperi* | | Grassland, Riparian, Oak Woodland | Low |
| Sharp-shinned hawk | *Accipiter striatus* | | Coastal Sage Scrub, Oak Woodland, Mixed Conifer | Medium |
| Grasshopper sparrow | *Ammodramus savannarum* | | Grassland, | Medium |
| Golden Eagle | *Aquila chrysaetos* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest, Pinon-Juniper | Low |
| Great blue heron | *Ardea Herodias* | | Grassland, Freshwater Marsh, Lakes and Bays | Medium |
| Red-shouldered hawk | *Buteo lineatus* | | Riparian, Oak Woodland | Medium |

| Common Name | Scientific Name | Federal/State Status | Habitat | Potential On-Site [1] |
|---|---|---|---|---|
| Turkey vulture | *Cathartes aura* | | Coastal Sage Scrub, Mixed Chaparral, Grassland, Riparian, Oak Woodland, Chamise Chaparral, Mixed Conifer, Closed Cone Forest | Observed |
| Black-shouldered kite | *Elanus caeruleus* | | Grassland, Riparian | Medium |
| Southwestern willow flycatcher | *Empidonax trailii extimus* | Federally Endangered | Riparian | Low |
| Horned lark | *Eremophila alpestris actis* | | Grassland, Montane Meadow | Medium |
| Yellow-breasted chat | *Ictera virens* | | Riparian | Medium |
| Loggerhead shrike | *Lanius ludovicianus* | | Coastal Sage Scrub, Grassland, Riparian, Oak Woodland, Desert Scrub, Desert Wash | Medium |
| Western bluebird | *Sialia mexicana* | | Riparian, Oak Woodland | Medium |
| Common barn-owl | *Tyto alba* | | Riparian, Oak Woodland | Medium |
| Least Bell's vireo | *Vireo bellii pusillus* | Federally Endangered, State Endangered | Riparian | Low |

[1] Probability of Occurrence Codes:

Low - Low Probability rare species in area, and no significant habitat (animals), or distinctive perennial that would not have been missed if present on-site (plants). Most of these species occur on habitat not found on the project site, including vernal pools, native grasslands, mafic soils, etc. Campo Clarkia and Least Bell's Vireo are two examples of species that fit into this category. Both are very rare in San Diego County.

Medium - Moderate Probability; could be expected to occur on-site on at least an occasional basis, based on habitat quality (animals), or could occur onside, but rare, and/or poorly known (plants). Most of these species occur in habitat similar to that found on-site, although they may or may not use the project site. Native bats and uncommon but cryptic reptiles are examples of species that have a moderate probability of occurring on-site.

High - High Probability; certain to occur on-site on a regular basis (animals), but cryptic, or ephemeral species known from the immediate vicinity, but seasonal in occurrence (plants). Most of these species are expected to use the site, but are difficult to reliably detect. Examples include various fossorial reptiles, wide-ranging species, etc.

**TABLE 3.1.3-6**
**Cumulative Projects – Biological Resource Impacts**

| Project | Wetlands | Wildlife Movement |
|---|---|---|
| West Lilac Subdivision (Proposed Project) TM 5276 | An Agricultural Open Space easement will retain wetland buffer and agricultural drainage. | An Agricultural Open Space easement to retain agricultural uses which will also maintain wildlife movement area. |
| Stehly (Caminito Quieto) TPM 20799 | No wetland impacts. | Avocado trees present. |
| McNulty Minor Subdivision TPM 20763 | Project incorporates biological open space easement to avoid impacts to wetland resources. | Same as for wetlands, orchard present. |
| Woodhead TPM 20541 | Project incorporates biological open space easement to avoid impacts to drainage/wetland areas on project site. | Same as for wetlands, avocado trees present. |
| Dabbs TM 5346 | Project site does not support wetlands. | Proposes 4-acre minimum lot size, citrus trees present. The project also proposes biological open space easement to mitigate habitat impacts. Wildlife movement impacts not expected (proximity to I-15). |
| Pfaff TPM 21016 | No wetland impacts. | No wildlife movement impacts. |
| Brisa del Mar TM 5492 | Project may impact 1.7 acres of southern willow riparian woodland. Impact to wetlands requires mitigation with “no net loss” (revegetation) of habitat. | Project is still under environmental review. Findings require wildlife movement connectivity be maintained. |
| Rawhide Ranch MUP 72-618 | Southern coast live oak riparian forest on-site preserved within a biological open space easement | Wildlife corridor maintained. |
| Mustafa TPM 20811 | Southern coast live oak riparian forest on-site preserved within a biological open space easement. | Wildlife corridor maintained. |
| Champagne Lakes MUP 70-212-02 | Wetlands on-site preserved within a biological open space easement. | Wildlife corridor maintained. |
| Fitzpatrick TPM 20842 | Project site contains 0.57 acre of southern willow scrub; however, provision of a biological open space easement and buffer results in avoidance of impacts. | This project is east of I-15 and near Valley Center. Wildlife movement impacts, if they occur, would not be cumulative. |
| Polo Club MUP 92-019-M2 | Impact to 1.6 acres oak riparian forest, 3.3 acres of southern riparian forest and 1.6 acres of southern willow scrub. Impact to wetlands requires mitigation with “no net loss” (revegetation) of habitat. | Project still requires a Habitat Loss Permit for grading. Mitigation to vegetation communities will occur through on-site and off-site preservation and implementation of appropriate habitat restoration plans. Wildlife movement impacts likely. |

**Note:** See Figure 1-7 for a location of the cumulative projects.

**TABLE 3.1.3-7**
**Cumulative Projects with Orchard Impacts (Wildlife Movement)[(1)]**

| Project | Amount/Type of Orchard Impact |
|---|---|
| West Lilac (Proposed Project) | 34.3 acres of citrus and avocado |
| Stehly (Caminito Quieto) | 4 acres of citrus and avocado |
| Marquart Ranch | 9 acres of avocado groves |
| Dabbs | 10 acres of citrus trees and row crops |
| Hukari | 7 acres of avocado trees |
| Nira Kohl | 5 acres of avocado groves |
| Woodhead | 150 individual avocado trees |
| Dressen | 2 acres of citrus and avocado trees. |
| McNulty Minor Subdivision | 2 acres of orchard/vineyard |
| **Total** | **73.3 acres + 150 individual trees** |

**Note:** [(1)] impacts based upon the likely impacts to agriculture, not the expectation that it will be removed.