Appendix D11
Biological Resources Review (PBS&J 2009)



# **Appendices**

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The Planning Center July 2011



February 3, 2009

Montecito Equities, Ltd. c/o Tom Wilkinson 2080 Bristol St., #630 Costa Mesa, CA 92626

Subject: Review and Update of the Biological Resources Associated with the Spring

**Trails Development and Associated Access Roads** 

Dear: Mr. Wilkinson:

PBS&J reviewed the Draft Biological Resources Report for Martin Ranch (2007) and the Spring Trails Habitat Assessment (Access Roads) Report (2008) prepared by Michael Brandman Associates, as well as conducted a site visit, to determine if the information contained within the reports is accurate and up to date.

The Spring Trails project site is a 353-acre property located on the foothills of San Bernardino approximately 1.5 miles due east of the unincorporated community of Devore and the junction of the Interstate 215 (I-215) and Interstate 15 (I-15) freeways (see Exhibit 1). Regional access to the project site is via the I-215 Freeway, exiting at the Palm Avenue interchange. Local access is currently provided by Little League Drive, north to Meyers Road, which is taken west to Martin Ranch Road, then northerly into the project site.

The property is relatively undisturbed and consists of canyons and steep hillsides with gently sloping alluvial benches in between. The east and west fork of Cable Creek flow through the northwest portion of the property. A tributary to Cable Creek cuts across the northern section of the property from east to west. The elevation of the property ranges from 2,062 feet above mean sea level (MSL) in the southern portion of the site to 3,400 feet above MSL in the northern portion.

The San Bernardino National Forest borders the property on north, east and west. Residential development borders the site to the south

The proposed project consists of an approximate 359-lot subdivision including 309 residential lots, open space lots, mini-park sites, water reservoir parcels, private streets, and two access roads to the site.

The Spring Trails site was used for agricultural purposes from the mid-19th Century through 1989. The site has remained fallow since 1989 and is mostly undeveloped. On November 24,

1980, the Panorama fire burned the site, leaving only the mature eucalyptus trees and the vegetation within the canyon areas. In October 2003, the Old Fire swept across the front of the San Bernardino Mountains burning the site's vegetation, except in the northernmost portion of Cable Canyon. Once again the site succumbed to wildfire in 2007 burning these same areas.

This review identified the following sensitive biological resources and/or constraints associated with the development of the Spring Trails project site.

# **Spring Trails Development Site**

#### **Plant Communities**

The project site has recovered dramatically from the various wildfires and again supports a diversity of habitat types as a result of many drainages and varied topographical conditions. Eighteen (18) different plant communities were identified on the project site. These are:

- California walnut woodland (2.1 acres)
- Ceanothus crassifolius chaparral (6.8 acres)
- Chamise chaparral (8.3 acres)
- Canyon live oak woodland (0.5 acre)
- Disturbed (2.5 acres)
- Eucalyptus (5.1 acres)
- Eucalyptus/Non-native grassland (10 acres)
- Eucalyptus/Riversidean sage scrub (3.1 acres)
- Non-native grassland (0.3 acre)
- Northern mixed chaparral (86.3 acres)
- Ornamental (0.7 acre)
- Riversidean sage scrub (165.4 acres)
- Riversidean sage scrub/California walnut woodland (24.3 acres)
- Riversidean sage scrub/Eucalyptus (1.6 acres)
- Southern sycamore-alder riparian woodland (22.4 acres)
- Southern willow scrub (1.2 acres)
- Southern willow scrub/California walnut woodland (7.2 acres)
- Sycamore alluvial woodland (5.2 acres)

The proposed project includes impacts to six sensitive plants communities through the removal of trees and other plants as follows: approximately 1.5 acres of California walnut woodland, 6.9 acres of California walnut woodland/Riversidean sage scrub, 6.5 acres of southern willow scrub/walnut woodland, 2.8 acres of southern sycamore—alder riparian woodland, 1.2 acres of southern willow scrub, and 1.1 acre of sycamore alluvial woodland. In addition, a fuel modification zone would be developed outside of the grading limits for the project site, and will significantly alter sensitive riparian communities. The fuel modification zone ranges from 100 to 300 feet and will impact or eliminate 1.4 acres of California walnut woodland, 13.3 acres of California walnut woodland/Riversidean sage scrub, 3.2 acres of southern willow scrub/walnut woodland, 9.0 acres of southern sycamore—alder riparian woodland, 1.0 acre of southern willow



scrub, and 4.0 acres of sycamore alluvial woodland. The alterations in plant species composition and structure with fuel modification will have significant adverse impacts, without appropriate mitigation, on these sensitive plant communities.

# **Threatened and Endangered Species**

The literature review revealed a total of five threatened/endangered plant species and nine threatened/endangered wildlife species with potential to occur within the vicinity of the project site. Three plants and five wildlife species were determined to have a moderate or higher potential to occur on the project site based on habitat suitability and species requirements.

# Plant species include:

*Nevin's Barberry*. The site contains suitable habitat for the Nevin's barberry within the RSS plant community.

*Slender-horned Spineflower*. There is suitable habitat within Cable Creek Wash and benches with RSS.

*Santa Ana River Woollystar*. There is suitable habitat within Cable Creek Wash and Meyers Creek.

## Wildlife species include:

*Coastal California Gnatcatcher.* The RSS plant community onsite provides suitable foraging and nesting habitat for CAGN.

**Southwestern Willow Flycatcher.** The riparian woodland plant communities in Cable Creek and Meyers Creek provide suitable habitat for willow flycatcher

*Least Bell's Vireo.* The riparian woodland plant communities in Cable Creek and Meyers Creek provide suitable habitat for the least Bell's vireo.

*Mountain Yellow-legged Frog.* The perennial stream in Cable Creek provides suitable habitat for this species.

*Arroyo Southwestern Toad.* The perennial stream in Cable Creek provides suitable habitat for this species.

Although suitable habitat occurs onsite for all of the above listed species, only one species, least Bell's vireo (which was observed in Cable Creek), were found to occupy the site during focused surveys in 2007.

As focused surveys are good for one year, additional focused surveys may be required in 2009.



#### Critical Habitat for SBKR and CAGN

With the 2007 revision of the final Critical Habitat for CAGN, the project site is no longer within a Critical Habitat. The project site is also outside of the revised boundaries of Critical Habitat for SBKR.

#### **Non Listed Sensitive Species**

Of the 8 plant and 38 wildlife non-listed sensitive species with a potential of occur within the project site, 2 plants—Plummer's mariposa lily and Parry's spineflower—have a moderate to high probability of occurring onsite. There are 26 wildlife species with a moderate to high potential to occur onsite. These species are: San Diego horned lizard, two-striped garter snake, San Bernardino ring-neck snake, San Diego banded gecko, California silvery legless lizard coastal western whiptail, rosy boa, coast patch-nosed snake, northern harrier (foraging), golden eagle (foraging), merlin (winter), sharp-shinned hawk, Cooper's hawk, white-tailed kite, ferruginous hawk (winter), Swainson's hawk (foraging), loggerhead shrike, southern California rufous-crowned sparrow, Bell's sage sparrow, yellow warbler, yellow-breasted chat, black-chinned sparrow, northwestern San Diego pocket mouse, Los Angeles pocket mouse, San Diego desert woodrat, and San Diego black-tailed jackrabbit.

These species are not listed as threatened or endangered and any loss of individuals would not threaten the regional populations. Removal of their habitat is an adverse but less than significant impact.

#### **Jurisdictional Waters**

The project site contains several drainages including, Cable Creek and Meyers Creek, and springs as well as two areas of potential wetlands. The drainages range from un-vegetated wash feature to densely vegetated riparian scrub and riparian woodland.

A jurisdictional assessment was completed by MBA (MBA 2007b), which determined that the project would impact non-wetland waters of the U.S. and non-wetland jurisdictional streambeds. Additionally, several areas on site may qualify as wetland waters of the U.S. A formal delineation is being conducted to determine the extent of jurisdictional waters present onsite and the type of wetland permits required.

The total impact area to waters of the U.S. is expected to be greater than 0.5 acre, necessitating the project to apply for an Individual Permit from USACE pursuant to Section 404 of the Clean Water Act. The project would also require a Water Quality Certification from the RWQCB pursuant to Section 401 of the Clean Water Act and a Streambed Alteration Agreement (SAA) from CDFG pursuant to Section 1602 of Fish and Game Code.

#### **Wildlife Movement**

The project site is likely used by wildlife species as a movement corridor. The location of the site adjacent to the San Bernardino National Forest and other undeveloped land, allows easy access



for many large mammal species. There are no physical barriers surrounding the site other than sparse residential development along the lower western and southern edge of the site. Adjacent properties to the east, north, and west are part of the much larger natural open space of the National Forest and mostly undeveloped. This expanse of undisturbed open space surrounding much of the site is conducive to wildlife traveling throughout the study area. During the 2007 surveys, large numbers of mule deer (up to 10) were often observed foraging within the central portion of the site.

The canyons and drainages found at the western and eastern ends of the project site function as corridors for wildlife movement. A drainage associated with Meyers Creek runs parallel along the eastern border then turns to cross the center point of the southern border. Another drainage crosses the tip of the southeast corner of the site, and an alluvial wash crosses the site in a southwesterly direction before eventually merging with Cable Creek Wash. The most valuable wildlife movement corridor onsite, however, is Cable Canyon along the westerly boundary of the site. This canyon begins off-site above the northwest portion of the site as the east and west forks of Cable Creek merge and eventually turn west and off the project site toward the community of Devore. Cable canyon is wider than the others, has a year-round flowing creek, offers extensive cover and foraging habitat, and provides a link between higher and lower elevation communities. Each of these features provides a linear passageway across the site.

Development of the project site would result in a significant impact to regional wildlife movement, particularly species traveling east-west across the foothills of the San Bernardino Mountains. The project would adversely impact species' ability to access the various canyons of the south-southwest facing San Bernardino Mountains. The topography of these canyons becomes increasingly steep with increases in elevation. If species are unable or less willing to traverse these steep canyons, it would be expected that over time there would be a decrease in movement. Decreases in the ability of a species to move can alter ecosystem functions, such as recolonization, gene flow, and seed dispersal, which can ultimately lead to local extinctions.

On a local level, the project description includes the crossing of drainage features most of which would be conserved. Some of the crossings will be at grade. Where a bridge and/or culvert is proposed these features could inhibit the likelihood for wildlife to cross, and would be considered a significant impact to wildlife corridors unless properly designed. Due to their small width (i.e., high edge to area ratio), they are not expected to facilitate movement of large mammal species. To facilitate movement of smaller species, such as amphibians, weasels, and badger, and perhaps some larger ones, the crossings of the drainages shall be designed for wildlife movement friendly features.

# Wildlife Nursery Site

The project site has been confirmed to provide fawning habitat for mule deer. Five does with at least four fawns were observed during site visits in early June, 2007. Because mule deer birth in May and June (Jameson and Peters 2004), and are typically concealed in the same location for approximately 4 weeks (Whititaker 1980), it is likely that these fawns were born onsite. In addition, up to 10 female deer have been observed on the site during surveys in April and May,



2007. The project site is likely serving as a nursing area for several reasons: the presence of flat terrain, foraging habitat, cover habitat, and a year-round freshwater source. Fawning habitat plays a key role in the life history of mule deer. For example, females select particular habitats to accommodate the higher physiological demands of pregnancy and lactation. In addition, selection of suitable cover habitat determines the success of the breeding season, as predation accounts for the majority of fawn mortality during the first 45 days of life (Fox and Krausman 1994). Once the fawns are lost or reared, the females typically return to their previous ranges. The number of female deer observed onsite indicates they are using group predator defense (Griffith 1988) as a mechanism that increases productivity.

The project will adversely and significantly modify the onsite fawning habitat. Female mule deer select particular habitat qualities that can accommodate the higher energy demands of pregnancy and lactation, and that provide cover and foraging for fawns. Project development will remove fawning and fawn rearing habitat for mule deer.

### **Nesting Birds**

The project site contains a variety of nesting habitats for many avian species. Under Sections 3503 and 3503.5 of the California Fish and Game Code (Code) and the federal Migratory Bird Treat Act (MBTA), it is unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any bird species. Disturbance of any active bird nest during the breeding season, including active owl burrows, would be prohibited by law. Breeding season typically runs from March through late August. Disturbing or destroying active nests is a violation of the MBTA.

The proposed project could have a significant adverse impact on nesting birds. The Code and the MBTA protect nesting birds. During rough grading of the project site, nesting birds have the potential to be adversely and significantly impacted if grading occurs during nesting season.

#### **Raptor Foraging Habitat**

The project site provides some raptor foraging habitat. The site has been shown to support foraging habitat for the Swainson's hawk and sharp-shinned hawk. Both species are protected by CDFG; the Swainson's hawk as threatened and the sharp-shinned hawk as sensitive. Other non-sensitive raptor species observed on the project site include great-horned owl, turkey vulture, red-tailed hawk, red-shouldered hawk and American kestrel.

Development of the proposed project will impact raptor foraging habitat. Although the project site may provide occasional foraging for year-round residents, it does not appear to be frequented for long periods of time by wintering raptor species. The project site lacks expansive grassland habitat and is dominated by dense Riversidean sage scrub and chaparral. These habitats do not provide ideal conditions for foraging raptors due to the lack of prey visibility. Therefore, impacts to raptor foraging habitat are considered less than significant.



# **Edge Effects**

The project site is adjacent to and abuts the boundary of the San Bernardino National Forest. Development of the site will create an edge effect to the natural habitats within the forest.

When an edge is created to any natural ecosystem, and the area outside the boundary is a disturbed or unnatural system, the natural ecosystem is seriously affected for some distance in from the edge. In the case of a forest where the adjacent land has been cut, creating an open/forest boundary, sunlight and wind penetrate to a much greater extent, drying out the interior of the forest close to the edge and encouraging growth of opportunistic species at the edge.

# **Spring Trails Primary and Secondary Access Roads**

The following are biological resources and/or constraints associated with development of the Spring Trails Primary and Secondary Access Roads.

#### **Sensitive Plant Communities**

The proposed access roads alignments contain a diversity of plant communities that provide habitat for many plant and wildlife species. These are:

- Nonnative grassland (26.5 acres in secondary access road)
- Eucalyptus woodland (2.1 acres in secondary access road)
- Developed (17.7 acres in secondary access road)
- Riversidean Sage Scrub (19.4 acres in primary access road and 1.3 acres in secondary access road)
- Riversidean Alluvial Fan Sage Scrub (7.5 acres in secondary access road)
- Ruderal (3.4 acres in primary access road)
- Sycamore Alluvial Woodland (0.9 acre in primary access road)

The proposed access roads would result in the loss of sensitive plant communities through development of the roads as well as the fuel modification requirements to reduce fire hazards.

Project related impacts include removal of approximately 7.5 acres of RAFSS habitat within the secondary access road alignment, approximately 1 acre of sycamore alluvial woodland in the primary access road, 19.4 acres of RSS in the primary road access, and 1.3 acres of RSS in the secondary road access.

# **Threatened and Endangered Species**

From the literature review it was determined that the following species have a moderate or higher potential of occurring within the access road alignments.

*Nevin's Barberry.* The site contains suitable habitat for the Nevin's barberry within the RSS plant community in the primary and secondary access road alignments.



*Slender-horned Spineflower.* There is suitable habitat within Cable Creek Wash and benches in secondary access road alignment.

*Santa Ana River Woollystar*. There is suitable habitat within Cable Creek Wash and Meyers Creek in both the primary and secondary access road alignments.

San Bernardino Kangaroo Rat. There is suitable RAFSS habitat within the secondary access road alignment in Cable Creek.

*Coastal California Gnatcatcher.* The RSS plant community within the primary access road alignment provides suitable foraging and nesting habitat for CAGN.

**Least Bell's Vireo.** The riparian woodland plant communities in Cable Creek and Meyers Creek in both the primary and secondary access road alignments provide suitable habitat for the least Bell's vireo.

*Arroyo Southwestern Toad.* The perennial stream in Cable Creek within the secondary access road alignment provides suitable habitat for this species.

Although suitable habitat occurs onsite for several listed species, focused surveys have not been conducted for all those species to determine that the threatened and endangered species listed above are present or absent.

The following focused surveys are recommended to determine the presence/absence of T&E species within the primary and secondary access road alignments:

- Focused mammal trapping for San Bernardino kangaroo rat (March August)
- Focused avian survey for coastal California gnatcatcher (March June)
- Focused avian survey for least Bell's vireo (April July)
- Focused survey for arroyo toad (March July)
- Focused plant survey for Nevin's barberry, slender-horned spineflower, and Santa Ana River woollystar (May – August)

#### Critical Habitat for SBKR and CAGN

With the 2007 revision of the final Critical Habitat for CAGN, the access road alignments are no longer within Critical Habitat. However, the secondary access road alignment is within the Final Designation of Critical Habitat for SBKR.

Impacts to Critical Habitat within jurisdictional waters will require formal consultation between USACE and USFWS under Section 7 of the Endangered Species Act.

#### **Sensitive Species**

Of the 8 plant and 38 wildlife non-listed sensitive species with a potential of occurring within the two access road alignments, 2 plants—Plummer's mariposa lily and Parry's spineflower—have a



moderate to high probability of occurring onsite. There are 26 wildlife species with a moderate to high potential to occur onsite. These species are: San Diego horned lizard, two-striped garter snake, San Bernardino ring-neck snake, San Diego banded gecko, California silvery legless lizard, coastal western whiptail, rosy boa, coast patch-nosed snake, northern harrier (foraging), golden eagle (foraging), merlin (winter), sharp-shinned hawk, Cooper's hawk, white-tailed kite, ferruginous hawk (winter), Swainson's hawk (foraging), loggerhead shrike, southern California rufous-crowned sparrow, Bell's sage sparrow, yellow warbler, yellow-breasted chat, black-chinned sparrow, northwestern San Diego pocket mouse, Los Angeles pocket mouse, San Diego desert woodrat, and San Diego black-tailed jackrabbit.

These species are not listed as threatened or endangered and any loss of individuals would not threaten the regional populations. Removal of their habitat is an adverse but less than significant impact.

#### **Jurisdictional Waters**

A formal jurisdictional delineation was conducted January 15 and 16, 2009 for the drainage features within the proposed primary and two secondary access road alignments. Several drainage features are located throughout the project site. The main hydrologic feature within the project site is Cable Creek. There are five unnamed drainages that have been delineated within the road access alignments, these all eventually flow into Cable Creek. The jurisdictional delineation field survey results conclude that approximately 3.19 acres within the proposed primary and secondary access road alignments could be under the jurisdiction of the USACE and RWQCB.

As the total impact area to waters of the U.S. is greater than 0.5 acre, an application for an Individual Permit from USACE pursuant to Section 404 of the Clean Water Act is required. The project would also require a Water Quality Certification from the RWQCB pursuant to Section 401 of the Clean Water Act and a Streambed Alteration Agreement (SAA) from CDFG pursuant to Section 1602 of Fish and Game Code.

#### **Nesting Birds**

The two access road alignments contain a variety of nesting habitats for many avian species. Under Sections 3503 and 3503.5 of the California Fish and Game Code (Code) and the federal Migratory Bird Treat Act (MBTA), it is unlawful to take, possess, or needlessly destroy any bird of prey or the nests or eggs of any bird species. Disturbance of any active bird nest during the breeding season, including active owl burrows, would be prohibited by law. Breeding season typically runs from March through late August. Disturbing or destroying active nests is a violation of the MBTA.

The proposed project could have a significant adverse impact on nesting birds. The Fish and Game Code and the MBTA protect nesting birds. During rough grading of the project site, nesting birds have the potential to be adversely and significantly impacted.



# **Raptor Foraging Habitat**

Several raptor species were observed within the access road alignments. These sensitive species would be affected by the loss of approximately 54 acres of foraging habitat including non native grasslands, RSS and RAFSS habitat.

Impacts to raptor foraging habitat may be considered significant.

# **Edge Effects**

The proposed project would have a significant impact on surrounding biological resources due to edge effects.

If you have any questions or concerns regarding this report, please call me at 909.384.2147.

Sincerely,

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