

Project Site

On-site

Off-site

Vegetation Communities

AGR, Agriculture

CLOW, Coast live oak woodland

CSS, Diegan coastal sage scrub

CSS-CHP, Coastal sage - chaparral transition

CSSB, Coastal sage scrub - Baccharis dominated

DEV, Urban/developed

DH, Disturbed habitat

DW, Disturbed Wetland

EAGR, Agriculture

EUC, Eucalyptus woodland

FWM, Freshwater marsh

IAGR, Intensive agriculture

MFS, Mulefat scrub

NNG, Non-native grassland

NNW, Non-native Woodland

ORC, Orchard and vineyards

ORF, Southern coast live oak riparian forest

SMX, Southern mixed chaparral

SOC, Scrub oak chaparral

SWS, Southern willow scrub

SWS/TS, Southern willow scrub/tamarisk scrub

dBSC, Flat-topped buckwheat - disturbed

dCLOW, Coast Live Oak Woodland - disturbed

dCSS, Diegan coastal sage scrub - disturbed

dCSSB, Coastal sage scrub - Baccharis dominated - disturbed

dSMX, Southern mixed chaparral - disturbed

Oak Root Zones

Las Posas Soil Series

Wildlife Species

Coastal California gnatcatcher

Nuttall's woodpecker

Oak titmouse

Red-shouldered hawk

Sharp-shinned hawk

Yellow warbler

Desert woodrat (midden)

Blainville's horned lizard

Blainville's horned lizard (scat)

Coast patch-nosed snake

Coastal whiptail

Red diamond rattlesnake

Plant Species

Engelmann oak

Munz's sage

Ramona horkelia

Summer holly

ashy spike-moss

chaparral rein orchid

Engelmann oak

Orcutt's brodiaea

Ramona horkelia

Summer holly

Project Impacts

Permanent Impact

Temporary Impact

Temporary Construction Easement

Open Space

INTENTIONALLY LEFT BLANK

Project Site

On-site

Off-site

Wildlife Species

Coastal California gnatcatcher

Nuttall's woodpecker

Oak titmouse

Red-shouldered hawk

Sharp-shinned hawk

Yellow warbler

Desert woodrat (midden)

Blainville's horned lizard

Blainville's horned lizard (scat)

Coast patch-nosed snake

Coastal whiptail

Red diamond rattlesnake

Plant Species

Engelmann oak

Munz's sage

Ramona horkelia

Summer holly

ashy spike-moss

chaparral rein orchid

Engelmann oak

Orcutt's brodiaea

Ramona horkelia

Summer holly

Vegetation Communities

AGR, Agriculture

CLOW, Coast live oak woodland

CSS, Diegan coastal sage scrub

CSS-CHP, Coastal sage - chaparral transition

CSSB, Coastal sage scrub - Baccharis dominated

DEV, Urban/developed

DH, Disturbed habitat

DW, Disturbed Wetland

EAGR, Agriculture

EUC, Eucalyptus woodland

FWM, Freshwater marsh

IAGR, Intensive agriculture

MFS, Mulefat scrub

NNG, Non-native grassland

NNW, Non-native Woodland

ORC, Orchard and vineyards

ORF, Southern coast live oak riparian forest

SMX, Southern mixed chaparral

SOC, Scrub oak chaparral

SWS, Southern willow scrub

SWS/TS, Southern willow scrub/tamarisk scrub

dBSC, Flat-topped buckwheat - disturbed

dCLOW, Coast Live Oak Woodland - disturbed

dCSS, Diegan coastal sage scrub - disturbed

dCSSB, Coastal sage scrub - Baccharis dominated - disturbed

dSMX, Southern mixed chaparral - disturbed

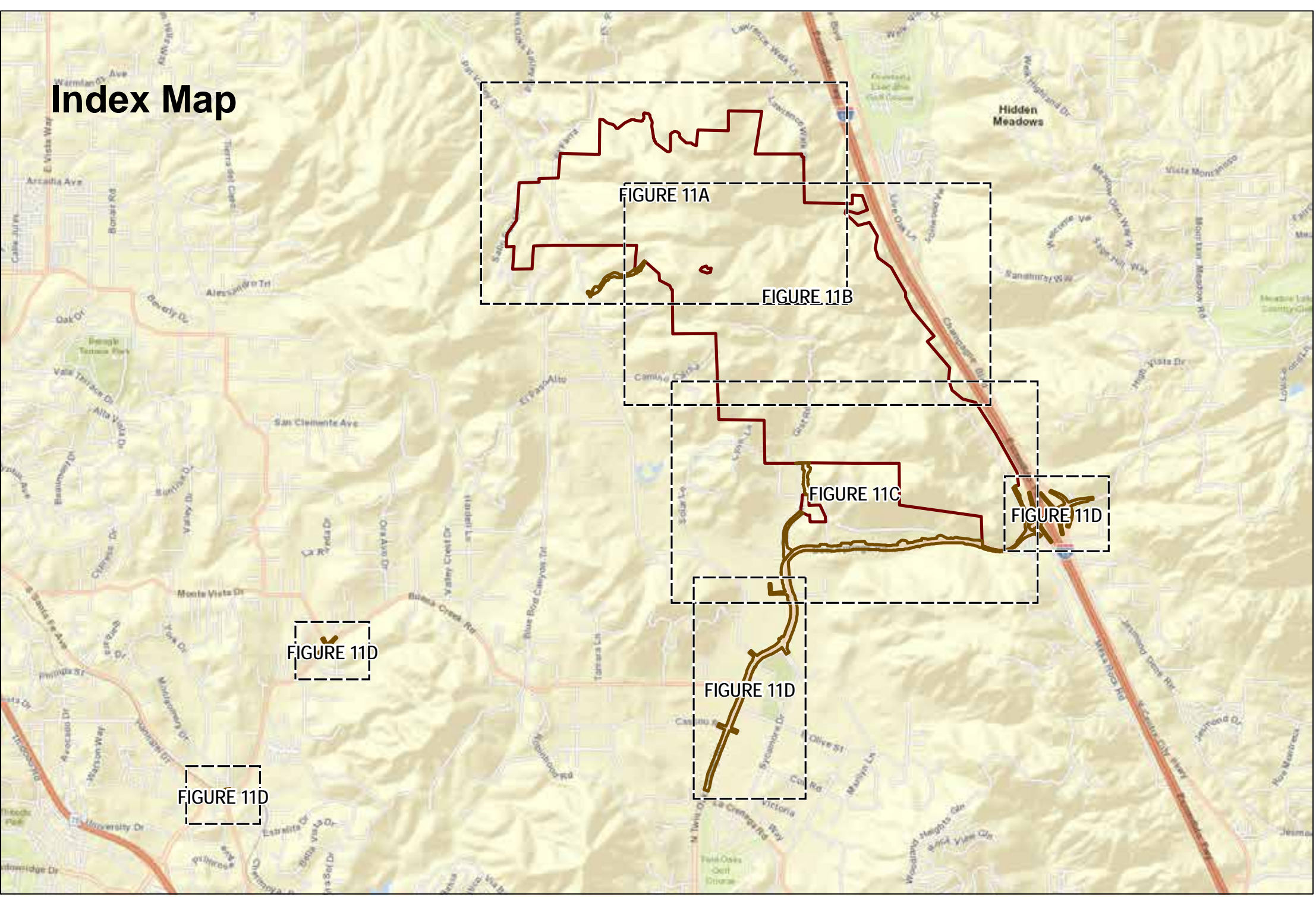
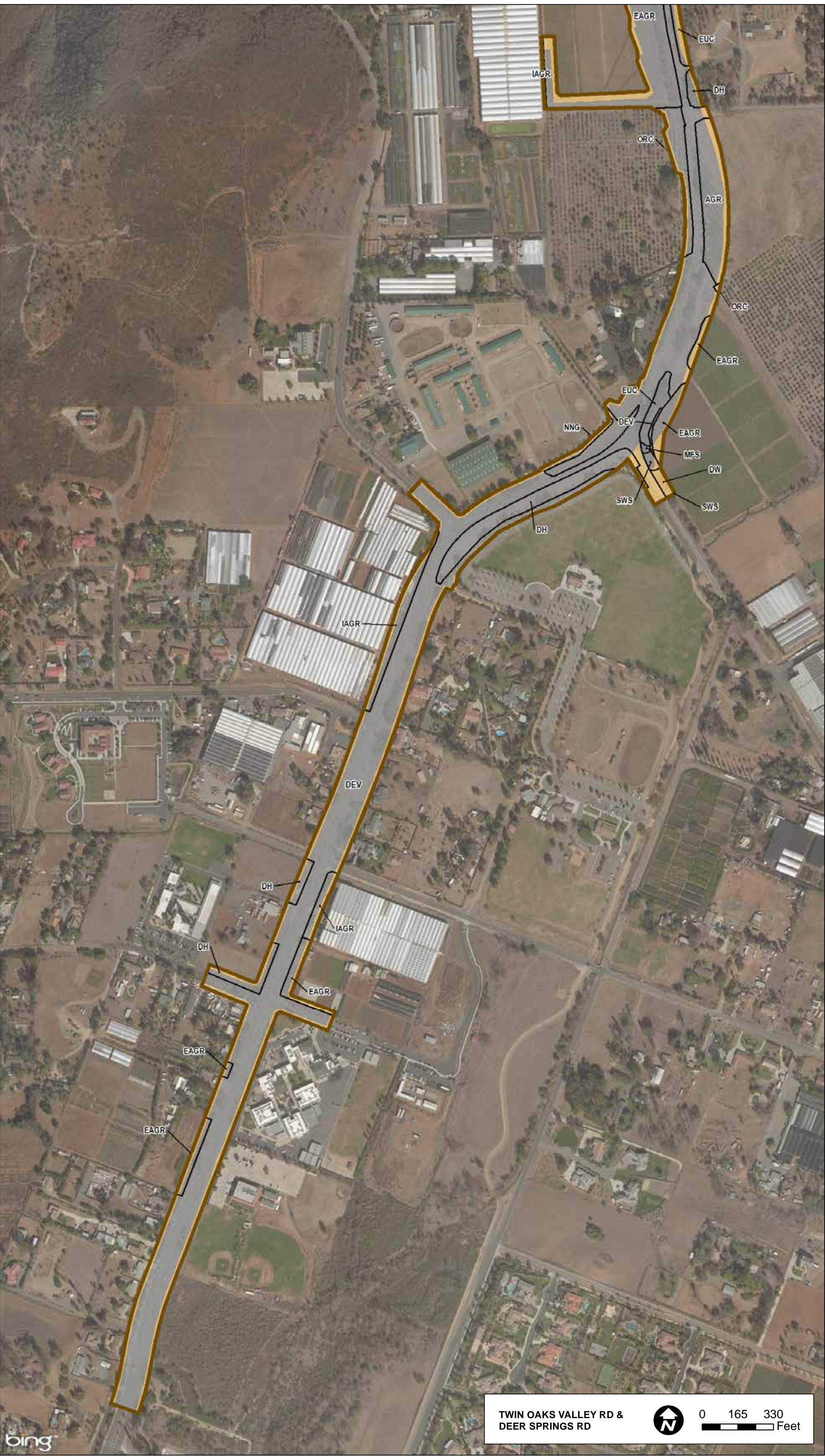
Project Impacts

Permanent Impact

Temporary Impact


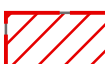
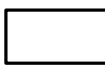
Temporary Construction Easement

Open Space



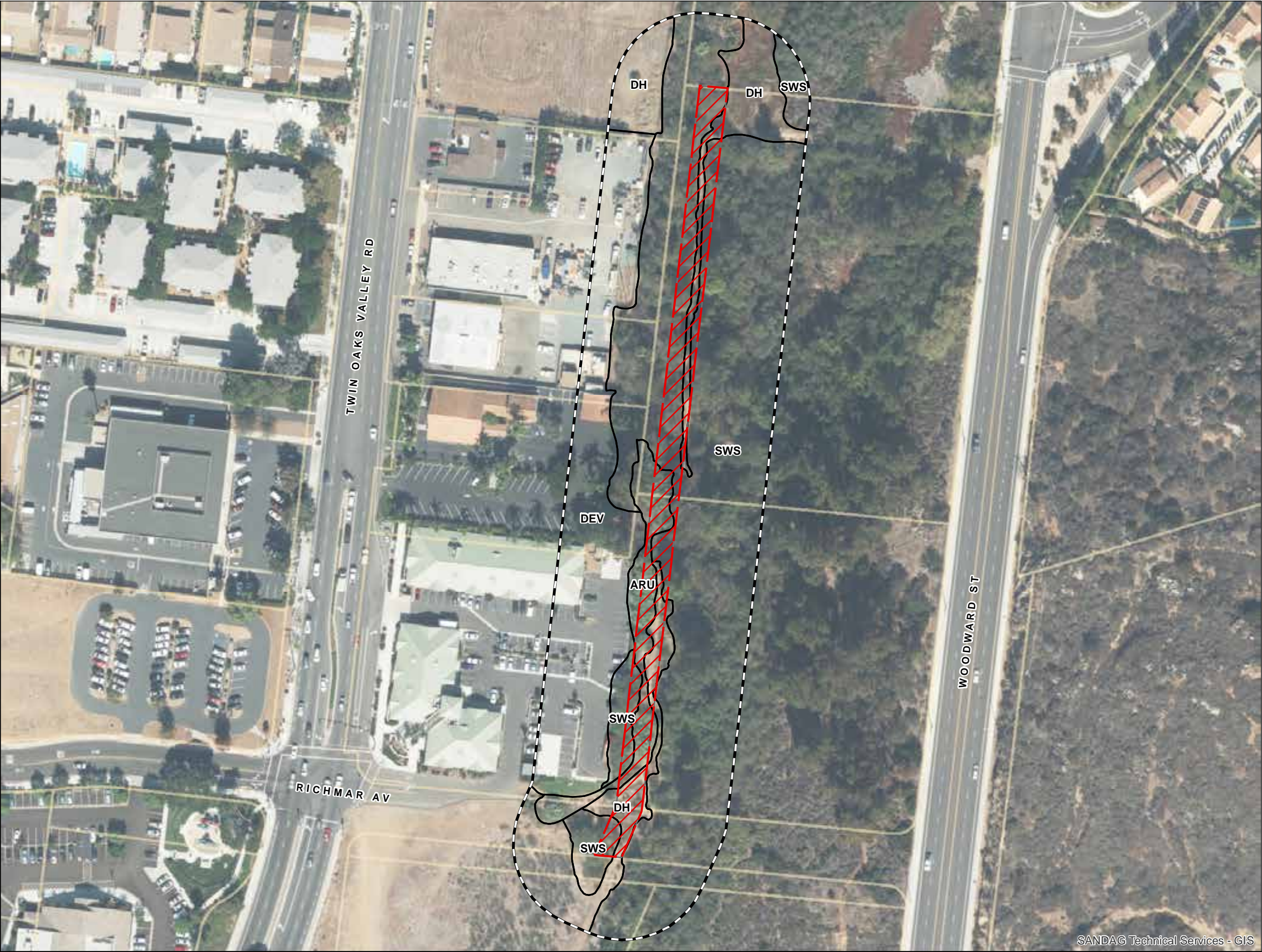
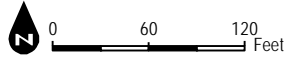
INTENTIONALLY LEFT BLANK

Date: 3/30/2017 - Last saved by: lterry - Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\BiologicalResourcesReport\Figure11E_BioResImpacts_Offsite_SewerTOVRd.mxd

-  100-Ft Buffer Of 30-Ft Sewer Easement
-  30-Ft Off-Site Sewer Permanent Impact
-  Vegetation Mapping

Vegetation Communities/Land Covers

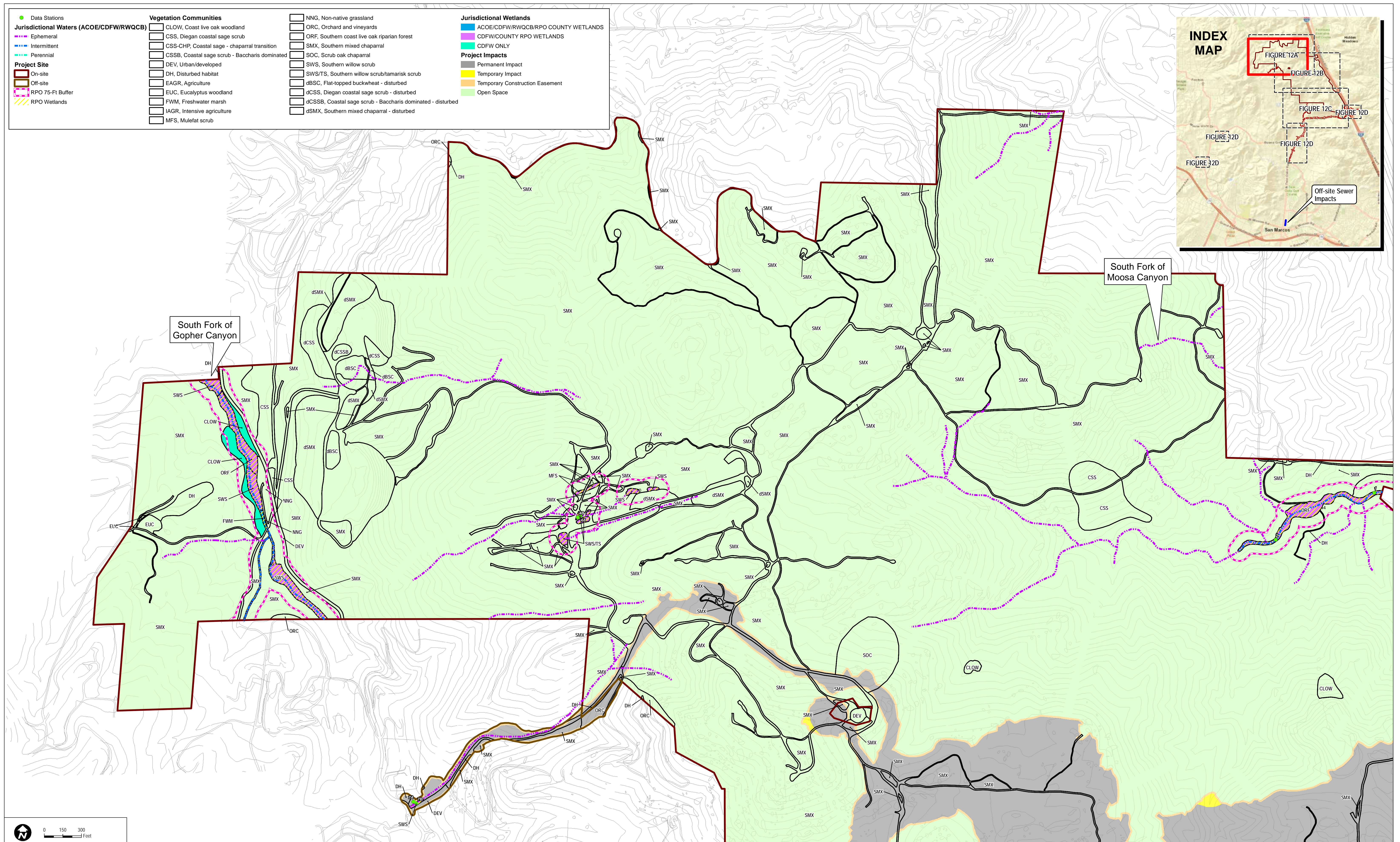
- ARU, Arundo Dominated Riparian
- DEV, Urban Developed Ornamental
- DH, Disturbed Habitat
- SWS, Southern Willow Scrub



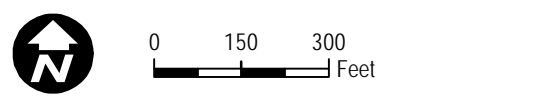
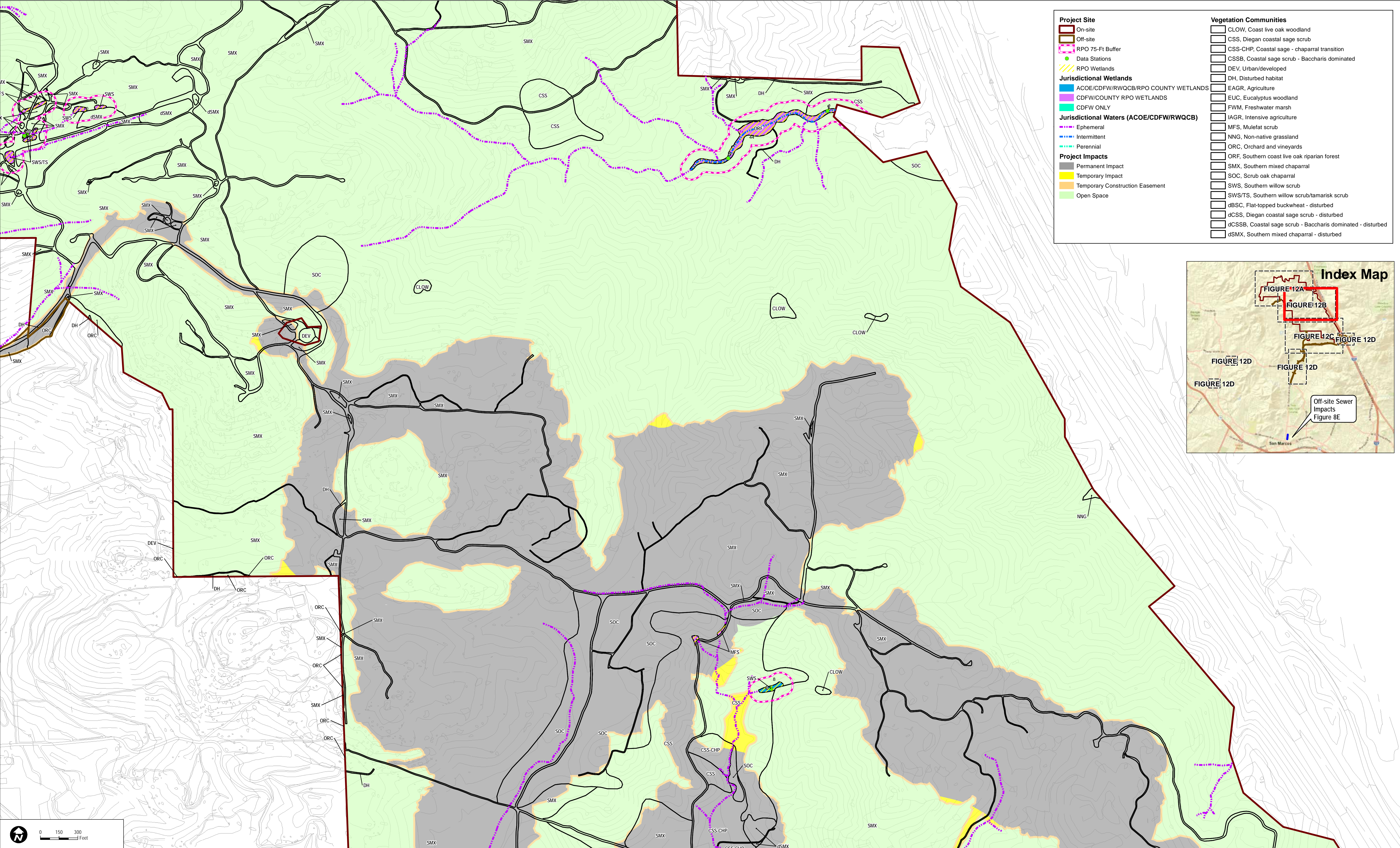
SANDAG Technical Services - GIS

FIGURE 11E
Impacts to Biological Resources for Off-Site Wastewater Upgrade East of Twin Oaks Valley Road

INTENTIONALLY LEFT BLANK



INTENTIONALLY LEFT BLANK



DUDEK

7608-01

SOURCE: Fuscoe Engineering 2016; CA Department of Conservation 2011

Biological Resources Report for the Newland Sierra Project

FIGURE 12B
Impacts to Jurisdictional Resources

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

Date: 3/30/2017 - Last saved by: lterry - Path: Z:\Projects\760801\MAPDOC\MAPS\Tech Reports\BiologicalResourcesReport\Figure12E_JDImpacts_Offsite_Sewer TOVRd.mxd

- 30-Ft Off-Site Sewer
Permanent Impact
- 100-Ft Buffer Of 30-Ft Sewer
Easement
- Vegetation Mapping

Jurisdictional Wetlands

ACOE/CDFW/RWQCB/RPO
COUNTY WETLANDS

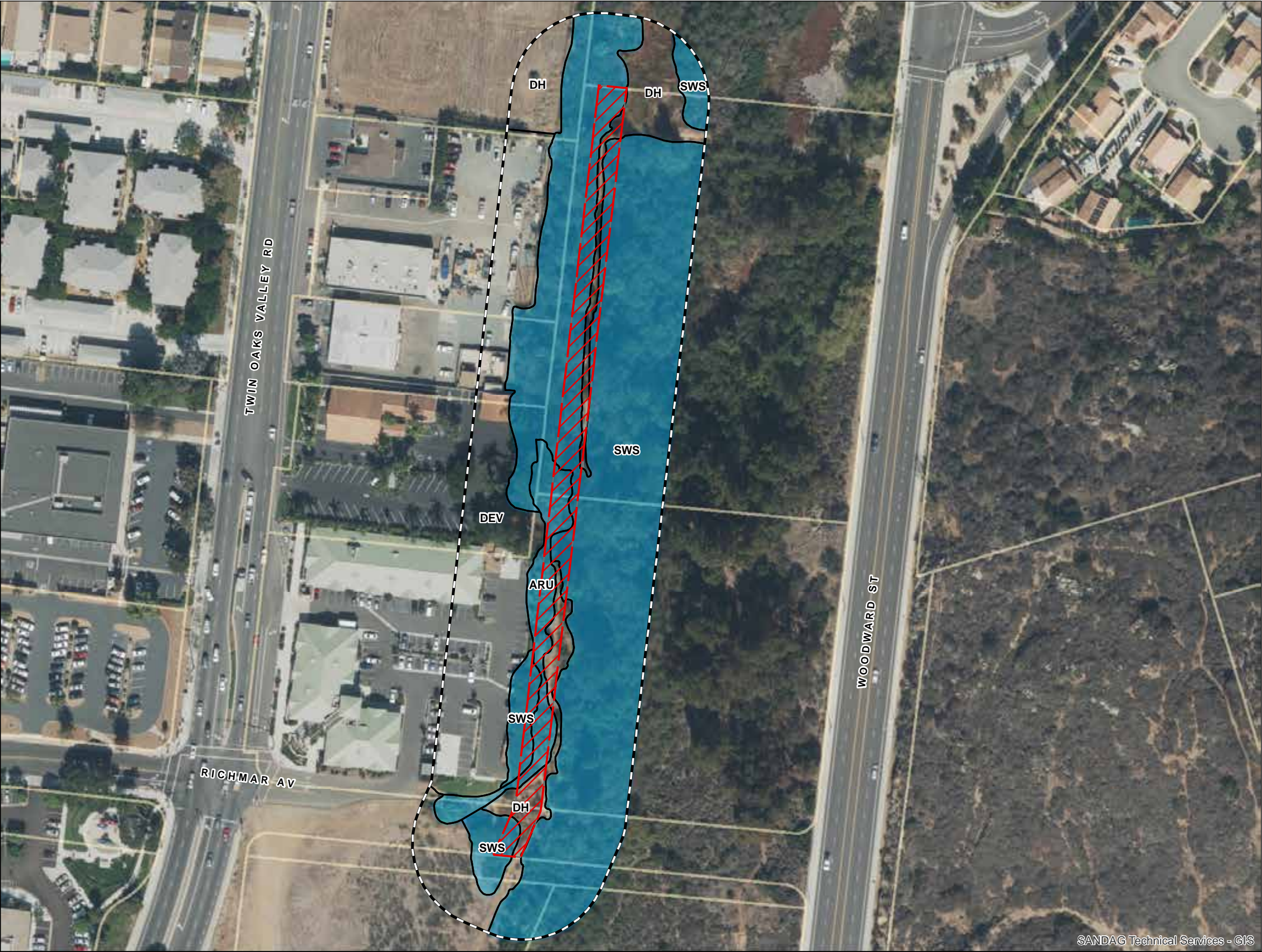
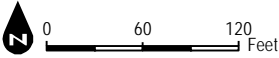
Vegetation Communities/Land Covers

ARU, Arundo Dominated Riparian

DEV, Urban Developed Ornamental

DH, Disturbed Habitat

SWS, Southern Willow Scrub



SANDAG Technical Services - GIS

DUDEK

SOURCE: AERIAL-SANDAG IMAGERY 2014

Biological Resources Technical Report for the Newland Sierra Project

FIGURE 12E
Impacts to Jurisdictional Resources for Off-Site Wastewater Upgrade East of Twin Oaks Valley Road

INTENTIONALLY LEFT BLANK

Biological Resources Technical Report for the Newland Sierra Project

3 SPECIAL-STATUS SPECIES

3.1 Guidelines for the Determination of Significance

The County's Guidelines for Determining Significance (County of San Diego 2010a) that follow are based on the criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and were used to analyze potential direct and indirect impacts to biological resources. The significance criteria directing the analysis include the following:

- Guideline 4.1** The project would 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 CDFG or USFWS.
- A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.
 - B. The project would impact an on-site population of a County List A or B plant species, or a County Group 1 animal species, or a species listed as a state Species of Special Concern (SSC). Impacts to these species are considered significant; however, impacts of less than 5 percent of the individual plants or of the sensitive species' habitat on a project Site may be considered less than significant if a biologically based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of that plant or animal taxon.
 - C. The project would impact the local long-term survival of a County List C or D plant species or a County Group 2 animal species.
 - D. The project may impact arroyo toad aestivation, foraging, or breeding habitat. Any alteration of suitable habitat within 1 kilometer (3,280 feet) in any direction of occupied breeding habitat or suitable stream segments (unless very steep slopes or other barriers constrain movement) could only be considered less than significant if a biologically based determination can be made that the project would not impact the aestivation or breeding behavior of arroyo toads.
 - E. The project would impact golden eagle habitat. Any alteration of habitat within 4,000 feet of an active golden eagle nest could only be considered less than significant if a biologically based determination can be made that the project would not have a substantially adverse effect on the long-term survival of the identified pair of golden eagles.
 - F. The project would result in the loss of functional foraging habitat for raptors. Impacts to raptor foraging habitat is considered significant;

Biological Resources Technical Report for the Newland Sierra Project

however, impacts of less than 5 percent of the raptor foraging habitat on a project Site may be considered less than significant if a biologically based determination can be made that the project would not have a substantial adverse effect on the local long-term survival of any raptor species.

- G. The project would impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, although smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species. Alteration of any portion of a core habitat could only be considered less than significant if a biologically based determination can be made that the project would not have a substantially adverse effect on the core area and the species it supports.
- H. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing undeveloped lands or other natural habitat areas, to levels that would likely harm sensitive species over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests, or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown to adversely affect sensitive species.
- I. The project would impact occupied burrowing owl habitat.
- J. The project would impact occupied cactus wren habitat, or formerly occupied coastal cactus wren habitat that has been burned by wildfire.
- K. The project would impact occupied Hermes copper habitat.
- L. The project would impact nesting success of the following sensitive bird species through grading, clearing, fire-fuel modification, and/or other noise-generating activities such as construction.

Species	Breeding Season
Coastal cactus wren	February 15 to August 15
Least Bell's vireo	March 15 to September 15
Southwestern willow flycatcher	May 1 to September 1
Tree-nesting raptors	January 15 to July 15
Ground-nesting raptors	February 1 to July 15
Golden eagle	January 1 to July 31
Light-footed clapper rail	February 15 to September 30

Biological Resources Technical Report for the Newland Sierra Project

3.2 Analysis of Project Effects

3.2.1 Project Effects Relevant to Guideline 4.1.A (Federally Listed and State-Listed Species)

There are no federally listed or state-listed endangered or threatened plant species known to occur on Site. However, one federally threatened wildlife species was detected on Site. Coastal California gnatcatcher was observed occurring in the project Site, and the project Site may support foraging and nesting opportunities that would be impacted by the project footprint.

Impact W-1: Temporary Direct Impacts to Special-Status Wildlife (Listed Species)

Loss of coastal California gnatcatcher from construction-related activities including unintentional habitat loss, soil loss, water quality impacts, introduction of invasive species, and disruption of wildlife activities by construction activities adjacent to remaining suitable habitat would be considered significant (**Impact W-1**). If any active nests or the young of this species are impacted through direct grading, these impacts would also be considered significant (**Impact W-1**), based on FESA and MBTA.

The project includes construction monitoring to avoid unintentional species and habitat impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3); landscape plans would prohibit invasive species and landscape products would be verified on the job Site (M-BIO-4); nesting birds would be avoided through preconstruction surveys and buffer setbacks (M-BIO-5); vegetation would be replaced through a vegetation plan where possible for temporary vegetation impacts (M-BIO-6); and outdoor night lighting would be in compliance with the Light Pollution Code (M-BIO-7). With these measures, impacts that would impact coastal California gnatcatcher and other sensitive status species would be significant and mitigated. The full text of mitigation measures is presented in Section 3.4, Mitigation Measures and Design Considerations.

As described under M-BIO-5, project construction should occur outside the typical nesting period for most bird species and raptors (i.e., outside the period February 1–August 31 and as early as January 1 for some raptor species) to limit impacts to nesting birds and raptors, or that a nesting bird survey is conducted within 72 hours of project implementation.

Impact W-2: Permanent Direct Impacts to Special-Status Wildlife (Listed Species)

Potential permanent direct impacts to coastal California gnatcatcher include the loss of both suitable nesting and foraging habitat (56.7 acres) and replacement with residential, commercial, recreational, and infrastructure uses (Tables 2-8 and 2-9). Permanent direct impacts to suitable

Biological Resources Technical Report for the Newland Sierra Project

foraging and nesting habitats are considered significant (**Impact W-2**). These impacts would be mitigated by compensation with like (occupied) habitat and habitat management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); and open space fencing and signage (M-BIO-8E). To mitigate for the loss of coastal sage scrub habitat due to the project, the proposed project would preserve 25.2 acres of on-site open space and known individuals (M-BIO-8A). A portion of the existing southeastern territory where California gnatcatcher was observed in 2002-2003 would be in open space. In addition, a California gnatcatcher location in the central portion of the open space would be preserved which identified a California gnatcatcher in June 2013 and August 2014. Additionally, the proposed project would preserve 106.4 acres of coastal sage scrub habitat on an off-site mitigation parcel in Ramona that has been designated as a PAMA by the draft North County Plan. The on-site and off-site habitat preserves would provide for long-term viability of suitable habitat that connects to high-value districts and potential to support listed species. Other areas adjacent to the project Site, within the I-15 right-of-way and historically occupied by California gnatcatchers, would be buffered from any project effects through project design and would continue to support the species. In addition, the project would need to obtain a habitat loss permit from the County of San Diego with written concurrence from the wildlife agencies.

3.2.2 Project Effects Relevant to Guideline 4.1.B (County-Designated Sensitive Species)

3.2.2.1 *Special-Status Plant Species (County List A and B Species)*

Impact SP-1: Temporary Direct Impacts to Special-Status Plant Species (List A)

Short-term, construction-related, or temporary direct impacts to County List A plant species would primarily result from construction activities. Clearing, trampling, or grading of special-status plants outside designated construction zones could be significant. Potential short-term temporary impacts to County List A and B plant species would be significant (**Impact SP-1**). Impacts to special-status plant species within a temporary construction area are considered permanent impacts and are discussed below (Table 3-1).

The project includes construction monitoring to avoid unintentional species and habitat impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3); and relocation of Ramona horkelia would be done through a revegetation plan (M-BIO-9). Short-term direct impacts to plant species would be

Biological Resources Technical Report for the Newland Sierra Project

mitigated to less than significant through implementation of the above mitigation measures, which are presented in Section 3.4, Mitigation Measures and Design Considerations.

Two County List A plant species would be directly impacted by the proposed project—summer holly and Ramona horkelia. Figures 11A–11D shows the proposed project impacts to County List A plant species on the project Site.

Impact SP-2: Permanent Direct Impacts to Special-Status Plant Species (List A)

Approximately 196 individuals of summer holly, a County List A species with a CRPR 1B.2, would be directly impacted by the proposed project (14 percent of the on-site individuals). Approximately 62 individuals of Ramona horkelia, a County List A species with a CRPR 1B.3, would be directly impacted by the proposed project (100 percent of the on-site individuals). This proposed impact would be considered significant (**Impact SP-2**). This project includes monitoring to avoid unintentional species and habitat impacts (M-BIO-1); habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); Mitigation and Monitoring Plan for the relocation of Ramona horkelia (M-BIO-9). With these measures, impacts to summer holly and Ramona horkelia and other sensitive status species which may not have been detected during focused surveys due to dense vegetation (see Section 1.3.6, Survey Limitations), would be significant and mitigated. Preservation of 1,160 individuals of summer holly within the preserve would provide a mitigation ratio of approximately 6:1, which exceeds the maximum 3:1 required ratio for list A plant species. All individuals of Ramona horkelia would be mitigated through transplantation of the existing plants into the preserve per M-BIO-9. Table 3-1 summarizes the proposed direct impacts to County List A Species and the significance of the impacts prior to mitigation. There would be no direct impacts to County List B plant species resulting from implementation of the proposed project.

Table 3-1
Summary of Direct Impacts to County List A Species and
Significance Prior to Mitigation

Species	CRPR	Approximate Number of Individuals within Project Site	Approximate Number of Individuals within On-Site Development Footprint	Estimated Percentage of Occurrences Impacted On Site	Significance Prior to Mitigation
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> Summer holly	1B.2	1,356	196 ¹	14%	Significant
<i>Horkelia truncata</i> Ramona horkelia	1B.3	62	62	100%	Significant

¹ This total includes one individual plant which is located within a temporary 15-foot construction area. Although vegetation within this area would be restored, and the impact is therefore considered temporary, impacts to special-status plants within the temporary area are considered permanent.

Biological Resources Technical Report for the Newland Sierra Project

3.2.2.2 Special-Status Wildlife Species (County Group 1 or State SSC)

Impact W-3: Temporary Direct Impacts to Special-Status Wildlife (Group 1 and/or SSC)

Thirteen County Group 1 and/or state SSC animal species were detected within the project Site during biological surveys: western spadefoot, Cooper's hawk, sharp-shinned hawk,⁵ Bell's sage sparrow, red-shouldered hawk, turkey vulture, yellow warbler, coastal California gnatcatcher, coastal whiptail, red-diamond rattlesnake, Blainville's horned lizard, coast patch-nosed snake, and San Diego desert woodrat (see Section 1.4.6). Figures 11A–11E shows the proposed project impacts in relation to the special-status wildlife observations mapped on Site.

In addition, one County Group 1 and/or state SSC wildlife species has a high potential to occur within the project Site: northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). Impacts to wildlife species are discussed in detail in Section 2.4.1.

Loss of special-status wildlife species (County Group 1 or state SSC animals) including individual amphibians, reptiles, and small mammals from construction-related activities would result in short-term direct impacts that would be considered significant (**Impact W-3**). The project includes biological monitoring to avoid unintentional species and habitat impacts (M-BIO-1); temporary construction fencing (M-BIO-2); monitoring verification through preparation of a biological monitoring report (M-BIO-3); reduction of invasive species through biological review of landscape plans (M-BIO-4); avoidance by preconstruction surveys for nesting birds and setbacks (M-BIO-5); vegetation would be replaced through a vegetation plan where possible for temporary vegetation impacts (M-BIO-6); and minimize night and outdoor lighting (M-BIO-7). As described under M-BIO-5, project construction should occur outside the typical nesting period for most bird species and raptors (i.e., outside the period of February 1 through August 31, and as early as January 1 for some raptor species) to limit impacts to nesting birds and raptors, or that a nesting bird survey is conducted within 72 hours of project implementation. If any active nests or the young of nesting special-status bird species (County Group 1 or state SSC animals) are impacted through direct grading, these impacts would be considered significant, based on the MBTA. This impact would be mitigated through mitigation measure M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks). With these measures, impacts that would impact nesting birds and raptors and other sensitive status species would be significant and mitigated.

⁵ Sharp-shinned hawk has a high potential to forage in the project Site, but not nest.

Biological Resources Technical Report for the Newland Sierra Project

Impact W-4: Permanent Direct Impacts to Special-Status Wildlife (Group 1 and/or SSC)

Potential permanent direct impacts to the wildlife species described previously include removal of suitable nesting and/or foraging habitat, summarized in Tables 2-8 and 2-9. Loss of suitable nesting/foraging habitat is considered a significant impact (**Impact W-4**). These impacts would be mitigated through habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); and development of a resource management plan (M-BIO-8D).

3.2.3 Project Effects Relevant to Guideline 4.1.C (Special-Status Species)

3.2.3.1 Special-Status Plant Species (County List C and D Species)

There would be no direct impacts to County List C plant species resulting from implementation of the proposed project. The project will, however, cause direct impacts to three County List D plant species: chaparral rein orchid, Engelmann oak, and ashy spike-moss. Figures 11A–11E show the proposed project impacts to County List D plant species on the project Site. Chaparral rein orchid and Engelmann oak are listed as CRPR 4.2, while ashy-spike moss is listed as CRPR 4.1. Specifically, the proposed project would impact all five occurrences of chaparral rein orchard individuals, 64 percent of the Engelmann oaks mapped on Site, and one of three occurrences of ashy spike-moss (Table 3-2). These proposed impacts to County List D species would be not considered significant because, based on the species CRPR of 4, these species are of limited distribution but not considered “rare” from a statewide perspective; therefore, proposed impacts are not expected to substantially affect long-term survival of the species (CNPS 2014). Although impacts to these species are not considered significant, suitable habitat for these species would be preserved within the open space (M-BIO-8A).

Table 3-2

Summary of Direct Impacts to County List D Species and Significance Prior to Mitigation

Species	CRPR	Approximate Number of Individuals within Project Site	Approximate Number of Individuals within On-Site Development Footprint	Estimated Percentage of Occurrences Impacted On Site	Significance Prior to Mitigation
<i>Piperia cooperi</i> Chaparral rein orchid	4.2	5	5	100%	Less than Significant
<i>Quercus engelmannii</i> Engelmann oak	4.2	28	18	64%	Less than Significant
<i>Selaginella cinerascens</i> Ashy spike-moss	4.1	3	1	33%	Less than Significant

Biological Resources Technical Report for the Newland Sierra Project

3.2.3.2 Special-Status Wildlife Species (County Group 2)

As summarized in Section 1.4.6, the following County Group 2 special-status wildlife species were incidentally observed either directly or indirectly (i.e., scat, tracks) within the project Site: Belding's orange-throated whiptail, San Diego ringneck snake, Coronado skink, western bluebird, barn owl, mule deer, and monarch butterfly. Figures 11A–11D show the proposed project impacts in relation to the special-status wildlife observations mapped on Site. Eight additional Group 2 species were observed but are analyzed in Section 3.2.2.2 because they are state SSC animals: western spadefoot, coastal whiptail, red-diamond rattlesnake, Blainville's horned lizard, coast patch-nosed snake, yellow warbler, northwestern San Diego pocket mouse, and San Diego desert woodrat. No additional County Group 2 species are determined to have a high potential to occur.

Construction-related activities may cause the loss of Group 2 special-status wildlife species that are not state SSC animals. This impact, however, is considered less than significant because the affected species has a widespread presence or the project Site is not of great importance to the species. The identified Group 2 wildlife species occur within a variety of habitats and through a wide geographic, topographic, and elevation ranges of which there are an abundance of these species in the region. Regardless of the significance of impacts to Group 2 species, M-BIO-8A ensures that suitable habitat for these species would be preserved within the open space.

Impact W-5: Temporary Direct Impacts to Special-Status Wildlife (Group 2)

However, if any active nests or young of nesting special-status bird species (County Group 2) are impacted through direct grading, these impacts would be considered significant (**Impact W-5**), based on the MBTA. This impact would be mitigated through avoidance by preconstruction surveys for nesting birds and setbacks (M-BIO-5).

3.2.4 Project Effects Relevant to Guideline 4.1.D (Arroyo Toads)

No arroyo toads have been detected in the project Site nor are they expected to occur. No appropriate breeding habitat occurs on Site or in vicinity and the Site is not within 1 kilometer (0.6 mile) of any known breeding habitat (PSBS 2007). Closest species occurrences are documented approximately 4 miles northwest in the San Luis Rey River (USFWS 2014). Additional detections occur throughout the upper San Luis Rey River, approximately 5 miles north of the Site (CDFW 2014a; USFWS 2014).

3.2.5 Project Effects Relevant to Guideline 4.1.E (Golden Eagles)

Although the project Site contains a historic nest site for golden eagles (as described in PSBS 2007), no golden eagles were reported by PSBS (2007) or others in this region for many years.

Biological Resources Technical Report for the Newland Sierra Project

There are no records of golden eagle on Site in the CNDDDB (CDFW 2014a), and the closest species occurrences are of a male eagle approximately 4.5 miles to the east in 2015/2016, and another approximately 8 miles northeast in 1991 (nest located) and 2000 (adult and young flying over; CDFW 2014a). Additionally, the project Site is primarily composed of dense chaparral vegetation, in which eagles cannot efficiently conduct foraging activities.

3.2.6 Project Effects Relevant to Guideline 4.1.F (Raptor Foraging Habitat)

Impact W-6: Permanent Direct Impacts to Raptor Foraging Habitat

Foraging habitat for raptors is present throughout portions of the project Site. Suitable foraging habitat for raptors would be impacted (Tables 2-8 and 2-9). Therefore, impacts to raptor foraging habitat is considered a significant impact (**Impact W-6**). Impacts to raptor foraging habitat would be mitigated through habitat preservation and management of existing populations of special-status species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); and open space fencing and signage (M-BIO-8E).

3.2.7 Project Effects Relevant to Guideline 4.1.G (Core Wildlife Area)

Impact CWA-1: Temporary Direct Impacts to Core Wildlife Area

The project Site is included in a core wildlife area, defined as a large block of habitat (typically 500 acres or more) that supports a viable population of multiple wildlife species.

Impacts to existing core wildlife area from construction-related activities would result in short-term direct impacts. Clearing, trampling, or grading of vegetation outside designated construction zones could occur in the absence of avoidance and mitigation measures (**Impact CWA-1**). The project includes monitoring to avoid unintentional species and habitat short-term direct impacts (M-BIO-1); temporary construction fencing (M-BIO-2); monitoring verification through preparation of a biological monitoring report (M-BIO-3); revegetation plan for temporary vegetation impacts (M-BIO-6); and outdoor night lighting would be in compliance with the Light Pollution Code (M-BIO-7). With these measures, short-term direct impacts that would impact the core wildlife area would be significant and mitigated.

Impact CWA-2: Permanent Direct Impacts to Core Wildlife Area

The proposed project would result in on-site impacts to 776.6 acres considered core wildlife area, and this would be a significant impact to viable populations of multiple wildlife species (**Impact CWA-2**) (see Table 1-7 for the species that were observed and the sensitive species that are

Biological Resources Technical Report for the Newland Sierra Project

known or expected to occur). Impacts to core wildlife area would be mitigated through habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); and open space fencing and signage (M-BIO-8E).

Impact CWA-3: Temporary Indirect Impacts to Core Wildlife Area

Short-term indirect impacts to core wildlife area as a result of the proposed project are described in Section 2.6.2.1 and include short-term, construction-related, or temporary indirect impacts resulting in increased human activity during construction, lighting, and noise. Short-term indirect impacts to core wildlife area would be considered a significant impact (**Impact CWA-3**). The proposed project includes construction monitoring to avoid unintentional species and habitat short-term indirect impacts (M-BIO-1); temporary construction fencing (M-BIO-2); monitoring verification through preparation of a biological monitoring report (M-BIO-3); revegetation plan for temporary vegetation impacts (M-BIO-6); and outdoor night lighting would be in compliance with the Light Pollution Code (M-BIO-7). With these measures, short-term indirect impacts to core wildlife area would be significant and mitigated. Long-term indirect impacts to habitat connectivity and wildlife corridors include habitat fragmentation, lighting, and noise from the proposed urban development and recreational facilities.

3.2.8 Project Effects Relevant to Guideline 4.1.H (Indirect Impacts)

3.2.8.1 Special-Status Plant Species

Impact SP-3: Temporary Indirect Impacts to Special-Status Plant (List A)

The short-term indirect impacts of the proposed project are described in Section 2.3.2.1 and include fugitive dust, changes in hydrology due to construction, and the introduction of chemical pollutants. Short-term indirect impacts to County List A plant species would be considered a significant impact (**Impact SP-3**). The project includes biological monitoring to avoid unintentional construction impacts (M-BIO-1); temporary construction fencing (M-BIO-2); and monitoring verification through preparation of a biological monitoring report (M-BIO-3). With these measures, impacts that would impact County list A species would be significant and mitigated.

Impact SP-3: Permanent Indirect Impacts to Special-Status Plant (List A)

Potential long-term or permanent indirect impacts to County List A plant species as result of the proposed project are described in Section 2.3.2.2 and include generation of fugitive dust, habitat fragmentation, chemical pollutants (herbicides), altered hydrology, non-native invasive species, alteration of the natural fire regime, and shading. Potential long-term indirect impacts to County

Biological Resources Technical Report for the Newland Sierra Project

List A plant species would be considered a significant impact (**Impact SP-4**). The project includes reduction of invasive species through biological review of landscape plans (M-BIO-4); habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); and open space fencing and signage (M-BIO-8E); regulated herbicide application to control invasive species (M-BIO-10); and implementation of a fire protection plan to minimize the potential exposure of the project Site to fire hazards (M-BIO-11). With these measures, long-term indirect impacts that would impact County A list plants have been reduced to less than significant because human activity has been restricted to the project footprint, the risk of fire has been reduced, and release of exotic plants and animals has been minimized.

There would be no indirect impacts to County List B plant species resulting from implementation of the proposed project.

3.2.8.2 Special-Status Wildlife Species

Impact W-7: Temporary Indirect Impacts to Special-Status Wildlife

The project's short-term (temporary) indirect impacts to special-status wildlife species are described in Section 2.4.2.1 and include fugitive dust, noise, chemical pollutants, increased human activity during construction, and invasive predators and non-native animal species. Short-term indirect impacts to special-status wildlife species would be considered a significant impact (**Impact W-7**). This project includes biological monitoring to avoid unintentional construction impacts (M-BIO-1); temporary construction fencing (M-BIO-2); monitoring and verification through preparation of a biological monitoring report (M-BIO-3); reduction of invasive species through biological review of landscape plans (M-BIO-4); avoidance by preconstruction surveys for nesting birds and setbacks (M-BIO-5); revegetation plan for temporary vegetation impacts (M-BIO-6); minimize night and outdoor lighting (M-BIO-7); and implementation of a fugitive dust control plan to prevent dust related impacts would be monitored through construction (M-BIO-1). With these measures short-term indirect impacts that would impact special-status wildlife species would be significant and mitigated.

Impact W-7: Permanent Indirect Impacts to Special-Status Wildlife

Potential long-term or permanent indirect impacts to special-status wildlife species are described in Section 2.4.2.2 and include generation of fugitive dust, off-road vehicle use, non-native, invasive plant and animal species, habitat fragmentation, alteration of the natural fire regime, and altered hydrology. Potential long-term indirect impacts to special-status wildlife species would be considered a significant impact (**Impact W-8**). This project includes reduction of invasive

Biological Resources Technical Report for the Newland Sierra Project

species through biological review of landscape plans (M-BIO-4); revegetation plan for temporary vegetation impacts (M-BIO-6); habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); open space fencing and signage (M-BIO-8E); and implementation of a fire protection plan minimize the potential exposure of the project Site to fire hazards (M-BIO-11). With these measures, long-term impacts that would impact special-status wildlife species have been reduced to less than significant because human activity has been limited to the project operational footprint, long-term preservation of on-site wildlife habitat movement corridor would be provided, the risk of fire has been reduced, and release of exotic plants and animals has been minimize.

3.2.9 Project Effects Relevant to Guideline 4.1.I (Burrowing Owl)

Burrowing owl was detected in 1998 surveys for Safa Ranch, which covered the northern part of the central valley of the present project Site. The 1998 report had no discussion on this species; any detection of this species was likely in the grassy area of the central valley. No observations have been made of burrowing owl in the numerous field visits. No burrowing owls have been detected in the project Site or are anticipated to occur. The closest CNDDDB record is 5.6 miles south of project Site (CDFW 2015). Therefore, there are no impacts to occupied burrowing owl habitat.

3.2.10 Project Effects Relevant to Guideline 4.1.J (Cactus Wren)

No cactus wrens (*Campylorhynchus brunneicapillus*) have been detected in the project Site. No appropriate breeding habitat for this species occurs on Site or in the immediate vicinity. There have been numerous species occurrences in the vicinity of the Site, with the closest occurrence approximately 4.5 to 5.0 miles north of project Site. Additional occurrences are located north, west, and south of the Site (CDFW 2014a). Due to the lack of suitable habitat on Site, there are no impacts to occupied cactus wren habitat.

3.2.11 Project Effects Relevant to Guideline 4.1.K (Hermes Copper Butterfly)

No Hermes copper butterflies have been detected in the project Site. Although the butterflies preferred adult nectaring plant, California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*), occurs throughout the project Site; the requisite larval host plant (i.e., true limiting factor), spiny redberry (*Rhamnus crocea*), has not been detected during plant surveys. In addition, the project Site is north of most recent records for this species, and the closest occurrence is located 25 miles south of the project Site near Mission Trails (CDFW 2014a). Based on the lack of suitable habitat for this species, the project Site is not considered occupied Hermes copper butterfly habitat. Therefore, there are no impacts related to this guideline.

Biological Resources Technical Report for the Newland Sierra Project

3.2.12 Project Effects Relevant to Guideline 4.1.L (Sensitive Bird Nesting)

Coastal cactus wren, least Bell's vireo, southwestern willow flycatcher, golden eagle, and light-footed clapper rail (*Rallus longirostris levipes*) do not nest in the project Site; therefore, the proposed project would not impact the nesting success of those species. No ground-nesting raptors (e.g., northern harrier (*Circus cyaneus*) and burrowing owl are expected to nest in the project Site. Therefore, the proposed project would not impact the nesting success of those species.

Impact W-9: Temporary Direct Impacts to Tree-nesting Raptors

Indirect impacts associated with construction, such as noise, could affect the nesting success of tree-nesting raptors. Construction-related impacts to the nesting success of tree-nesting raptors would be considered a significant impact (**Impact W-9**), and would be mitigated through avoidance by preconstruction surveys for nesting birds and setbacks (M-BIO-5).

Impact W-10: Permanent Direct Impacts to Tree-nesting Raptors

Impacts to the nesting success of tree-nesting raptors (i.e., Cooper's hawk and red-tailed hawk) as a result of habitat removal associated with the proposed project are anticipated. Long-term direct impacts to nesting habitat for Cooper's hawk and red-shouldered hawk are summarized in Table 3-2, and impacts to general vegetation communities are described in Table 2-1. On- and off-site suitable nesting habitat consists of coast live oak woodland, eucalyptus woodland, southern coast live oak riparian forest, and scrub oak chaparral. Impacts to the nesting success of tree-nesting raptors associated with the loss of suitable nesting habitat would be considered significant (**Impact W-10**). The loss of suitable nesting habitat would be mitigated by habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); and open space fencing and signage (M-BIO-8E).

3.3 Cumulative Impact Analysis

Cumulative impacts are not assessed in this document; they are discussed thoroughly in the proposed project's Environmental Impact Report (EIR).

3.4 Mitigation Measures and Design Considerations

Mitigation measures and design considerations for special-status plant species will be determined following the impacts analysis.

Biological Resources Technical Report for the Newland Sierra Project

M-BIO-1 CONSTRUCTION MONITORING: To prevent inadvertent disturbance to areas outside the limits of grading, all grading located shall be monitored by a biologist. A County of San Diego-approved “Project Biologist” shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities.

The following shall be completed:

6. The Project Biologist shall perform the monitoring duties before, during, and after construction pursuant to the most current version of the *County of San Diego Report Format and Content Requirements, Biological Resources*, and this permit. The contract provided to the County of San Diego (County) shall include an agreement that this will be completed, and a Memorandum of Understanding (MOU) between the biological consulting company and the County shall be executed. The contract shall include a cost estimate for the monitoring work and reporting. In addition to performing monitoring duties pursuant to the most current version of the *County of San Diego Report Format and Content Requirements, Biological Resources*, the Project Biologist also will perform the following duties:
 - a. Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities with other mitigation requirements (e.g., seasonal surveys for nesting birds).
 - b. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading. Perform weekly inspection of fencing and erosion control measures (daily during rain events) near proposed preservation areas and report deficiencies immediately to the Department of Public Works (DPW) Construction Inspector.
 - c. Discuss procedures/training for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
 - d. Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading.
 - e. Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading.

Biological Resources Technical Report for the Newland Sierra Project

- f. Supervise and monitor vegetation clearing, grubbing, and grading to ensure against direct and indirect impacts to biological resources that are intended to be protected and preserved.
- g. Flush special-status species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities.
- h. Verify that the construction site is implementing the following storm water pollution prevention plan (SWPPP) best management practices (BMPs): dust-control fencing, removal of construction debris and a clean work area, covered trash receptacles that are animal-proof and weather-proof, prohibition of pets on the construction site, and a speed limit of 15 miles per hour during the daylight and 10 miles per hour during dark hours.
- i. Periodically monitor incoming landscape products for compliance with the prohibition on non-native invasive species and the requirement for landscaping composed of native species that do not require high irrigation rates.
- j. Periodically monitor the construction site in accordance with the project's fugitive dust control plan in compliance with San Diego County Air Pollution Control Regulations to reduce particulate matter less than 10 microns (PM_{10}) and fine particulate matter less than 2.5 microns ($PM_{2.5}$) emissions during construction (refer to the Air Quality Technical Report). Periodically monitor the construction site to see that dust is minimized according to the fugitive dust control plan and that manufactured slopes are revegetated as soon as possible.
- k. Periodically monitor the construction site to see that artificial security light fixtures are directed away from open space and are shielded.
- l. Oversee the construction site so that cover and/or escape routes for wildlife from excavated areas shall be provided on a daily basis. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles will be covered at night to prevent wildlife from burrowing in. The edges of the sheeting will be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and prior to sealing the exposed area) by a qualified biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.

Biological Resources Technical Report for the Newland Sierra Project

- m. Stop or divert all work when deficiencies require mediation and notify DPW Construction Inspector and the County Construction Inspector within 24 hours; produce periodic (monthly during grading) and final reports and submit to the Wildlife Agencies and the PDS (final report will release bond);
- n. Confer with the Wildlife Agencies and the County Construction Inspector within 24 hours any time protected habitat or gnatcatchers or other special-status species are being affected by construction;
- o. Keep daily monitoring notes for the duration of the grading project for submittal in a final report to substantiate the biological supervision of the grading activities and the protection of the biological resources.

The cost estimate of the monitoring (provided in the contract) shall be added to the grading bonds that will be posted with the Department of Public Works (DPW), or bond separately with the Department of Planning & Development Services (PDS). The bond for monitoring will be released upon the acceptance of the monitoring report for each final map.

Documentation: The applicant shall submit the monitoring contract, cost estimate, and MOU to PDS for review and approval. The applicant shall provide verification that the cost of the monitoring has been added to the grading bond.

Timing: Monitoring shall be performed throughout the duration of the grading; if this project includes more than one Final Map, each shall have separate monitoring contracts and documentation.

Monitoring: The PDS shall review the contract, MOU, and cost estimate or separate bonds for compliance with this condition. The cost estimate shall be forwarded to the project manager for inclusion in the grading bond cost estimate and grading bonds. The DPW shall add the cost of the monitoring to the grading bond costs.

M-BIO-2 CONSTRUCTION FENCING: To prevent inadvertent disturbance to sensitive vegetation and species, temporary construction fencing shall be installed. The temporary fencing shall be placed to confine project activities to the areas approved for construction activities and to protect from inadvertent disturbance of all open space easements and preserve areas that do not allow grading, brushing or clearing. Temporary fencing shall also be required in all locations of the project where proposed grading or clearing is within 100 feet of open space or preserve

Biological Resources Technical Report for the Newland Sierra Project

boundaries. The placement of such fencing shall be approved by the PDS, Permit Compliance Section. Upon approval, the fencing shall remain in place until the conclusion of grading activities, after which the fencing shall be removed.

Documentation: The applicant shall provide evidence that the fencing has been installed and have a California licensed surveyor certify that the fencing is located on the boundary of the open space easement(s). The applicant shall submit the certification letter to PDS for approval.

Timing: Prior to the preconstruction conference for each Final Map area, and prior to any clearing, grubbing, trenching, grading, or any land disturbances the fencing shall be installed, and shall remain for the duration of the grading and clearing. This may be done in association with grading and improvement plans for each Final Map.

Monitoring: The County of San Diego Construction Inspector shall attend either the preconstruction conference and approve the installation of the temporary fencing, or review the certification and pictures provided by the applicant.

M-BIO-3 MONITORING REPORT: To ensure that the biological monitoring occurred during the grading phase of the project, a final biological monitoring report shall be prepared. The report shall substantiate the supervision of the grading activities and state that grading or construction activities did not impact any additional areas or any other sensitive biological resources. The report shall conform to the County of San Diego *Report Format and Content Requirements, Biological Resources*, and include the following items:

1. Photos of the temporary fencing that was installed during the trenching, grading, or clearing activities
2. Monitoring logs showing the date and time that the monitor was on site
3. Photos of the site after the grading and clearing activities
4. Lists of species observed with special-status species mapped.

Documentation: The Project Biologist shall prepare the final report and submit it to the PDS for review and approval.

Timing: Upon approval of each Final Map, and prior to approval of the associated grading and improvement plans, the monitoring contract and bonding shall be submitted and complete. Upon completion of grading activities for each Final

Biological Resources Technical Report for the Newland Sierra Project

Map, and prior to rough grading final Inspection (Grading Ordinance SEC 87.421.a.2), the final report shall be completed and accepted by PDS.

Monitoring: The PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, PDS shall inform DPW that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then PDS shall inform DPW to release the bond back to the applicant.

M-BIO-4 INVASIVE SPECIES PROHIBITION: The PDS Landscape Architect (PDS LA) shall require that all final landscape plans comply with the following: (1) no invasive plant species as included on the most recent version of the Cal-IPC California Invasive Plant Inventory for the project region shall be included, and (2) the plant palette shall be composed of native species that do not require high irrigation rates. The Project Biologist shall periodically check landscape products for compliance with this requirement.

Monitoring: PDS shall approve the final landscape plans; M-BIO-1 includes periodic monitoring of landscaping products brought to the Site.

M-BIO-5 NESTING BIRD MANAGEMENT, MONITORING, AND REPORTING PLAN: To avoid impacts to nesting migratory birds and raptors and other nesting birds, which are a sensitive biological resource pursuant to CEQA, the MBTA and Fish and Game Code, breeding season avoidance shall be implemented on all plans.

DESCRIPTION OF REQUIREMENT: There shall be no brushing, clearing and/or grading allowed during the breeding season of migratory birds or raptors (between January 15 and August 31) or coastal California gnatcatcher (between February 15 and August 15). The Director of PDS [PDS, PCC] may waive this condition, through written concurrence from the USFWS and the CDFW (i.e., Wildlife Agencies), provided that no nesting or breeding birds are present within 300 feet of the brushing, clearing or grading (500 feet for raptors) based on a pre-construction survey conducted by a County-approved biological consultant within seven days prior to the proposed start of clearing/grading. Prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction, compliance with this condition is mandatory unless the requirement is waived by the County upon receipt of concurrence from the Wildlife Agencies. If construction work must occur during the avian breeding season (February 1 to August 31, and as early as January 1 for some raptors), the applicant shall prepare

Biological Resources Technical Report for the Newland Sierra Project

a Nesting Bird Management, Monitoring, and Reporting Plan (NBMMRP) to address avoidance of impacts to nesting birds. This plan shall be designed in coordination with the Wildlife Agencies. To avoid impacts to nesting birds the applicant shall:

1. Prepare an NBMMRP that shall include the following: nest survey protocols describing the nest survey methodologies; a management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks; a monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log (NML) with sufficient details to monitor the applicant's compliance with Fish and Game Code Sections 3503, 3503.5, 3511, and 3513; guidance for the monitoring biologists on reducing stress and harm to the nesting birds as a result of monitoring activities, including instructions on frequency of monitoring visits and distance to keep from the nest; the schedule for the submittal (usually weekly) of the NML; standard buffer widths deemed adequate to avoid or minimize significant project-related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks; a detailed explanation of how the buffer widths were determined; and measures the applicant will implement to preclude birds from using project-related structures (i.e., construction equipment, facilities, or materials) for nesting.
2. Conduct preconstruction nesting bird surveys within 72 hours of construction-related activities and implement appropriate avoidance measures for identified nesting birds.
3. If feasible, conduct surveys beyond the project Site to determine presence of nesting birds that the project activities may affect—300 feet for passerine birds and 500 feet for raptors and coastal California gnatcatchers. The survey protocols should include a detailed description of methodologies used by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols shall include the size of the Site being surveyed, method of search, and behavior that indicates active nests.
4. Include each nest identified in the project Site in the NMLs. The NMLs shall be updated daily and submitted to the CDFW weekly. Since the purpose of the NMLs is to allow the CDFW to track compliance, the NMLs shall include information necessary to allow comparison between nests protected by standard buffer widths recommended for the project (300 feet or 500 feet) and nests with buffer widths were reduced by encroachment of project-related activities. The NMLs shall provide a summary of each nest identified, including the species,

Biological Resources Technical Report for the Newland Sierra Project

status of the nest, buffer information, and fledge or failure data. The NMLs shall allow for tracking the success and failure of the buffers, and shall provide data on the adequacy of the buffers for certain species.

5. Rely on its avian biologists to coordinate with CDFW and USFWS to determine the appropriate standard buffer widths for nests within the project corridor/footprint to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths shall be site- and species-/guild-specific and data-driven and not based on generalized assumptions regarding all nesting birds. The determination of the buffer widths shall consider the following factors:
 - a. Nesting chronologies
 - b. Geographic location
 - c. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise)
 - d. Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations—blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests)
 - e. Visibility of disturbance
 - f. Duration and timing of disturbance
 - g. Influence of other environmental factors
 - h. Species' site-specific level of habituation to the disturbance
 - i. Construction-related noise levels in coastal California gnatcatcher occupied habitat within 500 feet of construction activity would not exceed 60 dBA Leq or pre-construction ambient noise levels, whichever is greater. Project construction within 500 feet of occupied habitat would occur outside of the breeding season if possible. If necessary, construction activities during the breeding season would be managed to limit noise levels in occupied habitat within 500 feet of the project or noise attenuation measures, such as temporary sound walls, would be implemented to reduce noise levels below 60 dBA Leq or below existing ambient noise levels, whichever is greater.
6. Apply the standard buffer widths to avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to the

Biological Resources Technical Report for the Newland Sierra Project

nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.

7. Avoidance and buffering of nests in the process of being built on construction equipment or developed structures shall not be necessary. Additionally, although direct impacts to nests with eggs or chicks is not allowed, no buffer requirements will apply.

Documentation: The applicant shall submit the NBMMRP for review and approval by the County and the Wildlife Agencies.

Timing: The NBMMRP shall be submitted and approved prior to approval of the first Final Map. No grading shall occur until concurrence is received from the County and the Wildlife Agencies. The NMLs shall be submitted to the County and the Wildlife Agencies prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction. Compliance with this condition is mandatory unless the requirement is waived by the County upon receipt of concurrence from the Wildlife Agencies.

Monitoring: The County Construction Inspector shall not allow any grading during the specified dates, unless a concurrence from the Wildlife Agencies is received and reviewed by PDS.

M-BIO-6 REVEGETATION PLAN: To compensate for temporary impacts to special status vegetation and wildlife habitat impacts, a final Revegetation Plan shall be submitted and approved for temporary impacts from grading to areas within the preserve and outside the Limited Building Zone (LBZ) easement and Fire Management Zone (FMZ). The revegetation plan shall be in compliance with the conceptual restoration plan (Appendix J to this Biological Resources Technical Report) and provide replacement of comparable native vegetation. The final revegetation plan shall include, at a minimum, the implementation strategy; appropriate seed/source materials; appropriate planting method; an irrigation plan; quantitative and qualitative success criteria; a maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The revegetation plan shall conform to the most current version of the County of San Diego *Report Format and Content Requirements for Revegetation Plans*. To ensure project completion and success of the revegetation plan, a surety shall be provided and an agreement shall be executed with the County of San Diego and consist of a letter of credit, bond, or cash for 100 percent of the estimated costs

Biological Resources Technical Report for the Newland Sierra Project

associated with the implementation of the revegetation plan and a 10 percent cash deposit of the cost of all improvements (no less than \$3,000; no more than \$30,000). The surety shall be released upon completion of the revegetation plan provided the installed vegetation is in a healthy condition and meets the plan's success criteria.

Documentation: The applicant shall prepare the Revegetation Plan and submit it for review with the applicable review fees and deposits.

Timing: Prior to the approval of the first associated map and prior to the approval of the first associated plan or issuance of the first associated permit, the Revegetation Plan shall be approved by PDS.

Monitoring: The PDS LA shall review the Revegetation Plan for conformance with this condition and the County's *Report Format and Content Requirements for Revegetation Plans*. Upon approval of the Revegetation Plan, a Director's Decision of approval shall be issued to the applicant, with the request for compliance with a Secured Agreement for the implementation of the Revegetation Plan. Upon receipt of the compliance letter, the PDS LA shall sign the Agreement for the Director of PDS and ensure the cash deposit is collected. Upon acceptance of the Agreement, securities and cash deposit, the PDS LA shall provide a confirmation letter acknowledging acceptance of securities.

M-BIO-7 LIGHTING PLAN: All artificial outdoor light fixtures shall be installed so they are directed away from open space and are shielded in accordance with the project's lighting plan standards as outlined in the Specific Plan for the project. Light fixtures shall be installed in conformance with the County Light Pollution Code, the Building Code, the Electrical Code, and lighting requirements specified in Section 6324 (Lighting Permitted in Required Yards) and Section 6326 (Lighting not in Required Yards) of the Zoning Ordinance, along with any other related state and federal regulations such as California Title 24.

Documentation: The applicant shall submit building plans to the County for review in compliance of the above regulations.

Timing: Prior to the approval of all building permits.

Monitoring: The County building inspector shall review structures for compliance with this condition. During construction, the Project Biologist shall review lighting for compliance with this measure as part of the construction monitoring requirement.

Biological Resources Technical Report for the Newland Sierra Project

M-BIO-8A PRESERVE: The applicant shall preserve in permanent open space approximately 1,420.9 acres of native habitats generally consistent with the assemblage of vegetation communities impacted by the project in a proposed on-site and off-site open space preserve area (Table 4-1) (see Appendix K for the off-site mitigation site description). This shall include preservation of 1,420.9 acres of native habitats to mitigate for project impacts to 760.6 acres of special-status vegetation communities (both upland and riparian), thereby preserving compensatory habitat that provides equal to or greater benefit to plant and wildlife species. Proposed on-site open space preserve has already been evaluated and may be used to satisfy this requirement through M-BIO-8B through M-BIO-8E.

Documentation: A Resource Management Plan (RMP) shall be prepared per M-BIO-8D and an application for the RMP shall be submitted to the PDS.

Timing: Prior to issuance of a grading permit the mitigation shall occur.

Monitoring: The PDS shall accept an application for an RMP, and PDS and DPR shall review the RMP submittal for compliance with this condition and the RMP Guidelines.

M-BIO-8B BIOLOGICAL OPEN SPACE EASEMENT. The County of San Diego (County) shall be granted a biological open space easement, as shown on the approved Tentative Map for the on-site open space and a separate open space easement exhibit for the off-site biological open space. These easements shall be for the protection of biological resources and all of the following shall be prohibited on any portion of the land subject to said easement: grading; excavation; placing soil, sand, rock, gravel, or other material; clearing of vegetation; constructing, erecting, or placing of any building or structure; vehicular activities; dumping trash; or using for any purpose other than as open space. Granting this open space shall authorize the County and its agents to periodically access the land to perform management and monitoring activities for species and habitat conservation. The only exception(s) to this prohibition are the following:

1. Selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. Although clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the applicable fire code of the fire authority having jurisdiction and the Memorandum of Understanding dated February 26, 1997, between the wildlife agencies and the fire districts and any subsequent amendments thereto.

Biological Resources Technical Report for the Newland Sierra Project

2. Activities conducted pursuant to a revegetation or habitat management plan approved by the Director of PDS, DPR and DPW.
3. Vegetation removal or application of chemicals for vector control purposes where expressly required by written order of the County of San Diego DEH.
4. Uses, activities, and placement of structures expressly permitted and shown on the plot plan.
5. Construction, use and maintenance of multi-use, non-motorized trails.

Documentation: The applicant shall show the on-site open space easement on the Final Map and open space easement exhibit with the appropriate granting language on the title sheet concurrent with Final Map Review, then submit them for preparation and recordation with the [DGS, RP], and pay all applicable fees associated with preparation of the documents. For the off-site open space an easement will be dedicated to the County through a separate document.

Timing: Prior to the approval of each Final Map, and on the associated map and prior to the approval of any associated plan and issuance of any associated permit, the on-site and off-site biological open space easements shall be recorded.

Monitoring: For recordation on the map, the [PDS, LDR] shall route the Final Map to [PDS, PCC] for approval prior to map recordation. The [PDS, PCC] shall preapprove the language and estimated location of the easements prior to recordation. The [PDS LDR] shall satisfy the condition after map recordation.

M-BIO-8C LIMITED BUILDING ZONE EASEMENT: A Limited Building Zone (LBZ) Easement shall be granted to prohibit the building of structures that would require vegetation clearing within the protected biological open space for fuel management purposes. The easement must extend at least 100 feet from the Biological Open Space boundary.

DESCRIPTION OF REQUIREMENT: Grant to the County of San Diego a LBZ Easement as shown on the Tentative Map. The purpose of this easement is to limit the need to clear or modify vegetation for fire protection purposes within the adjacent biological open space easement and prohibit the construction or placement of any structure that would require vegetation clearing within the protected biological open space for fuel management purposes. The only exceptions to this prohibition are structures that do not require fuel modification/vegetation management.

Biological Resources Technical Report for the Newland Sierra Project

Documentation: The applicant shall show the easement on the Final Map with the appropriate granting language on the title sheet concurrent with Final Map Review, then submit them for preparation and recordation with the [DGS, RP], and pay all applicable fees associated with preparation of the documents.

Timing: Prior to the approval of each Final Map, and on the associated map and prior to the approval of any associated plan and issuance of any associated permit, the Limited Building Zone easements shall be recorded.

Monitoring: For recordation on the map, the [PDS, LDR] shall route the Final Map to [PDS, PCC] for approval prior to map recordation. The [PDS, PCC] shall preapprove the language and estimated location of the easements prior to recordation. The [PDS LDR] shall satisfy the condition after map recordation.

M-BIO-8D RESOURCE MANAGEMENT PLAN: To provide for the long-term management of the proposed biological open space preserve, a Resource Management Plan (RMP) shall be prepared and implemented. Conceptual RMPs are provided as Appendix L (on-site open space) and Appendix M (off-site open space) to this Biological Resources Technical Report.

DESCRIPTION OF REQUIREMENT: Submit to and receive approval from the Director of PDS, a RMP consistent with the project's RPP on file with as Environmental Review Number PDS2014-MPA-14-018. The final RMP cannot be approved until the following has been completed to the satisfaction of the Director of PDS, and, in cases where DPR has agreed to be the owner/manager, to the satisfaction of the Director of DPR:

1. The RMP shall be prepared and approved pursuant to the most current version of the County of San Diego Biological Report Format and Content Requirements.
2. The habitat land to be managed shall be completely purchased.
3. The biological open space easements shall be dedicated to ensure that the land is protected in perpetuity.
4. A Resource Manager shall be selected and evidence provided by applicant as to the acceptance of this responsibility by the proposed Resource Manager
5. The RMP funding costs, including a PAR (Property Assessment Record) or other equally adequate forecast. The funding mechanism (endowment or other equally adequate mechanism) to fund annual costs for the RMP and the holder of the security shall be identified and approved by the County.

Biological Resources Technical Report for the Newland Sierra Project

6. A contract between the applicant and County shall be executed for the implementation of the RMP.
7. Annual reports shall include an accounting of all required tasks and details of tasks addressed during the reporting period, and an accounting of all expenditures and demonstration that the funding source remains adequate.

Documentation: The applicant shall prepare the RMP and submit it to PDS and pay all applicable review fees.

Timing: Prior to approval of the first Final Map, submit the RMP for review and approval.

Monitoring: PDS shall review the RMP for compliance with the content guidelines, the conceptual RMP, and this condition.

M-BIO-8E BIOLOGICAL OPEN SPACE FENCING AND SIGNAGE: To protect the proposed open space easement from unauthorized entry or disturbance, permanent post and rail fencing, or similar permeable fence, shall be installed along the boundaries of the biological open space. Open space signage shall be placed approximately every 200 feet along the fencing (Figure 13).

DESCRIPTION OF REQUIREMENT: Open space fencing or walls shall be placed adjacent to residential uses and roads, as shown on Figure 13. Open space signage shall be installed as shown on Figure 13 and shall be corrosion resistant, a minimum of 6 inches by 9 inches, on posts not less than 3 feet in height from the ground surface, and must state the following:

Sensitive Environmental Resources

Area Restricted by Easement

Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions contact the County of San Diego,

Planning & Development Services

Reference: (PDS2015-ER-15-08-001)

Documentation: The applicant shall install the fencing or walls as indicated on Figure 13 and include them on the building plans. The applicant shall install the signage as indicated on Figure 13 and have them photographed and verified by a California Registered Engineer or licensed surveyor.

Timing: Prior to occupancy, the fencing or walls and signs shall be in place.

Biological Resources Technical Report for the Newland Sierra Project

Monitoring: PDS shall verify compliance of the fencing or walls through review of the building permits and this condition. Evidence of the signage shall be site photos and a statement from a California Registered Engineer, or licensed surveyor that the open space signs have been installed in accordance with the open space fencing and signage plan.

M-BIO-9 HORKELIA RELOCATION PLAN: For any direct loss of Ramona horkelia, the applicant shall prepare and implement a Relocation Plan prior to the issuance of grading permits. The relocation plan shall provide for replacement of individual plants to be removed at a minimum 1:1 ratio, within suitable receptor sites(s) where no future construction-related disturbance will occur. The relocation plan shall specify at minimum the following: (1) the location of the receptors site(s) in protected open space areas within the project Site; (2) appropriate methods for replacement (e.g., harvesting seeds, salvaging and transplantation of impacted plants, and/or nursery propagation); (3) receptor site preparation methods; (4) schedule and action plan for maintaining and monitoring the receptor site(s); (5) list of performance criteria and standards for successful mitigation; (6) measures to protect the receptor site(s) (e.g., trespass and erosion control, weeding); and (7) cost of implementing the plan.

Documentation: The applicant shall prepare the final Horkelia Mitigation Plan that complies with the Conceptual Restoration Plan and submit it for review with the applicable review fees and deposits (this is considered a Revegetation Plan submittal).

Timing: Prior to the approval of the first associated map and prior to the approval of the first associated plan or issuance of the first associated permit, the Horkelia Mitigation Plan shall be approved.

Monitoring: The PDS shall review the Horkelia Mitigation Plan for conformance with this condition and the applicable elements of the most current version of the County of San Diego *Report Format and Content Requirements for Revegetation Plans*. Upon approval of the Horkelia Mitigation Plan, security for success of the Horkelia Mitigation Plan shall be collected and the applicant shall provide a confirmation letter acknowledging acceptance of securities.

M-BIO-10 CONTROL OF INVASIVE SPECIES: Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods applied with the authorization of the County of San Diego agriculture commissioner. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a pest control advisor (PCA) and

Biological Resources Technical Report for the Newland Sierra Project

implemented by a licensed applicator. Where manual and/or mechanical methods are used, disposal of the plant debris shall follow the regulations set by the County of San Diego agriculture commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA, the County of San Diego agriculture commissioner, and Cal-IPC with the goal of controlling populations before they start producing seeds.

M-BIO-11 FIRE PROTECTION PLAN: To minimize the potential exposure of the project Site to fire hazards, all features of the Fire Protection Plan for the Newland Sierra Project shall be implemented in conjunction with development of the project.

3.5 Conclusions

3.5.1 Sensitive Plant Species

Impact SP-1 The significant short-term direct impacts to summer holly and Ramona horkelia will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, and M-BIO-9, which require biological monitoring, temporary construction fencing, preparation of a biological monitoring report, and relocation of Ramona horkelia through implementation of a Mitigation and Monitoring Plan. These mitigation measures will prevent and document that construction will not cause additional impacts beyond the project footprint.

Impact SP-2 The significant long-term direct impacts to summer holly and Ramona horkelia will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-8A, and M-BIO-9, which require biological monitoring, provides commensurate on- or off-site habitat management and conservation that has been demonstrated to contain habitat for these species, and relocation of Ramona horkelia through implementation of a Mitigation and Monitoring Plan. This would reduce the impact to less than significant because there would be adequate numbers of individuals and habitat to preserve and manage the species in perpetuity. Impacts to 14 percent of the summer holly population are mitigated with on-site preservation and management (M-BIO-8A). This would reduce the impact to less than significant because there would be adequate numbers of individuals and habitat to preserve and manage the species in perpetuity. Impacts to 100 percent of the Ramona horkelia population will be mitigated through a transplantation/revegetation program that will meet applicable standards and be regulated through a Revegetation Plan (M-BIO-9) (see Appendix J).

Biological Resources Technical Report for the Newland Sierra Project

Impact SP-3 The significant short-term indirect impacts to summer holly and Ramona horkelia will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, and M-BIO-3, which require biological monitoring during construction, temporary construction fencing, and a biological monitoring report. These impacts have been reduced to less than significant because these measures will prevent and document that construction will not cause additional impacts beyond the project footprint.

Impact SP-4 The significant long-term indirect impacts to summer holly and Ramona horkelia will be reduced to less than significant through implementation of mitigation measures M-BIO-4, M-BIO-8A–8E, M-BIO-10, and M-BIO-11, which provide for biological review of landscape plans, habitat conservation and management of equivalent function and value, regulation of landscape installation and herbicide application, and implementation of a fire protection plan. Potential indirect impacts have been reduced to less than significant because human activity has been restricted to the project footprint, the risk of fire has been reduced, and release of exotic plants and animals has been minimized to the extent possible, and the Revegetation Plan includes adaptive management that will add measures to restore the population if needed (Appendix J).

3.5.2 Sensitive Wildlife Species

Impact W-1 Direct loss of federally threatened coastal California gnatcatcher nesting individuals (including nests and/or young) will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, M-BIO-4, M-BIO-5, M-BIO-6, and M-BIO-7, which require biological monitoring during construction, temporary construction fencing, preparation of a biological monitoring report, review of landscape plans, preconstruction surveys for nesting birds and setbacks, and minimizing night lighting. Biological monitoring and reporting will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to. Preconstruction surveys will identify locations of coastal California gnatcatchers and other migratory bird nests and implement construction limitations or provide suitable buffers between these locations and construction. Review of the conceptual landscape plans has ensured that native species are being used, thus reducing the potential for invasive species to encroach upon existing native habitat. PDS will confirm use of native species during approval of the final landscape plans prior to grading. Minimizing night and outdoor lighting will reduce disruption of nocturnal wildlife movement. Therefore, implementation of these mitigation measures will reduce these impacts to less than significant.

Biological Resources Technical Report for the Newland Sierra Project

Impact W-2 The significant long-term direct impacts to coastal California gnatcatcher as a result of removal of suitable habitat, will be reduced to less than significant through implementation of mitigation measures M-BIO-8A through M-BIO-8E, which provides commensurate on- or off-site habitat management and conservation that has been demonstrated to contain habitat for these species. The proposed project has been incorporated into the overall conservation strategy of the County's draft North County Plan, and the development areas and biological open space areas of the proposed project are identified as proposed hardline areas in the draft North County Plan (County of San Diego 2016). Loss of coastal sage scrub and any associated incidental take of California gnatcatcher would be authorized through the County's Section 4(d) HLP process or through Section 7 consultation with the USFWS. A Draft Habitat Loss Permit, including 4(d) findings has been provided in Appendix E. As demonstrated by the incorporation of the proposed project as a proposed hardline area in the draft North County Plan and by the draft HLP findings provided in Appendix E, the loss of coastal sage scrub associated with the proposed project would be consistent with the NCCP Guidelines, County's draft North County Plan, and the Section 4(d) Rule.

Impacts W-3 and W-7 Potential significant short-term direct and indirect impacts from loss of County Group I and/or SSC species. Species will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, M-BIO-4, M-BIO-5, M-BIO-6, and M-BIO-7, which require biological monitoring during construction, preparation of a biological monitoring report, biological review of landscape plans, preconstruction surveys for nesting birds and setbacks, revegetation of temporarily impacted areas, and minimizing night and outdoor lighting. Biological monitoring and reporting will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to. Preconstruction surveys will identify locations of nesting birds and implement construction limitations or provide suitable buffers between these locations and construction. The conceptual landscape plans demonstrate that native species are being used, thus reducing the potential for invasive species to encroach upon existing native habitat. PDS will confirm use of native species during approval of the final landscape plans prior to grading. Minimizing night and outdoor lighting will reduce disruption of nocturnal wildlife movement while monitoring of excavated areas and soil piles will prevent entrapment, and potential death, of wildlife species. Therefore, implementation of these mitigation measures will reduce these impacts to less than significant because the measures will minimize the potential for loss of individuals.

Biological Resources Technical Report for the Newland Sierra Project

Impact W-4 The significant long-term direct impacts to habitat for County Group I species (described in Table 3-2) as a result of removal of suitable habitat, and sensitive vegetation types will be reduced to less than significant through implementation of mitigation measure M-BIO-8A, which provides commensurate on- and off-site purchase of mitigation lands habitat management and conservation that has been demonstrated to contain habitat for these species, and off-site preservation of sensitive habitat and species, in accordance with the County *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*, through established mitigation ratios.

This would reduce the impact to less than significant because the amount of preserved habitat would be adequate to compensate for the rarity of the habitat types and be managed in perpetuity to provide equivalent function and value, all in accordance with the County *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*.

Impact W-5 The significant short-term direct impacts to active nests or the young of nesting Group II or SSC species will be reduced to less than significant through implementation of mitigation measure M-BIO-5, which requires preconstruction surveys for nesting birds and setbacks for active nests. These impacts have been reduced to less than significant by ensuring that nests and fledglings are not directly impacted by construction activities. Active nests will be mapped during the nesting bird surveys, and buffers, which eliminate construction activities near nests, will be applied.

Impact W-6 The significant long-term direct impacts to raptor foraging habitat will be reduced to less than significant through implementation of mitigation measure M-BIO-8A through M-BIO-8E, which provides commensurate on- and off-site habitat, management, and conservation that has been demonstrated to contain raptor foraging habitat.

Impact W-8 The significant long-term indirect impacts to special-status wildlife species would be reduced to less than significant through the implementation of mitigation measures M-BIO-4, M-BIO-6, M-BIO-8A-E, and M-BIO-11 which provide for biological review of landscape plans, revegetation of temporarily impacted areas, habitat conservation and management of equivalent function and value, and implementation of a fire protection plan. Potential indirect impacts have been reduced to less than significant because human activity has been restricted to the project footprint, the risk of fire has been reduced, and release of exotic plants and animals has been minimized to the extent possible, and the Revegetation Plan

Biological Resources Technical Report for the Newland Sierra Project

includes adaptive management that will add measures to restore the population if needed (Appendix J).

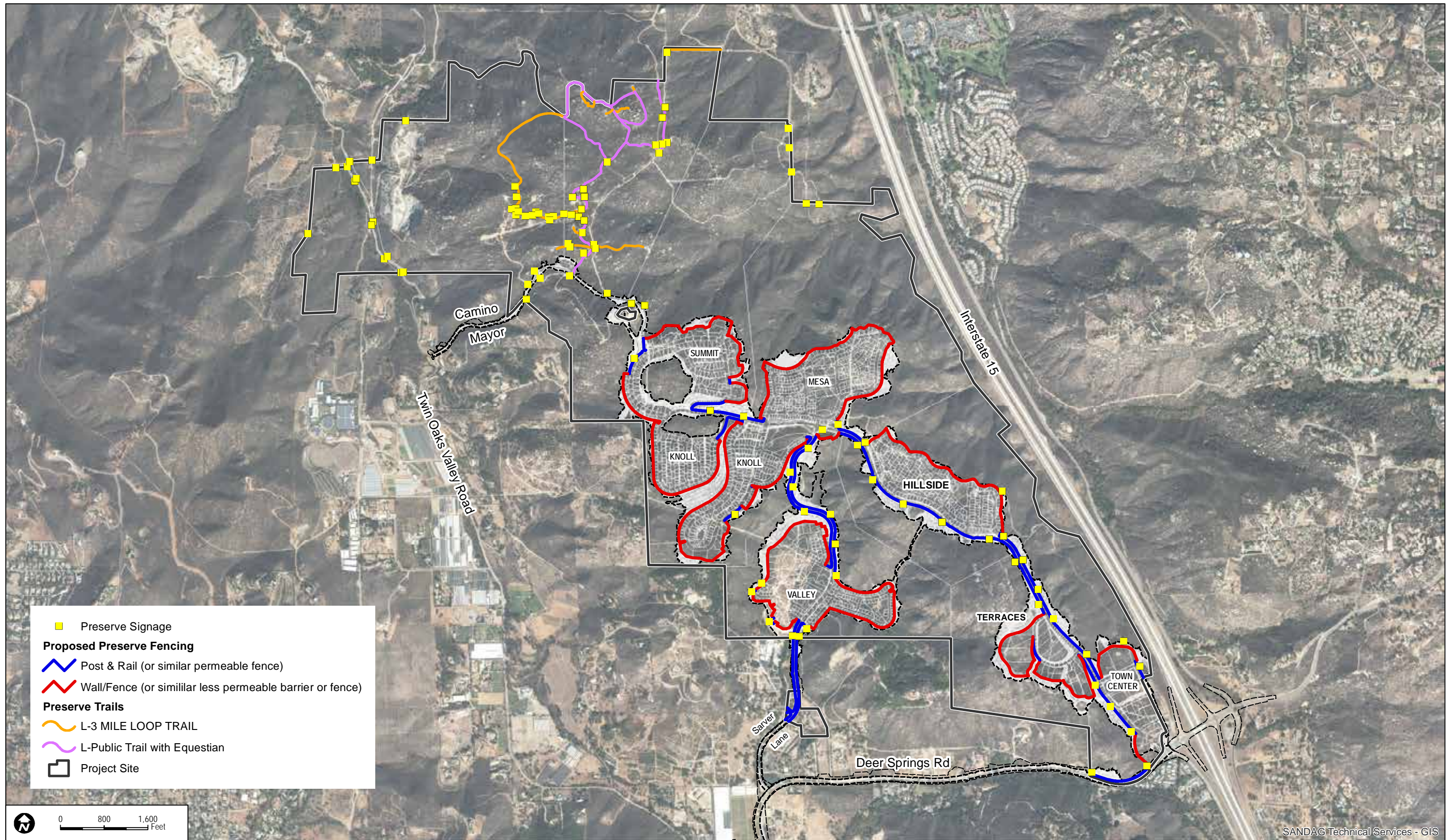
Impact W-9 The significant short-term indirect impacts to tree-nesting raptors as a result of project construction would be reduced to less than significant through mitigation measure M-BIO-5, which would provide for avoidance of impacts through setbacks, preconstruction surveys for nesting birds and implementation of nest buffers should nests be found.

Impact W-10 The significant long-term direct impacts to tree-nesting raptors, as a result of removal of suitable nesting habitat, as shown in Table 3-2 and discussed in Section 3.2.12, will be reduced to less than significant through implementation of mitigation measure M-BIO-8A through M-BIO-8E, which provides for off-site habitat management and conservation of equivalent or better function and value that has been demonstrated to contain habitat for these species. Avoidance of direct impacts on site for the individuals would be done during construction and operation of the project by a monitoring biologist.

3.5.3 Core Wildlife Area

Impacts CWA-1 and CWA-3 The significant impact to the existing core wildlife area from construction-related activities that would result from short-term direct impacts would be mitigated to less than significant through the implementation of M-BIO-1, M-BIO-2, M-BIO-3, M-BIO-6, and M-BIO-7. These mitigation measures require biological monitoring during construction, temporary construction fencing, preparation of a biological monitoring report, revegetation of temporary impacts, and minimization of night and outdoor lighting. Biological monitoring and reporting and temporary fencing will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to. Revegetation of temporary impacts will ensure that native vegetation will be restored, thus reducing the potential for invasive species to encroach upon existing native habitat. Minimizing night and outdoor lighting during construction will reduce disruption of nocturnal wildlife movement.

Impact CWA-2 The significant long-term direct impacts to the core wildlife area and the subsequent viability populations of multiple wildlife species, as a result of removal of suitable habitat, will be reduced to less than significant through implementation of mitigation measure M-BIO-8A through M-BIO-8E, which provides habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities.



INTENTIONALLY LEFT BLANK

Biological Resources Technical Report for the Newland Sierra Project

4 RIPARIAN HABITAT OR SENSITIVE NATURAL COMMUNITY

4.1 Guidelines for the Determination of Significance

The County of San Diego's (County's) *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* (County of San Diego 2010a) are based on the criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and were used to analyze potential direct and indirect impacts to biological resources. The following guidelines for the determination of significance come directly from the County's Guidelines (County of San Diego 2010a).

Guideline 4.2 The project would have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations, or by CDFG⁶ or USFWS.

- A. Project-related grading, clearing, construction, or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as listed in Table 5 [County of San Diego 2010b], excluding those without a mitigation ratio) on or off the project Site. This Guideline would not apply to small remnant pockets of habitat that have a demonstrated limited biological value. No de minimus standard is specified under which an impact would not be significant; however, minor impacts to native or naturalized habitat that is providing essentially no biological habitat or wildlife value can be evaluated on a case-by-case basis to determine whether the projected impact may be less than significant. For example, an impact to native or naturalized upland habitat under 0.1 acre in an existing urban setting may be considered less than significant (depending on a number of factors). An evaluation of this type should consider factors including, but not limited to, type of habitat, relative presence or potential for sensitive species, relative connectivity with other native habitat, wildlife species and activity in the project vicinity, and current degree of urbanization and edge effects in project vicinity, etc. Just because a particular habitat area is isolated, for example, does not necessarily mean that impacts to the area would not be significant (e.g., vernal pools). An area that is disturbed or partially developed may provide a habitat "island"

⁶ Although the California Department of Fish and Game changed its name to California Department of Fish and Wildlife effective January 1, 2013, this language is taken directly from the County's Guidelines and has not been modified.

Biological Resources Technical Report for the Newland Sierra Project

that would serve as a functional refuge area “stepping stone” or “archipelago” for migratory species.

- B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by U.S. Army Corps of Engineers (ACOE), California Department of Fish and Game (CDFG), and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
- C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historically low groundwater levels.
- D. The project would cause indirect impacts, particularly at the edge of proposed development adjacent to proposed or existing undeveloped lands or other natural habitat areas, to levels that would likely harm sensitive habitats over the long term. The following issues should be addressed in determining the significance of indirect impacts: increasing human access; increasing predation or competition from domestic animals, pests, or exotic species; altering natural drainage; and increasing noise and/or nighttime lighting to a level above ambient that has been shown by the best available science to adversely affect the functioning of sensitive habitats.
- E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands. If the project is subject to the Resource Protection Ordinance (RPO), buffers of a minimum of 50 feet and a maximum of 200 feet to protect wetlands are required based on the best available science available to the County at the time of adoption of the ordinance. The following examples provide guidance on determining appropriate buffer widths:
 - A 50-foot wetland buffer would be appropriate for lower quality RPO-wetlands where the wetland has been assessed to have low physical and chemical functions, vegetation is not dominated by hydrophytes, soils are not highly erosive, and slopes do not exceed 25 percent.
 - A wetland buffer of 50 to 100 feet is appropriate for moderate- to high-quality RPO-wetlands that support a predominance of hydrophytic vegetation or wetlands within steep slope areas (greater

Biological Resources Technical Report for the Newland Sierra Project

than 25 percent) with highly erosive soils. Within the 50- to 100-foot range, wider buffers are appropriate where wetlands connect upstream and downstream, where the wetlands serve as a local wildlife corridor, or where the adjacent land use(s) would result in substantial edge effects that could not be mitigated.

- Wetland buffers of 100 to 200 feet are appropriate for RPO-wetlands within regional wildlife corridors or wetlands that support significant populations of wetland-associated sensitive species, or where stream meander, erosion, or other physical factors indicate a wider buffer is necessary to preserve wildlife habitat.
- Buffering of greater than 200 feet may be necessary when an RPO-wetland is within a regional corridor or supports significant populations of wetland-associated sensitive species and lies adjacent to land use(s) that could result in a high degree of edge effects within the buffer. Although the RPO stipulates a maximum of 200 feet for RPO-wetland buffers, actions may be subject to other laws and regulations (such as the Endangered Species Act) that require greater wetland buffer widths.

4.2 Analysis of Project Effects

The proposed project vegetation and land cover impacts, including riparian and other sensitive habitat impacts are analyzed in Section 2.2. The applicable County Guidelines are applied in this section. The project will result in significant impacts under the guidelines presented in Section 4.1 for the following reasons.

4.2.1 Project Effects Relevant to Guideline 4.2.A (Impacts to Sensitive Upland Habitat)

Impact V-1: Temporary Direct Impacts to Special-Status Upland Vegetation

Short-term, construction-related, or temporary direct impacts to special-status upland vegetation communities would primarily result from construction activities and are analyzed in Section 2.2.1.1.

The proposed project would result in either 8.7 or 9.2 acres (Deer Springs Road Option A and Option B, respectively) of on-site temporary impacts associated with grading and improvements to Deer Springs Road. The amount of temporary impacts would be determined by the final Deer Springs Road option approved for the project. Of the temporary impacts, 8.5 to 9.0 acres would impact special-status vegetation communities (see Table 2-1). In addition, clearing, trampling, or

Biological Resources Technical Report for the Newland Sierra Project

grading of special-status vegetation communities outside designated construction zones could occur in the absence of avoidance and mitigation measures. Impacts related to other off-site improvements of roads and sewer facilities would in an additional 8.8 acres of temporary impacts (Table 2-3). Of those impacts 3.9 acres would be to sensitive upland vegetation.

Potential temporary direct impacts to sensitive upland vegetation communities on-site and off-site would be significant (**Impact V-1**).

The project would require construction monitoring to avoid unintentional impacts to species and habitat impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3); and vegetation would be replaced through a vegetation plan where possible for temporary vegetation impacts (M-BIO-6); and outdoor night lighting would be in compliance with the Light Pollution Code (M-BIO-7).

Impact V-2: Permanent Direct Impacts to Special-Status Upland Vegetation

Permanent direct impacts to special-status upland vegetation communities are analyzed in Section 2.2.1. There are permanent direct impacts to 776.6 acres of onsite vegetation communities and land covers, including permanent direct impacts to 757.2 acres of special-status upland vegetation communities as a result of the proposed project (see Table 2-4). There are also permanent off-site direct impacts associated with Deer Springs Road improvements which total 47.5 acres (Option A), including 5.7 acres of special-status upland vegetation (see Table 2-5); or 50.2 acres (Option B), including 7.1 acres of special-status upland vegetation (see Table 2-5). There are additional off-site impacts that would occur to 23 acres, including 6.8 acres of special-status upland vegetation (see Table 2-6). The proposed project would permanently impact up to 757.2 acres of sensitive upland vegetation. Permanent direct impacts to special-status upland vegetation communities would be considered a significant impact (**Impact V-2**).

Tables 2-3 and 2-4 in Section 2.2 summarize permanent direct impacts to vegetation communities and land covers found in the project Site. Figures 11A–11E illustrate the distribution of biological resources on Site and the locations where proposed impacts would occur. Table 4-1, Summary of Impacts, Mitigation, and Open Space for Vegetation Communities and Jurisdictional Areas, summarize the impacts and required mitigation for special-status vegetation communities in the project Site. Jurisdictional resources are discussed in Section 4.2.2.

Biological Resources Technical Report for the Newland Sierra Project

Table 4-1
Summary of Permanent Impacts, Mitigation, and Open Space for
Vegetation Communities and Jurisdictional Areas (Acres)

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts ¹	Total Off-Site Impacts ²	Mitigation Ratio	Mitigation Required	On-Site Open Space ³	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
<i>Coastal Scrub</i>								
Diegan coastal sage scrub (including disturbed)*	68.2	45.6	0.5	2:1	92.2	22.6	106.4	36.8
Coastal sage scrub – Baccharis dominated (including disturbed)	2.0	1.5	—	2:1	3.0	0.5	—	(2.5)
Flat-topped buckwheat – disturbed*	1.7	0	—	2:1	0	1.7	—	1.7
Coastal sage – chaparral transition*	7.8	7.4	1.7	2:1	18.2	0.4	—	(17.8)
<i>Subtotal</i>	<i>79.7</i>	<i>54.5</i>	<i>2.2</i>	<i>n/a</i>	<i>113</i>	<i>25.2</i>	<i>106.4</i>	<i>18.2</i>
<i>Chaparral</i>								
Chamise chaparral ⁴ *	—	—	—	—	—	—	19.7	19.7
Granitic southern mixed chaparral (including disturbed)*	1,700.7	626.9	6.3	0.5:1	316.6	1,073.8	—	757.2
Mafic southern mixed chaparral*	58.8	0.8	—	3:1	2.4	58.0	—	55.6
Scrub oak chaparral*	44.3	39.2	—	0.5:1	19.6	5.1	—	(14.5)
<i>Subtotal</i>	<i>1,803.8</i>	<i>666.9</i>	<i>6.3</i>	<i>n/a</i>	<i>338.6</i>	<i>1,136.9</i>	<i>19.7</i>	<i>818.0</i>
<i>Woodland</i>								
Coast live oak woodland*	9.1	6.5	2.8	3:1	27.9	2.6	—	(25.3)
Engelmann Oak Woodland - Open ⁴ *	—	—	—	n/a	—	—	29.0	29.0
<i>Subtotal</i>	<i>9.1</i>	<i>6.5</i>	<i>2.8</i>	<i>n/a</i>	<i>26.1</i>	<i>2.6</i>	<i>29.0</i>	<i>3.7</i>
<i>Riparian</i>								
Freshwater marsh*	0.1	—	—	3:1	—	0.1	—	0.1
Southern coast live oak riparian forest*	5.2	1.9	0.8	3:1	8.1	3.3	—	(4.8)
Mulefat scrub*	0.2	0.1	0.03	3:1	0.4	0.1	—	(0.3)
Southern sycamore-alder riparian woodland ⁴ *	—	—	—	—	—	—	7.9	7.9
Southern willow scrub*	2.5	0.1	0.5	3:1	1.8	2.4	—	0.6

Biological Resources Technical Report for the Newland Sierra Project

Table 4-1
Summary of Permanent Impacts, Mitigation, and Open Space for
Vegetation Communities and Jurisdictional Areas (Acres)

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts ¹	Total Off-Site Impacts ²	Mitigation Ratio	Mitigation Required	On-Site Open Space ³	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
Southern willow scrub/tamarisk scrub*	0.3	—	—	3:1	—	0.3	—	0.3
Arundo-dominated riparian	—	—	0.1	3:1	0.3	—	—	(0.3)
<i>Subtotal</i>	8.3	2.1	1.4	<i>n/a</i>	10.6	6.2	7.9	3.5
<i>Grassland</i>								
Valley needlegrass grassland ^{4*}	—	—	—	—	—	—	8.5	8.5
Non-native grassland*	16.1	15.3	2.6	0.5:1	9.0	0.8	33.8	25.7
<i>Subtotal</i>	16.1	15.3	2.6	<i>n/a</i>	9.0	0.8	42.3	34.2
<i>Non-native Communities and Land Covers</i>								
Agriculture	—	—	2.0	None	—	—	—	(2.0)
Eucalyptus woodland	0.5	—	2.0	None	—	0.5	3.2	1.7
Intensive agriculture	<0.0	<0.0	1.4	None	—	—	—	(1.4)
Extensive agriculture	—	—	4.5	None	—	—	—	(4.5)
Orchard and vineyards	2.0	1.0	1.9	None	—	1.0	—	(1.9)
Urban/developed	9.2	9.2	40.8	None	—	—	0.1	(49.9)
Disturbed habitat	57.0	21.0	5.1	None	—	36.0	3.3	13.2
Non-native woodland	—	—	0.2	None	—	—	—	(0.2)
<i>Subtotal</i>	68.7	31.2	57.9	—	0	37.5	6.6	(35.5)
Total¹	1,985.6	776.6	73.2	n/a	497.3	1,209.1	211.8	923.6
<i>Other</i>								
RPO wetland buffer ⁵	30.2	8.7	3.9	n/a	n/a	n/a	28.09	n/a
Oak Root Zone ⁵	32.9	11.2	8.4	3:1	58.8	21.7	16.8	-2.1
Non-wetland waters (ephemeral and intermittent) ⁵	5.33	1.41	0.16	1:1	1.59	3.92	—	n/a

¹ Totals may not add due to rounding.

² This includes impacts for Deer Springs Road Option B and all other off-site impacts.

³ The open space acreage includes the on-site temporary impacts since they would be restored and conserved in permanent open space.

Biological Resources Technical Report for the Newland Sierra Project

⁴ These communities occur in the off-site Ramona mitigation site and are described in Appendix J.

⁵ These features are overlays to the vegetation community layer and are not counted toward the total existing acreage.

* Considered special-status by the County (2010b).

3:1 for riparian areas includes a 1:1 creation and 2:1 enhancement requirement.

Biological Resources Technical Report for the Newland Sierra Project

The project's proposed preservation of existing populations of sensitive species, suitable habitat, and special-status vegetation communities would conserve approximately 1,209.1 acres of habitat of equivalent function and value on the project Site. In addition, the project would preserve 211.8 acres within the off-site Ramona mitigation site (M-BIO-8A through M-BIO-8E). Together, the on-site and off-site preservation would adequately mitigate the project's impacts to sensitive-status upland habitat.

The project would not result in net mitigation deficit for any vegetation communities. Impacts to scrub oak chaparral would be mitigated through the on-site preservation of granitic southern mixed chaparral, which serves the same habitat function as scrub oak chaparral. The scrub oak chaparral on Site is surrounded by southern mixed chaparral. Areas mapped as scrub oak chaparral are largely composed of stands of scrub oaks, but chamise and other chaparral species, such as a variety of chaparral species including chamise, scrub oak, manzanita, and ceanothus, are also intermixed. Since these vegetation communities contain overlapping plant species, they provide habitat for similar plant and wildlife species. The preservation of 2.4 acres of southern willow scrub would serve as mitigation for impacts to 1 acre of mulefat scrub and 0.1 acre of arundo-dominated riparian. The mulefat scrub within the development footprint occurs along a dirt road isolated from other riparian habitat and does not provide habitat for sensitive wildlife species. The arundo-dominated habitat is composed of a non-native invasive species that is not known to support sensitive plant or wildlife species. Since the mule fat scrub is isolated and the arundo-dominated habitat is a non-native vegetation community, preservation of a continuous area of native habitat would be considered greater than like functioning. The preservation of southern willow scrub areas that are located adjacent to native habitat areas support more mature riparian scrub species and provide better foraging and cover for wildlife species.

This impact would be mitigated to less than significant through implementation of the above mitigation measures.

4.2.2 Project Effects Relevant to Guideline 4.2.B (Impacts to Wetlands and Riparian Habitats)

Any adverse change to jurisdictional wetlands or riparian habitats (i.e., jurisdictional resources) would be significant and they would result from construction activities, as analyzed in Section 2.5. Section 7.2.3 discusses Guideline 4.5.C, which pertains specifically to RPO Wetlands.

Impact V-3: Temporary Direct Impacts to Jurisdictional Resources

As described in Section 2.5.1.1, there is 0.06 acre of impacts to ACOE/RWQCB/CDFW non-wetland waters associated with temporary grading. There are no temporary direct impacts to

Biological Resources Technical Report for the Newland Sierra Project

resources under the combined jurisdiction of ACOE/RWQCB/CDFW/County within the on-Site components of the project.

Temporary off-site impacts are summarized in Table 2-10. Off-site temporary grading impacts are the same for both Deer Springs Road options and includes 0.52 acre of temporary impacts to southern coast live oak riparian forest (CDFW riparian habitat and County RPO), and 0.01 acre of non-wetland waters (ACOE/RWQCB/CDFW). Additional impacts from off-site road improvements include impacts to 0.01 acre of non-wetland waters and less than 0.01 acre of southern willow scrub (CDFW only) associated with Camino Mayor and 0.04 acre of impacts to non-wetland waters and 0.39 acre of impacts to coast live oak woodland (CDFW only) associated with Sarver Lane. Mar Vista and I-15 interchange improvements would result in less than 0.01 acre and 0.12 acre of temporary impacts to coast live oak woodland which is assumed to be under the jurisdiction of all three agencies as well as the County.

Temporary wetland impacts are considered significant (**Impact V-3**), and they would be mitigated to less than significant through implementation of mitigation measure M-BIO-6 (revegetation plan) (Appendix J) and M-BIO-12, which requires permits from the appropriate federal and state agencies to impact jurisdictional resources. Revegetation would occur at a 1:1 ratio for the temporary impact of 0.52 acre of southern coast live oak riparian forest, 0.04 acre of southern willow scrub, 0.51 acre of coast live oak woodland, and 0.05 acre of non-wetland waters.

Impact V-3: Permanent Direct Impacts to Jurisdictional Resources

Table 2-11 quantifies the on-site permanent direct impacts to jurisdictional resources. There are permanent direct impacts to 2.13 acres of CDFW/County RPO wetlands and impacts to 3.30 acres of CDFW-only riparian habitat from the proposed project. These impacts include both development and FMZ activities. There are additional impacts to 1.41 acres of ACOE/RWQCB/CDFW non-wetland waters.

For permanent off-site impacts associated with Deer Springs Road, both options are identical. Both options would result in impacts to 0.09 acre of ACOE/RWQCB/CDFW/County resources including 0.06 acre of southern willow scrub and 0.03 acre of mulefat scrub. In addition, 0.83 acre of CDFW and County jurisdictional southern coast live oak riparian forest would also be permanently impacted. Both options include 0.08 acre of permanent impacts to non-wetland waters (ACOE/RWQCB/CDFW). Other off-site road improvements would result in impacts to jurisdictional resources including 0.06 acre of impacts to non-wetland waters and 0.06 acre of impacts to southern willow scrub (CDFW riparian habitat/County RPO) associated with Camino Mayor. Improvements to Sarver Lane would result in impacts to less than 0.01 acre of non-wetland waters and 0.56 acre of CDFW only coast live oak woodland while impacts associated with the sewer improvements include 0.35 acre of southern willow scrub and 0.14 acre of arundo

Biological Resources Technical Report for the Newland Sierra Project

dominated riparian. Permanent impacts resulting from improvements to the I-15 interchange include 0.02 acre of coast live oak woodland which is assumed to be under the jurisdiction of all three agencies as well as the County (Table 2-12).

Permanent impacts to County RPO wetlands, CDFW riparian habitat, ACOE/RWQCB wetlands and non-wetland waters of the United States/state are considered a significant impact (**Impact V-4**). This project includes habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); open space fencing and signage (M-BIO-8E); and obtaining permits from the appropriate federal and state agencies to impact jurisdictional resources (M-BIO-12). Overall, creation of 1:1 ratio and enhancement of 2:1 ratio for the impact is required for achieving “no-net loss” of wetlands required through agency permitting (M-BIO-12). Additionally, M-BIO-8D includes preparation and implementation of an RMP, which would provide specific management for the RPO wetlands including exotic plant control; non-native predator/pest control; prohibition of off-road vehicles; prohibition of herbicides and other chemicals that can affect wetlands; and prohibition of manipulating, impounding, or altering any natural watercourse, body of water, or water circulation on the open space, except as specified for restoration activities.

This impact would be mitigated to less than significant through implementation of the above mitigation measures.

4.2.3 Project Effects Relevant to Guideline 4.2.C (Impacts to Groundwater Table)

Water supply for the proposed project would be supplied by Vallecitos Water District. No ground-water pumping would occur; therefore, there are no impacts to the groundwater table.

4.2.4 Project Effects Relevant to Guideline 4.2.D (Indirect Impacts)

Impact V-5: Temporary Indirect Impacts to Special-Status Vegetation Communities and Jurisdictional Resources

Any indirect impacts that would cause adverse changes to special status vegetation communities and jurisdictional resources over the long term would be significant; typically, they result from errant construction activities and from long-term edge effects analyzed in Sections 2.2.2 and 2.5.2.

Due to the large scale of the project, short-term, construction-related indirect impacts, such as generation of fugitive dust, changes in hydrology resulting from construction, and the introduction of chemical pollutants (including herbicides) to special-status vegetation

Biological Resources Technical Report for the Newland Sierra Project

communities and jurisdictional resources would be considered a potentially significant impact (**Impact V-5**). The project includes biological monitoring to avoid unintentional species and habitat short-term, construction-related indirect impacts (M-BIO-1); temporary construction fencing (M-BIO-2); monitoring verification through preparation of a biological monitoring report (M-BIO-3); retaining the required federal and state agency permits for impacts to jurisdictional resources (M-BIO-12). With these measures short-term, construction-related impacts would be mitigated to less than significant through implementation of the above mitigation measures.

Impact V-6: Permanent Indirect Impacts to Special-Status Vegetation Communities and Jurisdictional Resources

Potential long-term, permanent indirect impacts to special-status vegetation communities and jurisdictional resources as a result of the proposed project are analyzed in Sections 2.2.2 and 2.5.2, and include fugitive dust, habitat fragmentation, chemical pollutants, altered hydrology, non-native invasive species, and alteration of the natural fire regime. Potential long-term, indirect impacts to special-status vegetation communities and jurisdictional resources would be considered a significant impact (**Impact V-6**). The project includes prevention of invasive species through review of landscaping plants (M-BIO-4); edge effects and other indirect impacts would be minimized through preservation and management of open space (M-BIO-8A); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); open space fencing and signage (M-BIO-8E); potential indirect effects from dust would be minimized through implementation of a fugitive dust control plan (M-BIO-1); herbicide regulations (M-BIO-10); implementation of a fire protection plan to minimize fire hazards (M-BIO-11); and obtaining federal and state agency permits for impacts to jurisdictional resources (M-BIO-12, federal and state agency permits). With these measures, long-term indirect impacts to special-status vegetation communities and jurisdictional resources would be mitigated to less than significant through implementation of mitigation measures.

4.2.5 Project Effects Relevant to Guideline 4.2.E (Wetland Buffers)

As described in Section 2.2.2, the County requires all RPO wetlands to have a buffer to protect their functions and values. The buffer requirements depend on the overall quality of the wetlands, and are between 50 and 200 feet. The functions and values of the on-site drainages are described in Section 1.4.7 and are categorized by flood storage and flood flow modification, nutrient retention and transformation, groundwater recharge, sediment trapping, toxicant trapping, wildlife habitat, aquatic habitat, and public use. Based on this information, and the information provided in Section 1.4.7.1, a 75-foot wetland buffer is proposed for RPO wetlands

Biological Resources Technical Report for the Newland Sierra Project

within the project Site. Many of the RPO wetlands are located in the open space and have a much larger buffer.

Based on the *Fire Protection Plan for the Newland Sierra Project* (see Appendix N of EIR; FPP), the fire modeling resulted in FMZs that are at least 250 feet wide for most of the Site, 2.5 times larger than the standard 100-foot-wide requirement. The fire buffers are separated into two zones. Zone 1 (Irrigated Structure Setback Zone) extends a minimum of 100 feet starting at a structure and moving outward; all flammable native vegetation shall be removed except for species approved by the Deer Springs Fire Protection District (see Appendix N of EIR). This zone would be planted with drought-tolerant, fire-resistive plants from San Diego County Fire Chief's Association Fuel Modification Zone Plant Reference List, and an automatic irrigation system would be installed in this area to maintain hydrated plants without over-watering, allowing for run-off, or attracting nuisance pests. Zone 2 (Thinning Zone) adjoins Zone 1 and measures up to 150 feet in most areas. Zone 2 includes 50 percent thinning or removal of plants and low ground cover; California sycamore (*Platanus racemosa*), coast live oak, and Engelmann oak are allowed in Zone 2. The FPP also includes a Special Management Zone where native fuels would be managed such that the highly flammable prohibited species and the dead and dying plants are removed while other native plants that are less prone to ignition and fire spread are allowed to remain (see Appendix N of EIR). As described above, the RPO wetlands have at least a 75-foot buffer between the proposed FMZs and the RPO wetland. There are potential impacts 0.4 (0.25 acre of permanent impacts and 0.15 acre of temporary impacts) acre of RPO wetland buffer from FMZ Zone 2 thinning activities. In this area, the RPO wetland abuts the project boundary on the east side where the resource appears to extend farther to the slope of I-15. The RPO wetland is buffered by open space to the north–northwest for the entire length of the project boundary, ranging in widths from 400 feet to over 6,000 feet. To the south–southeast, the RPO wetland is buffered by 350 feet which is reduced as the open space ends at the project boundary. The majority of the open space surrounding the RPO wetland, including the habitat type impacted, is southern mixed chaparral, a non-wetland habitat type. A portion of the southern mixed chaparral is elevated above the RPO wetland but is not steeply sloped and would not be subject to high erosion. In addition, the chaparral is thick, and the removal of 50 percent of fuel load would still maintain a natural vegetation community that provides soil compaction and erosion control. Other edge effects typical of a reduced buffer area (such as lighting, noise, and trash) would not occur in this area, because Zone 2 fuel modification is the only allowed activity within the buffer. Because the southern mixed chaparral habitat within the buffer would still provide erosion protection and no other edge effects are expected, the fuel modification activities would not affect the functions and values of the RPO wetland (southern coast live oak riparian forest). With a relatively large buffer between the outer edge of the RPO wetlands to development and minimal fire management activities within a portion of the 75-foot RPO buffer,

Biological Resources Technical Report for the Newland Sierra Project

the buffers are adequate to protect the functions and values of the existing wetlands and this is not considered a significant impact per the County significance criteria 4.2(e).

The existing North Twin Oaks Valley Road is located within approximately 1.1 acres of RPO wetlands and wetland buffer. No road widening or other improvements are planned for this portion of Twin Oaks Valley Road to maintain the rural character of the road. This County-maintained paved road is regularly used by residents, and the creek continues to function and maintain riparian scrub and woodland habitat. In addition, all of the land to the east and west of the road are preserved in open space (Figures 12A–12E). Because this is an existing road and no widening or other improvements are planned, this area is not considered an impact to RPO wetland buffers, and would not be significant per the County significance criteria 4.2(e).

Impact V-7: Permanent Direct Impacts to RPO Wetlands and Buffers

The off-site improvement areas would impact 1.49 acres of RPO wetlands and 3.85 acre of RPO wetland buffer. These off-site impacts would be significant per the County significance criteria 4.2(e) (**Impact V-7**). This impact would be mitigated to less than significant through implementation of mitigation measure M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities); easement for the open space (M-BIO-8B); limited building zone easement (M-BIO-8C); development of a resource management plan (M-BIO-8D); open space fencing and signage (M-BIO-8E); and M-BIO-12 (federal and state agency permits). Additionally, M-BIO-8D includes preparation and implementation of an RMP (Dudek 2017b), which would provide specific management for the RPO wetlands. The RPP also includes information about the project's general consistency with the RPO and how the proposed project design is the superior alternative (Dudek 2017a).

4.3 Cumulative Impact Analysis

Cumulative impacts are not assessed in this document; they are discussed thoroughly in the proposed project's EIR.

4.4 Mitigation Measures and Design Considerations

The proposed project would impact 40 percent (776.6 acres of 1,985 acres) through development and fuel modification. The off-site improvements would impact between 70 and 72.6 acres.

Mitigation for short-term, direct impacts to special-status vegetation communities include mitigation measures M-BIO-1 (biological monitoring to avoid unintentional construction impacts), M-BIO-2 (temporary construction fencing), and M-BIO-3 (monitoring verification through preparation of a biological monitoring report), which are described in Section 3.4.

Biological Resources Technical Report for the Newland Sierra Project

Mitigation for short-term and long-term indirect impacts to special-status vegetation communities are analyzed in Sections 2.2.1 and 2.2.2. The project would require construction monitoring to avoid unintentional impacts to species and habitat impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3); landscape plans would prohibit invasive species and landscape products would be verified on the job site (M-BIO-4); by compensation with like- (occupied) habitat and habitat management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities and placing an easement over the open space (M-BIO-8A and M-BIO-8B), installing fencing and signage around open space (M-BIO-8E), limiting clearing or modification of vegetation adjacent to open space (M-BIO-8C), by construction monitoring to include a fugitive dust control plan to prevent dust related impacts (M-BIO-1), a Resource Protection Plan to coordinate regulated herbicide application to control invasive species, implementation of a fire protection plan to minimize the potential exposure of the project Site to fire hazards, and ongoing annual monitoring and reporting (M-BIO-8D, M-BIO-10, and M-BIO-11), and federal and state agency permits for jurisdictional wetland would result in no-loss of wetlands through revegetation and enhancement (M-BIO-12). This impact would be mitigated to less than significant through implementation of the above mitigation measures.

In accordance with County guidelines (County of San Diego 2010a), impacts to special-status vegetation communities would require mitigation. There are permanent direct impacts to approximately 760.6 acres of special-status vegetation communities, and 497.3 acres of habitat with equivalent function and value are required to be conserved to offset this significant impact. Mitigation measure M-BIO-8 describes the on-site and off-site preservation of 1,420.9 acres of open space (see Section 3.4), which would mitigate for impacts to special-status vegetation communities.

M-BIO-12 FEDERAL AND STATE AGENCY PERMITS: To comply with the state and federal regulations for impacts to U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdictional resources, the following agency permits are required, or verification that they are not required shall be obtained.

The following permit and agreement shall be obtained, or evidence from the respective resource agency, satisfactory to the director of PDS that such an agreement or permit is not required, shall be provided:

- a. A Clean Water Act, Section 401/404 permit issued by the California RWQCB and ACOE for all project-related disturbances of waters of the United States and/or associated wetlands.

Biological Resources Technical Report for the Newland Sierra Project

- b. A Section 1602 Streambed Alteration Agreement issued by the CDFW for all project-related disturbances of any streambed and/or associated riparian habitat.

Documentation: The applicant shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this project, the applicant shall provide a copy of the permit(s)/requirements/agreement(s).

Timing: Prior to approval of any grading and or improvement plans and issuance of any grading or construction permits.

Monitoring: PDS shall review the permits/agreement for compliance with this condition. Copies of these permits should be implemented on the grading plans.

4.5 Conclusions

Impact V-1 The significant short-term, direct impacts to special-status vegetation communities will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, M-BIO-6, and M-BIO-7, which require biological monitoring, placement of temporary construction fencing, preparation of a biological monitoring report, revegetation plan for temporary impacts and minimization of night and outdoor lighting. Biological monitoring and reporting will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to.

Impact V-2 The significant permanent, direct impact to 757.2 acres of special-status upland vegetation communities located both onsite and offsite will be reduced to less than significant through implementation of mitigation measure M-BIO-8A through M-BIO-8E, which provides for 1,420.9 acres of habitat conservation and management of equivalent function and value in an amount in accordance with the County *Guidelines for Significance and Report Format and Content Requirements: Biological Resources*.

Implementation of M-BIO-8A would reduce the impact to vegetation because in-kind habitat/vegetation preservation and management of special-status vegetation communities, based on the appropriate ratio specific to each type of vegetation community, in conformance with the mitigation ratios required by the County of San Diego *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* (2010a) has been proposed. The required mitigation ratios were determined through consideration of the rarity and sensitivity of each individual vegetation community throughout the County and are appropriate to maintain, preserve, and protect each specific habitat community.

Biological Resources Technical Report for the Newland Sierra Project

Typically, the required mitigation ratios are higher (i.e., 3:1) for vegetation communities that are most sensitive and rare to provide a higher level of preservation and protection. The on-site and off-site RMPs (provided in M-BIO-8D) provides for the long-term funding, management, and monitoring efforts including performance standards to measure the success of mitigation and will ensure that impacts to the habitat communities are truly mitigated. All mitigation land will be located within a biological open space easement (or owned by a governmental agency for the purpose of conservation) and would be part of the North County Plan. The larger undeveloped framework of the surrounding landscape is currently under review for incorporation into the draft North County Plan. The designated open space as part of the proposed project would be consistent with North County MSCP draft guidelines, thereby preserving a portion of the connections of large and diverse landscapes for wildlife. Implementation of these mitigation measures will reduce significant impacts to vegetation communities to less than significant in accordance with the County *Guidelines for Significance and Report Format and Content Requirements: Biological Resources*, the Southern California CSS NCCP Process Guidelines, and the Planning Agreement between the County and the Wildlife Agencies (2014).

Impact V-3 The proposed project would result in temporary impacts to ACOE/RWQCB/CDFW resources associated with temporary grading and would be reduced to less than significant through M-BIO-6 and M-BIO-12. M-BIO-6 requires the restoration and revegetation of temporarily impacted areas to pre-project conditions (i.e., a 1:1 ratio) (Appendix J) thus restoring the functions and values of those resources. M-BIO-12 requires permits from the appropriate federal and state agencies to impact jurisdictional resources.

Impact V-4 The proposed project would result in permanent direct impacts to County RPO wetlands, CDFW riparian habitat, and non-wetland waters of the United States/state, and would be reduced to less than significant through M-BIO-8A through M-BIO-8E, which includes the permanent preservation and management of open space, and M-BIO-12, which requires permits from the appropriate federal and state agencies to impact jurisdictional resources. County RPO wetlands, CDFW riparian habitat, and non-wetland waters of the United States/state would be conserved within the open space, thus retaining the functions and values of those resources. Mitigation for permanently impacted jurisdictional resources will be identified through the permitting process to ensure that impacts to these resources are mitigated in accordance with state and federal laws and regulations. Mitigation for permanently impacted jurisdictional resources will be identified through the permitting process to ensure that impacts to these resources are mitigated in accordance with state and federal laws and regulations.

Biological Resources Technical Report for the Newland Sierra Project

- Impact V-5** The significant short-term, indirect impacts to special-status upland vegetation and riparian habitat will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, and M-BIO-12, which require temporary construction fencing, biological monitoring, preparation and implementation of a SWPPP, preparation of a biological monitoring report, implementation of a fugitive dust control plan, and obtaining permits from the appropriate federal and state agencies. Fencing, biological monitoring, and reporting will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to. Implementation of the fugitive dust control plan will ensure that impacts related to dust are avoided to the maximum extent possible.
- Impact V-6** The significant long-term, indirect impacts to special-status upland vegetation communities and jurisdictional resources will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-4, M-BIO-8A through M-BIO-8E, M-BIO-10, M-BIO-11, and M-BIO-12, which provide for biological monitoring and the implementation of a fugitive dust control plan, biological review of landscape plants, 1,420.9 acres of habitat conservation and management of equivalent function and value, regulated herbicide application, implementation of a fire protection plan, and obtaining permits from the appropriate federal and state agencies.
- Impact V-7** The significant direct impacts to County RPO wetlands and wetland buffers will be reduced to less than significant through implementation of M-BIO-8A through M-BIO-8E, which includes the permanent preservation and management of open space, and management of RPO resources as specified in the RPP. Much of the County RPO wetlands would be conserved within the open space, thus retaining the functions and values of those resources. Additionally, the RPP (Dudek 2017a) provides information about the proposed project as generally consistent with the RPO, and where not consistent, it meets the RPO exemption because the project design concentrates the development in the southern portion of the property to create a biological preserve in the northern portion of the property, providing a core habitat block in the Merriam Mountains, and required improvements to Deer Springs Road. Since the County RPO wetlands are also jurisdictional resources of the state, implementation of M-BIO-12, which requires permits from the appropriate federal and state agencies to impact jurisdictional resources, will identify additional mitigation through the permitting process to ensure that impacts to these resources are mitigated in accordance with state and federal laws and regulations.

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

Biological Resources Technical Report for the Newland Sierra Project

5 JURISDICTIONAL WETLANDS AND WATERWAYS

5.1 Guidelines for the Determination of Significance

The County's *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* (County of San Diego 2010a) are based on the criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and were used to analyze potential direct and indirect impacts to biological resources. The following guideline for the determination of significance comes directly from the County's guidelines (County of San Diego 2010a) and refers only to federally protected wetlands.

Guideline 4.3 The project would 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.

Impacts to federally protected wetlands defined by Section 404 of the CWA are discussed under Guidelines 4.2.B and 4.2D.

5.2 Analysis of Project Effects

5.2.1 Project Effects Relevant to Guideline 4.3 (Federally Protected Wetlands)

Impacts to federally protected wetlands defined by Section 404 of the CWA are discussed under Guidelines 4.2.B and 4.2D.

5.3 Cumulative Impact Analysis

Cumulative impacts are not assessed in this document; they are discussed thoroughly in the proposed project's EIR.

5.4 Mitigation Measures and Design Considerations

Mitigation associated with impacts to federal wetlands are described in Section 4.4.

5.5 Conclusions

See Section 4.5.

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

6 WILDLIFE MOVEMENT AND NURSERY SITES

6.1 Guidelines for the Determination of Significance

The County's *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* (County of San Diego 2010a) are based on the criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and were used to analyze potential direct and indirect impacts to biological resources. The following guidelines for the determination of significance come directly from the County's guidelines (County of San Diego 2010a):

Guideline 4.4 The project would interfere substantially with the movement of a 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.

- A. The project would impede wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- B. The project would substantially interfere with connectivity between blocks of habitat, or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage. For example, if the project proposes roads that cross corridors, fencing that channels wildlife to underpasses located away from interchanges will be required to provide connectivity. Wildlife underpasses shall have dimensions (length, width, height) suitable for passage by the affected species based on a Site-specific analysis of wildlife movement. Another example is increased traffic on an existing road that would result in significant road-kill or interference with an existing wildlife corridor/linkage.
- C. The project would create artificial wildlife corridors that do not follow natural movement patterns; for example, constraining a corridor for mule deer or mountain lion to an area that is not well-vegetated or that runs along the face of a steep slope instead of through the valley or along the ridgeline.
- D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels likely to affect the behavior of the animals identified in a Site-specific analysis of wildlife movement.
- E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses

Biological Resources Technical Report for the Newland Sierra Project

adjacent to it, and placement of barriers in the movement path. The adequacy of the width shall be based on the biological information for the target species, the quality of the habitat within and adjacent to the corridor, topography, and adjacent land uses. Where there is limited topographic relief, the corridor should be well-vegetated and adequately buffered from adjacent development. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages.

- F. The project does not maintain adequate visual continuity (i.e., long lines of site) within wildlife corridors or linkage. For example, development (such as homes or structures) sited along the rim of a corridor could present a visual barrier to wildlife movement. For stepping-stone/archipelago corridors, a project does not maintain visual continuity between habitat patches.

6.2 Analysis of Project Effects

6.2.1 Project Effects Relevant to Guideline 4.4.A (Wildlife Access to Key Habitat Areas)

Impact WM-1: Temporary Direct Impacts to Foraging and Nesting Habitat

Temporary direct impacts (short-term or construction-related) to potential avian foraging and nesting habitat, and potential habitat connectivity and wildlife movement for species that use the project Site would primarily result from errant construction activities and from 8.7 to 9.2 acres of temporary impacts associated with grading (see Table 2-1 and analysis in Section 2.4.1). Clearing, trampling, or grading of foraging and breeding habitat outside designated construction zones could occur in the absence of avoidance measures and potential temporary direct impacts to avian foraging and nesting habitat and to wildlife, especially to wildlife that move slowly or are fossorial on Site would be significant (**Impact WM-1**).

The project proposes monitoring to avoid unintentional construction impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3), and impacted vegetation would be replaced through a vegetation plan where possible for temporary vegetation impacts (M-BIO-6). With these measures, temporary direct impacts to avian foraging and nesting habitat would be less than significant.

Impact WM-2: Permanent Direct Impacts to Foraging and Nesting Habitat

The proposed project would result in permanent direct impacts to approximately 776.6 acres that has the potential to provide avian foraging, roosting and nesting habitat; foraging,

Biological Resources Technical Report for the Newland Sierra Project

breeding, and nursery habitat for terrestrial wildlife; access to water, shelter, and reproduction habitat; and connectivity and wildlife movement for species that use the project Site. As described in Section 2.4.1 and Tables 2-7 and 2-8, avian foraging, roosting, nesting and dispersal habitat for the native species that were previously using the habitats of the development area would be eliminated from those areas. According to Project Effects Relevant to Guideline 4.4.A, permanent direct impacts to foraging and breeding habitat would be considered a significant impact (**Impact WM-2**).

The project proposes habitat preservation and management of 1,420.9 acres of habitat that provides for avian breeding and foraging, as well as compensation for loss of wildlife foraging, breeding and movement (M-BIO-8A). M-BIO-8A includes on-site habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities and off-site preservation of sensitive habitat and species, in conformance with the County *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*. See Section 1.4.8 for a detailed description of the proposed open space design. Table 4-1 summarizes the impacts and required mitigation for vegetation communities in the project Site. Wildlife movement within the proposed open space design would occur within three large blocks of open space and four corridors located between development (Figure 9). The proposed open space design would allow for wildlife movement within on-site open space and surrounding preserves to the north and south. Access to intermittent and perennial water sources outside of the project Site would be retained. Block 2 would retain access to Deer Spring Creek to the south while Block 1 would retain access to the creek that runs along Twin Oaks Valley Road to the west and wildlife in the steep eastern slopes facing the freeway of Block 3 can cross Deer Springs Road to access the unnamed stream channel south of the project Site. It is unlikely, though possible, for wildlife to cross Interstate 15, however that is an existing condition that is unrelated to this project. Improvements to Deer Springs Road has the potential to impact wildlife movement by causing direct mortality through road kill, or reducing the amount of attempted crossings due to increased noise and activity. Species which occur, or are anticipated to occur within all blocks include typical upland reptile, avian, and mammal species. Larger species would be expected to search out water resources, while smaller species would support their hydration needs by seeds, prey, or dew. In support of the habitat preservation and management, these additional mitigation measures would be implemented: an easement would be placed over the open space (M-BIO-8B), fencing and signs would be constructed around the open space (M-BIO-8E), the project would limit the clearing or modification of vegetation adjacent to open space (M-BIO-8C), and on-site and off-site RMPs have been provided (M-BIO-8D).

Biological Resources Technical Report for the Newland Sierra Project

Impact W-3: Temporary and Permanent Indirect Impacts to Foraging and Nesting Habitat

Short-term and long-term indirect impacts to avian foraging and wildlife access to foraging, roosting, nesting, or water resources are described in Sections 2.4.2 and 2.6.2 and include generation of fugitive dust, noise from construction activities, chemical pollutants, increased human activity during construction; invasive predators and non-native plant and animal species, lighting; habitat fragmentation; and the proposed urban development and recreational facilities. These indirect impacts are considered a significant impact (**Impact WM-3**). As analyzed in previous sections (Project Effects Relevant to Guidelines 4.1.H and 4.2.D), this impact would be mitigated through mitigation measure M-BIO-8A through M-BIO-8E (e.g., habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities, easement, signage and fencing), which would conserve approximately 1,209.1 acres in an on-site preserve with superior preserve function and value. Wildlife movement within the proposed on-site open space design would occur within three large blocks of open space and four corridors located between development blocks (Figure 9). Small mammals that regularly use the dense chaparral occurring on Site often do not require access to water sources and have small territories; larger mammals such as mule deer, mountain lion, and coyote are expected to use dirt trails, and any riparian corridors occurring throughout the open space as their primary means of travel. Similarly, small wildlife species (e.g., lizards and small mammals) would continue to use the dense chaparral and dirt trails within the proposed open space. Additionally, the off-site mitigation area in Ramona would connect segments of the Cleveland National Forest and San Diego Parks and provide protection for continued use by a variety of wildlife (Appendix K). The preservation of 211.8 acres of one large off-site parcel situated in a key natural gap in the adjacent agricultural (ranches, poultry farms) landscape amid cattle ranch lands and open space provides for connectivity between segments of the Cleveland National Forest located approximately 2 miles to the east and west, and San Diego County Parks land located approximately 3 miles to the north and south (Appendix K).

6.2.2 Project Effects Relevant to Guideline 4.4.B (Connectivity Between Blocks of Habitat)

The proposed project Site is located within the northern portion of the Merriam Mountains, a narrow chain of low mountains generally running north–south with a variety of east–west trending ridgelines and scattered peaks. The undeveloped Site contains natural features of scenic and biological value, including rugged topography and rock outcroppings with a wide range of elevations occurring on Site. Land use within the project Site and in the surrounding areas is a mixture of undeveloped lands and rural residential areas. For the most part, the area in and around the project Site is very similar with regard to undeveloped landscapes with limited human disturbance, similar topographic relief, and similar vegetation communities. The Site currently facilitates the movement of small and larger mammals to traverse across to adjacent undeveloped landscapes.

Biological Resources Technical Report for the Newland Sierra Project

The proposed project would limit wildlife (particularly large mammals) from traversing directly through the project Site in a southward direction toward Deer Springs Creek. A southern connection to Deer Springs Creek would be maintained, but it would be narrower than current conditions. In this area, open space is proposed both between development areas and areas surrounding the development that are adjacent to open space; these open space areas would continue to provide some opportunity for movement through the project Site. The majority of the northern portion of the project would remain as open space and development would not occur around Twin Oaks Valley Road. Wildlife are expected to cross Deer Springs Road and Twin Oaks Valley Road similar to current conditions because the open space configuration allows for continued movement to the south and west. Wildlife crossing would occur at the proposed internal roads within the development in areas where wildlife are expected to move (see wildlife corridors on Figure 9). The speed limits within the internal roads are slower, which helps reduce vehicle collisions, and vehicle collisions along Deer Springs Road and Twin Oaks Valley Road are not expected to increase significantly. Additionally, wildlife crossing these roads are common (e.g., skunk, opossum, mule deer) and genetic flow through the Site and surrounding areas would be maintained both in the short-term and long-term. In addition, dedicating the northern half of the project Site as biological open space would continue to facilitate wildlife movement to the adjacent PAMA-designated lands of the draft North County Plan, which are largely situated along the northern and eastern boundaries of the project Site. Draft North County Plan PAMAs are also located along the southern boundary of the project Site and open space within developed landscapes would continue to facilitate movements to these areas. Overall, the project effects are expected to be greater along the central and southern portion of the project Site and for large mammals rather than small mammals or reptiles (due to the home range size and mobility of large mammals).

As discussed earlier, the project would preserve three blocks of habitat (Figure 9), including an 870.2-acre Block 153.9-acre Block 2, and 185-acre Block 3. These are not necessarily considered to be corridors so much as blocks of open space, as they are capable of supporting most of the species present or expected on Site both from a multiple territory standpoint and from a generational standpoint. Although the project Site is not located in the adopted South County Plan, the following discussion is within the context of the goals and criteria for linkages and corridors as discussed in the MSCP County of San Diego Subarea Plan (County 1997): “If a corridor is relatively long, it must be wide enough for animals to hide in during the day. Generally, wide corridors are better than narrow ones. If narrow corridors are unavoidable, they should be relatively short. If the minimum width of a corridor is 400 feet, it should be no longer than 500 feet. A width of greater than 1,000 feet is recommended for large mammals and birds. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages, especially if the topography is steep.”

Biological Resources Technical Report for the Newland Sierra Project

Block 1 is situated along the northern portion of the project Site. It includes a minimum 10,000-foot by 5,000-foot block that is adjacent to draft North County Plan PAMA-designated lands to the north, so meets the minimum width goals. It also includes rim-to-rim recommendations. It maintains connectivity to the remainder of the Core Area to the north and west, builds off of, and buffers existing conservation areas, and conserves Gopher Canyon Creek and associated riparian resources, coastal sage scrub, mafic southern mixed chaparral, California gnatcatcher and a wide variety of other smaller and medium-sized wildlife, summer holly, and Engelmann oak.

Block 2 is situated along the western side of the project Site and directly connects to Block 1. It includes a minimum 1,000-foot by 7,000-foot block of habitat so conforms to the minimum width goals. This area is intended to support the California gnatcatcher linkage along I-15 by preserving the western portion of the rim-to-rim draft North County Plan PAMA-designated area, thus fulfilling the rim-to-rim recommendations. In addition, it conserves southern mixed chaparral and species linked to that community.

Block 3 is connected to Blocks 1 and 2 by multiple short corridors (Corridors A through D as described in Section 1.4.8), all of which meet the minimum standards. Block 3 is a minimum 4,400-foot by 1,200-foot and conserves coastal sage scrub, southern mixed chaparral, rock outcrops, ridges, and valleys. The varied terrain does not strictly meet the rim-to-rim recommendation, but includes suitable topography for movement, plus unique resources on Site. It also includes habitat for all species which might occur on Site and maintains connectivity to draft North County Plan PAMA-designated areas and habitat south of the project Site, establishing preserve along the majority of the southern property boundary.

Impact WM-4: Permanent Direct Impacts to Habitat Connectivity

Although open space has been designed to reduce interference with connectivity between blocks of habitat or local/regional wildlife corridor or linkages, the proposed development could substantially interfere with connectivity between blocks of habitat, such that wildlife seeking movement to landscapes south of the project Site would need to locate and use designated corridors incorporated throughout development that would provide some opportunity for these movements. The additional effects of increased traffic may also pose barriers to direct connectivity to adjacent landscapes in the southern half of the project Site. Impacts to smaller mammals, reptiles, and birds are not expected to be significant. Impacts to connectivity between blocks of habitat would be potentially significant for larger wildlife species (**Impact WM-4**).

This impact would be mitigated through mitigation measure M-BIO-8, which would conserve approximately 1,420.9 acres of well-designed on-site and off-site biological open space preserves in support of the draft North County Plan. The designated open space in the Newland Sierra proposed project is consistent with North County Plan draft guidelines and has been

Biological Resources Technical Report for the Newland Sierra Project

incorporated into the reserve design of the draft North County Plan as a proposed hardline area, thereby interconnecting large and diverse landscapes for wildlife. See Section 1.4.8 for a detailed description of the proposed open space design. The proposed on-site open space design consists of two large continuous blocks of key biological resources situated within the northern half, along the eastern boundary of the project Site, and open space in the center of the proposed development which connects the above-mentioned blocks of open space to open space located east and south of the project Site (Figure 9).

6.2.3 Project Effects Relevant to Guideline 4.4.C (Creation of Unnatural Movement Corridors)

The proposed project would designate open space consisting of two large continuous blocks of key biological resources situated within the northern half and along the eastern boundary of the project Site, as well as a large third block of open space in the center of the proposed development that connects the abovementioned blocks of open space to open space located east and south of the project Site (Figure 9). The off-site open space located in Ramona within the draft North County MSCP area provides a 211.8-acre block of continuous habitat situated between segments of the Cleveland National Forest and San Diego County Parks land.

Block 3 presents a fairly unique preserve area within the network of preserves already existing in this vicinity (i.e., 5-mile buffer around the project). Nearly all of the other preserves are centered around coastal sage scrub, gentle slopes, or flatter areas. This particular block provides a diversity of topography that the other preserve sites do not offer. The combination of diverse topographies, peaks, and boulder slopes provides suitable habitat for a variety of species that the other preserves likely do not. This list may include granite night lizard, granite spiny lizard, bat roosts, and raptor nesting areas in addition to woodrats, rock wren, canyon wren, slender salamanders, and other reptiles. A variety of ferns and interesting annual plants may also be supported within this block. Typical species that have been identified or are expected to occur in this block includes blue-gray gnatcatcher, northern red-diamond rattlesnake, southern California rufous-crowned sparrow, western scrub jay, spotted towhee, California kingsnake, rosy boa, night snake, among others.

Dudek reviewed a draft North County Plan map in August 2014 showing PAMA and existing preserve areas. Dudek scanned and digitized the map to provide a quick comparison of the existing preserves in the area to provide a visual and quantitative snapshot (see Table 6-1; Figure 7). Based on this, it is apparent that the acreage provided within Block 3 far exceeds many of the existing preserves and is directly comparable to nearly all. Of the approximately 73 preserves in the vicinity, only 5 are larger than Block 3 and of these, only 2 are substantially larger.

Biological Resources Technical Report for the Newland Sierra Project

Table 6-1
County Provided North County Plan Preserve Areas
Within 5-Mile Buffer Area Compared to On-Site Open Space Blocks

ID Number	Acres	ID Number	Acres	ID Number	Acres
<i>Block 1</i>	<i>870.2</i>	<i>Block 2</i>	<i>153.9</i>	<i>Block 3</i>	<i>185.0</i>
1	345.1	26	13.7	51	15.5
2	81.8	27	280.4	52	5.8
3	40.1	28	17.3	53	7.9
4	122.6	29	21.8	54	26.0
5	144.0	30	36.6	55	22.8
6	33.2	31	62.1	56	25.3
7	17.3	32	13.9	57	65.6
8	38.8	33	37.1	58	8.9
9	145.0	34	29.7	59	7.4
10	21.2	35	8.3	60	15.7
11	556.0	36	14.6	61	41.3
12	241.3	37	11.4	62	23.6
13	23.8	38	11.4	63	17.3
14	21.7	39	10.0	64	72.2
15	44.8	40	12.1	65	110.8
16	86.8	41	33.7	66	25.5
17	80.0	42	18.6	67	3.6
18	66.8	43	89.7	68	6.4
19	42.3	44	6.4	69	2.7
20	50.4	45	22.5	70	23.7
21	44.6	46	12.7	71	15.8
22	106.7	47	15.9	72	21.7
23	31.3	48	15.3	73	26.0
24	50.0	49	85.3		
25	187.3	50	177.2		

* No preserves are larger than block 1; 6 preserves are larger than block 2; 5 preserves are larger than block 3

Table 6-2 provides additional information about preserves in Southern California that were set aside for species management or as managed preserves for bio-diversity. These are all within the relative size neighborhood of Block 3, not to mention the entire proposed preserve.

Table 6-2
Comparable Open Space/Preserves

Site	Area	Location
Pascoe Parcel of Del Dios Preserve (SDC Parks)	153 acres	North County Inland San Diego County
Helix-Lambron Parcel of Del Dios Preserve (SDC Parks)	60 acres	North County Inland San Diego County

Biological Resources Technical Report for the Newland Sierra Project

Table 6-2
Comparable Open Space/Preserves

Site	Area	Location
Escondido Creek Preserve (SDC Parks) Roughly 6 separate properties	346 acres	North County Inland San Diego County
San Luis Rey Preserve (SDC Parks) 3 separate parcels	460 acres	North County Inland San Diego County
Stoneridge Preserve (SDC Parks) 2 separate parcels	248 acres	East County San Diego
San Ramon	95 acres	Palos Verdes Peninsula
Forrestal Nature Preserve	155 acres	Palos Verdes Peninsula
Montebello Hills	260 – 320 acres	Montebello

In conclusion, Block 3 provides a diversity of topography and microhabitat features that few, if any, preserves in the vicinity provide; is directly connected to adjacent PAMA lands; supports, or is expected to support, the full range of species which could occur on the project Site; is buffered from adjacent development areas by topography; is situated similarly to other preserves in the vicinity (i.e., in and around homes, open space, and agricultural areas); and is larger than nearly all of the other preserves in the vicinity.

Four additional sections of open space corridors would be interspersed throughout development. Two of these can provide movement through a long corridor and is considered to be ancillary to the project. The other two (Corridors B and C) are described above under Section 6.2.2. These meet corridor width criteria, but are too small to support the rim-to-rim recommendation. These corridors are included within the open space and would provide for additional movement but since they are within FMZ, they are not accounted for in the open space acreages. Wildlife would be freely able to use the 1,600-foot-wide connection between Blocks 2 and 3.

An important aspect of preserve principles is to protect preserves from encroachment. Ideally, preserves would establish blocks of habitat without road access or inaccessible to human disturbance. As previously noted, much of the area is encompassed by dense chaparral. In such habitat, unmaintained dirt roads on Site may serve as important wildlife corridors for large mammals, including mule deer, coyotes, gray foxes, and bobcats. These species may be sensitive to human disturbance and/or presence. Currently the habitat sees much human use, particularly in the southeast and northwest portions of the Site. In addition, the revegetation of some of the roads and trails to be abandoned with coastal sage scrub and chaparral species would help provide habitat expansion and linkages.

Designated public access trails are planned and would use signage and designated trail routes to protect the biological open space and control human encroachment. It is also important to protect

Biological Resources Technical Report for the Newland Sierra Project

large patches of habitat that do not currently contain trails. The proposed trails, as shown in Figure 13, would be located along pre-existing dirt roads and trails. The use of these trails would be monitored and reinforced by a preserve manager who would visit the area on a semi-weekly basis to document and reinforce these efforts.

Management of the open space areas would keep the many current trespassers from dumping trash, camping, off-road vehicle use, boulder graffiti/tagging and other illegal activities. In many areas, the portion of FMZ directly adjacent to buildings would consist of vineyards. These would provide a sense of ownership that would deter trespassing. This would also provide wildlife with a visual screen from development and might facilitate wildlife movement. In addition, the zone between the vineyard and the Limited Building Zone Easement for biological open space would be thinned to varying degrees. Since much of the habitat on Site is overly mature, making movement for large ground-based wildlife difficult except for dirt trails and dirt roads, the thinned FMZ may provide additional travel avenues for larger ground-based wildlife.

The designated open space and corridors are designed to follow natural ridgelines and landscape patterns that would facilitate wildlife movement around and through developed landscapes. In addition, developed landscapes were designed to follow, as feasible, natural contours of the landscape. Therefore, impacts to movement of wildlife as a result of artificial wildlife corridors would be less than significant.

6.2.4 Project Effects Relevant to Guideline 4.4.D (Noise and Lighting Impacts to Wildlife Corridors)

Impact WM-5: Temporary and Permanent Indirect Impacts to Wildlife Behavior

Permanent nighttime lighting associated with the proposed project includes residential units, vehicle traffic, and street lamp posts. These areas may experience high levels of nighttime lighting. In addition, there would be both short-term and long-term noise associated with construction-related activities and increased human activity, respectively (as described in Section 2.6). Although a Site-specific analysis of wildlife movement has not been conducted, it is expected that an increase in nighttime lighting and noise would affect the behavior of wildlife and, as a result, influence wildlife behavior.

For example, the long-term increase in noise and nighttime lighting is likely to affect the behavior of solitary or secluded wildlife (e.g., species that shy away from developed areas). Noise during daylight hours may impact diurnal wildlife, such as birds, mule deer (diurnal and nocturnal), coyote (diurnal and nocturnal), small mammals and reptiles, and insects that can occur in or near developed areas. Nighttime lighting disturbance on animals may include attraction, fixation, and repulsion; improvement in orientation, or disorientation; disruption of biological rhythms; and change in habitat quality, and increase predation risk, and would impact

Biological Resources Technical Report for the Newland Sierra Project

wildlife (e.g., mammals, rodents, bats and owls) that are directly within or adjacent to developed areas or seeking to move through, near, or over these areas. It can also affect diurnal animals, particularly during nesting and nursery seasons. Artificial night lighting can affect the feeding, breeding and egg-laying of insects and can affect plants by altering their bud dormancy, flowering and leaf-fall. The proposed open space areas and corridors would be located throughout developed areas and were designed in large continuous blocks in the northern, eastern, and central portions of the Site to minimize these types of impacts. Therefore, it is expected that some species of wildlife would use these larger habitat patches as a means to escape noise during the day and night and nighttime lighting to traverse through the project Site. Although the project was designed to provide areas of refuge and corridors, noise and nighttime lighting associated with the project would impact wildlife behavior. Therefore, impacts to wildlife behavior due to an increase in noise and nighttime lighting in a wildlife corridor would be potentially significant (**Impact WM-5**).

This impact would be mitigated through minimizing outdoor lighting near the open space through the project's Lighting Plan as outlined in the Specific Plan (M-BIO-7) and through creation of an on-site habitat preserve and its management of both existing wildlife populations and suitable habitat, which would conserve approximately 1,209.1 acres with adequate movement corridors away from noise and light (M-BIO-8A).

6.2.5 Project Effects Relevant to Guideline 4.4.E (Width of Wildlife Corridors)

Because the project Site is undeveloped, wildlife is able to move freely throughout the Site. Corridors on the Site include riparian areas, ridge lines, and established animal trails. The project removes 406.6 acres of habitat and alters another 369.9 acres in the fuel management zones and LBZs. The majority of the vegetation to be impacted or altered consists of granitic southern mixed chaparral (626.9 acres). Off-site improvements associated with Deer Springs Road would permanently impact either 47.5 acres (Option A) or 50.2 acres (Option B). Other off-site improvements would permanently impact 23 acres.

The proposed project includes 1,209.1 acres of on-site open space and 4 designated corridors interspersed throughout development. The proposed biological open space was designed to maintain large patches of habitat for various wildlife movement and use. In addition, the majority of the project Site is surrounded by draft North County Plan PAMA lands and dedicated preserves (see Figure 4).

One of the goals and criteria for linkages and corridors described in the *Multiple Species Conservation Program County of San Diego Subarea Plan* (County of San Diego 1997), states:

If a corridor is relatively long, it must be wide enough for animals to hide in during the day. Generally, wide corridors are better than narrow ones. If narrow

Biological Resources Technical Report for the Newland Sierra Project

corridors are unavoidable, they should be relatively short. If the minimum width of a corridor is 400 feet, it should be no longer than 500 feet. A width of greater than 1,000 feet is recommended for large mammals and birds. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages, especially if the topography is steep.

The proposed on-site open space areas range from nearly 2 miles wide to areas no less than 400 feet wide. The corridors located within the development areas are smaller and function as stopover habitat for birds or habitat for smaller mammals, reptiles, and birds that do not require large home ranges and are more tolerant of urban-related activities. The corridors within the development only make up 74 acres out of the designated 1,209.1 acres of on-site biological open space.

The remaining on-site open space is characterized by wide and long corridors, and when adjacent undeveloped land is considered, there are only two areas less than 400 feet wide for a length greater than 500 feet located in the southwest portion of the project boundary near some rural residential homes and associated agriculture. When considered as a whole, the proposed open space is designed to allow for wildlife movement from the north to the south, and the proposed project would allow for that through the large blocks of open space at the north, east, and south, and the undeveloped lands (FMZs). Additionally, the off-site mitigation area in Ramona would connect segments of the Cleveland National Forest and San Diego Parks, and provide protection for continued use by a variety of wildlife (Appendix K). Therefore, this impact is less than significant.

6.2.6 Project Effects Relevant to Guideline 4.4.F (Visual Continuity Within Wildlife Corridors)

As described above, the open space is designed to maintain and preserve large blocks of habitat that include varying topography and riparian and upland habitat types. These large open space areas allow for adequate visual continuity and unimpeded wildlife movement. The smaller corridors interspersed within the development are along slopes which allow for a grade separation that would increase the visual continuity within those areas. While the smaller corridors are not considered in the preservation acreages, they would provide for ancillary movement of wildlife. Likewise, the outer brush management zones, while not included in preservation acreages, would provide a significant swath of movement areas adjacent to the entire Site. Clearing within these areas would remove approximately 20 to 50 percent of the vegetation, thus providing suitable cover. Because of the density of surrounding vegetation, some wildlife would be able to more easily use these areas. The proposed project would not be considered a significant impact under significance guideline 4.4(f).

Biological Resources Technical Report for the Newland Sierra Project

6.3 Cumulative Impact Analysis

Cumulative impacts are not assessed in this document; they are discussed thoroughly in the proposed project's EIR.

6.4 Mitigation Measures and Design Considerations

The project includes construction monitoring to avoid unintentional species and habitat impacts (M-BIO-1); construction areas would have temporary construction fencing to avoid inadvertent habitat destruction (M-BIO-2); there would be monitoring verification through preparation of a biological monitoring report (M-BIO-3); and vegetation would be replaced through a vegetation plan where possible for temporary vegetation impacts (M-BIO-6). With these measures, short-term, direct impacts that would impact potential foraging and breeding habitat would be significant and mitigated. Mitigation for long-term direct impacts to potential foraging and breeding habitat for wildlife species includes M-BIO-8A through M-BIO-8E (habitat preservation and management), described in Section 3.4.

6.5 Conclusions

Impact WM-1 The significant short-term direct impacts to potential foraging and nesting habitat will be reduced to less than significant through implementation of mitigation measures M-BIO-1, M-BIO-2, M-BIO-3, and M-BIO-6 which require biological monitoring, preparation and implementation of a SWPPP, preparation of a biological monitoring report, and a revegetation plan for temporarily impacted areas. Temporary construction fencing, biological monitoring, and reporting will ensure that additional habitat is not impacted during construction and that the BMPs outlined in the SWPPP are adhered to. Revegetation of temporary impacts will ensure that native vegetation will be restored, thus reducing the potential for invasive species to encroach upon existing native habitat.

Impact WM-2 The significant permanent, direct impact to the loss of potential foraging and nesting habitat will be reduced to less than significant through implementation of mitigation measures M-BIO-8A through M-BIO-8E, which provides commensurate habitat management and conservation of open space areas. This would reduce the impact to less than significant because there would be adequate habitat to support wildlife species in perpetuity, and in accordance with the County's *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* equivalent function and value, as well as management of that habitat.

Biological Resources Technical Report for the Newland Sierra Project

- Impact WM-3** Short-term or long-term indirect impacts to suitable foraging and nesting habitat for wildlife species would be less than significant as a result of the proposed project, and no mitigation is proposed. The significant impact to movement of large mammals from loss of wildlife corridors would be reduced to less than significant through implementation of mitigation measures M-BIO-8A through M-BIO-8E, which provides commensurate habitat management and conservation of open space areas. This would reduce the impact to less than significant because there would be adequate habitat conserved within the open space available for wildlife movement to cross through the project Site to adjacent open space. In addition, the preserve created by the open space would constitute a core habitat for most species.
- Impact WM-4** Significant impacts to habitat connectivity for larger wildlife species would be less than significant through implementation of mitigation measures M-BIO-8A through M-BIO-8E, which provides for habitat management and conservation of open space areas that allow for unimpeded wildlife movement and use. This would reduce the impact to less than significant because the proposed open space design consists of two large continuous blocks of key biological resources situated within the northern half, along the eastern boundary of the project Site, and open space in the center of the proposed development which connects the above-mentioned blocks of open space to regional open space located east and south of the project Site. The analysis demonstrates there would be adequate habitat available for wildlife to use on Site, or to move to available habitat areas outside of the project Site.
- Impact WM-5** Significant impacts to wildlife behavior resulting from noise and/or nighttime lighting in a wildlife corridor would be reduced to less than significant through implementation of mitigation measures M-BIO-7, which minimizes nighttime and outdoor lighting, and M-BIO-8A, which provides commensurate habitat management and conservation of open space areas. This would reduce the impact to less than significant because lighting will not interfere with nocturnal wildlife movements, and the proposed open space design consists of two large continuous blocks of key biological that are buffered by FMZs where adjacent to residences. These features help reduce the urban-wildland interfaces and allow wildlife to move through the open space areas relatively uninterrupted.

7 LOCAL POLICIES, ORDINANCES, AND ADOPTED PLANS

7.1 Guidelines for the Determination of Significance

The County of San Diego's (County's) *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources* (County of San Diego 2010a) are based on the criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and were used to analyze potential direct and indirect impacts to biological resources. The following guidelines for the determination of significance come directly from the County's guidelines (County of San Diego 2010a).

Guideline 4.5 The project would conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

- A. For lands outside of the Multiple Species Conservation Plan (MSCP), the project would impact coastal sage scrub (CSS) vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Community Conservation Planning (NCCP) Process Guidelines.
- B. The project would preclude or prevent the preparation of the subregional Natural Community Conservation Planning (NCCP) Process. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- C. The project will impact any amount of wetlands or sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).
- D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Natural Community Conservation Planning (NCCP) Process Guidelines.
- E. The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- F. For lands within the Multiple Species Conservation Program (MSCP), the project would not minimize impacts to Biological Resource Core Areas (BRCAs), as defined in the Biological Mitigation Ordinance (BMO).

Biological Resources Technical Report for the Newland Sierra Project

- G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Community Conservation Planning (NCCP) Process Guidelines.
- H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the Biological Mitigation Ordinance (BMO).
- I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).
- L. The project would result in the take of eagles, eagle eggs, or any part of an eagle (Bald and Golden Eagle Protection Act).

7.2 Analysis of Project Effects

7.2.1 Project Effects Relevant to Guideline 4.5.A (Coastal Sage Scrub Habitat Loss)

The proposed project is designed in accordance with the draft North County Plan. The Section 4(d) HLP findings are included as Appendix E. The HLP findings show that the proposed project would not impact coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Process Guidelines. Therefore there is no significant impact related to Guideline 4.5.A.

7.2.2 Project Effects Relevant to Guideline 4.5.B (NCCP Planning)

The proposed project would not preclude or prevent the preparation of the subregional NCCP because the project has been planned in accordance with the planning principles of the draft North County Plan. First, the proposed project has been identified as a proposed hardline area in the draft North County Plan, which means the proposed project's development areas and biological open space areas have been predetermined and hardlined for the purposes of the draft North County Plan (County of San Diego 2016). Additionally, the proposed project has been developed consistent with the Preliminary Conservation Objectives outlined in the Planning Agreement for the North County Plan (County of San Diego 2008a and 2014). The Planning Agreement identifies preserve design principles in the process for evaluating "Interim Projects" and the proposed project has also been developed to be consistent with these principles. Finally, the draft North County Plan identifies conservation goals for each of the adjacent PAMA-designated lands, and the proposed

Biological Resources Technical Report for the Newland Sierra Project

project has been designed to be consistent with these goals. The project design has been evaluated according to the Preliminary Conservation Objectives outlined in the Planning Agreement for draft North County Plan (County of San Diego 2008a and 2014). These objectives and project applicability/compliance are listed in Table 7-1. Based on the proposed hardline area as shown for the draft North County Plan, the proposed biological open space would assemble 1,209.1 acres of on-site habitat into three cohesive, contiguous blocks as well as an additional off-site block of habitat totaling 212 acres (providing habitat value for proposed MSCP-covered species), and protect the biological open space from future encroachment through organized habitat management and land stewardship in perpetuity (Figure 5).

Therefore, the proposed project would not preclude or prevent the preparation of the subregional NCCP and would not be a significant impact. Additional support for this determination is provided below.

Draft North County Plan Preliminary Conservation Objectives

As outlined in Table 7-1, the habitat loss from the proposed project would not preclude or prevent the North County Plan from achieving the preliminary conservation objectives from the draft North County Plan Planning Agreement (County of San Diego 2008 and 2014).

Table 7-1
Consistency of the Newland Sierra Project with the
Draft North County Plan Planning Agreement Conservation Objectives

Conservation Objective	Consistency
Provide for the protection of species, natural communities, and ecosystems on a landscape level	The proposed project, with mitigation, would provide for protection and conservation of special-status species and natural communities. Through the preservation and long-term management of 1,420.9 acres of on-site and off-site open space of multiple species and multiple communities with connection to off-site PAMA areas, the proposed project would allow for protection of species, natural communities, and ecosystems at a landscape level.
Preserve the diversity of plant and animal communities throughout the Planning Area	The proposed project would conserve and provide long-term habitat management for 1,420.9 acres of biological open space designed to capture the range of plant and animal diversity found on Site, which would contribute to the preserved biodiversity in the draft North County Plan Planning Area. All of the native vegetation communities and habitat types that occur on the project Site are represented within the proposed on-site biological open space. In addition to the California gnatcatcher movement corridors and coastal sage scrub conserved by the project, the on-site and off-site biological open space would preserve unique communities like Mafic southern mixed chaparral and diverse riparian communities along a segment of Gopher Canyon Creek, which would contribute to the diversity of plant and animal communities preserved in the North County Plan Planning Area. The proposed biological open space would also capture an array of landscape features and microhabitats, like rock outcrops and varying landforms (ridgelines, valleys, and slopes), across a range of topographic gradients and differing aspects, which would contribute to the plant and animal communities preserved in the North County Plan Planning Area.

Biological Resources Technical Report for the Newland Sierra Project

Table 7-1
Consistency of the Newland Sierra Project with the
Draft North County Plan Planning Agreement Conservation Objectives

Conservation Objective	Consistency
Protect threatened, endangered, or other special status plant and animal species, and minimize and mitigate the take or loss of proposed Covered Species	The proposed project, with mitigation, would provide for protection and conservation of special-status plant and animal species, thereby contributing to the conservation of the planned North County Plan, consistent with the draft North County Plan conservation strategy. Specifically, the proposed project would provide conservation of populations and/or suitable habitat, for the following draft North County Plan Covered Species: summer holly, sticky dudleya, felt-leaved monardella, Engelmann oak, orange-throated whiptail, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion.
Identify and designate biologically sensitive habitat areas	Consistent with federal, state, and County standards, biological studies have been conducted on the project Site between 2000 and 2017, which contributes to the biological database and knowledge for nearly 2,000 acres in the draft North County Plan Planning Area. Field surveys, mapping, and documentation has been conducted for vegetation communities, rare plants, jurisdictional waters and wetlands, nesting raptors, reptiles, wildlife crossing and culverts, and focused surveys for burrowing owl least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, and Harbison's dun skipper..
Preserve habitat and contribute to the recovery of Covered Species	The proposed project, with mitigation, would provide for protection and conservation of special-status plant and animal species, thereby contributing to the recovery of the draft North County Plan Covered Species, consistent with the draft North County Plan conservation strategy. Specifically, the proposed project would provide conservation of populations and/or suitable habitat for the following draft North County Plan Covered Species: summer holly, sticky dudleya, felt-leaved monardella, Engelmann oak, orange-throated whiptail, western spadefoot, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion.
Reduce the need to list additional species	The long-term conservation of large areas of open space resulting from the proposed project would contribute to building the draft North County Plan reserve system and build upon and buffer existing adjacent preserve areas within the PAMA. By implementing the proposed project consistent with the draft North County Plan conservation strategy, the proposed project would contribute to reducing the need to list draft North County Plan Covered Species that are currently not listed.
Set forth species-specific goals and objectives	For the Covered Species, the draft North County Plan describes the general species goals as: Conserve the ecosystem functions and values, appropriate natural communities, and opportunities for genetic exchange needed for the Covered Species to persist in the Plan Area. As described above under separate objectives, the proposed project would provide conservation of populations and/or suitable habitat, for the Covered Species to contribute toward meeting the species-specific goals of the draft North County Plan.
Set forth specific habitat-based goals and objectives expressed in terms of amount, quality, and connectivity of habitat.	The proposed project, with mitigation, would provide for protection and conservation of Covered Species habitat and natural communities, consistent with the conservation strategy of the draft North County Plan, thereby contributing to and not precluding the ability of the County to meet the goals and objectives of the draft North County Plan. Through the preservation and long-term management of 1,420.9 acres of on-site and off-site biological open space within the draft North County Plan the proposed hardline area on Site and PAMA in the off-site mitigation parcel, multiple Covered Species and natural communities would be protected in an interconnected system of biological open space, consistent with the goals and objectives of the draft North County Plan.

Biological Resources Technical Report for the Newland Sierra Project

Interim Project Preserve Design Principles

In addition to the preliminary conservation objectives, the Planning Agreement for the draft North County Plan identifies an interim project review process, including a set of preserve design principles that interim projects would be evaluated against during the period when the North County Plan is in preparation. As described below, the habitat loss resulting from the proposed project would not preclude or prevent the County from preparing the North County Plan because it has been developed consistent with the interim project preserve design guidelines.

Principle: On-site open space should provide a long-term biological benefit.

- The biological open space proposed for protection on the Site is located within a proposed hardline area of the draft North County Plan (County of San Diego 2016), which means that the proposed project's development areas and biological open space areas have been predetermined and hardlined for the purposes of preparing draft North County Plan. By identifying the proposed on-site biological open space as a proposed hardline area, the County of San Diego has determined that the proposed biological open space would provide long-term biological benefit consistent with the draft North County Plan. The proposed 1,209.1 acres of on-site biological open space occur in an interconnected system of 3 blocks, consisting of a 870.2-acre northern block, a 153.9-acre eastern block, and a 185-acre southern block. Each of these blocks is connected to adjacent draft North County Plan PAMA Core Areas and linkages. Therefore, the proposed large, interconnected on-site biological open space would provide long-term biological benefit.

Principle: On-site open space must protect habitat of equal or greater value as that being impacted. No isolated pockets of open space should be used for mitigation credit.

- The proposed project's development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity and retain the functionality of the reserve design for the draft North County Plan, as reflected by the designation of a proposed hardline area for the Site. By situating a majority of the development area in the southwestern corner of the project Site, the proposed biological open space is connected to the draft North County Plan PAMA in three key locations:
 - North – Establishing a large, contiguous biological open space (approximately 870.2 acres) in the northern portion of the Site (referred to as Block 1) retains the connectivity to the remainder of the draft North County Plan Core Area. This portion of the project Site is located in the most interior part of the Core Area and conserving it would retain the integrity of the draft North County Plan reserve design. The proposed Block 1 biological open space also builds off and buffers existing protected

Biological Resources Technical Report for the Newland Sierra Project

lands north of the project Site. Additionally, the Block 1 open space area conserves key biological resources, including a section of Gopher Canyon Creek and associated riparian resources, patches of coastal sage scrub, Mafic southern mixed chaparral, and North County Plan Covered Plant Species (i.e., summer holly and Engelmann oak).

- East – Establishing a north–south biological open space area along nearly the entire eastern portion of the project Site (referred to as Block 2; approximately 153.9 acres) would maintain the landscape connectivity by establishing dedicated conserved lands within the north–south coastal sage scrub “stepping stone” corridor for identified as important for California gnatcatcher regional movement. Additionally, the Block 2 biological open space would establish permanently protected habitat for approximately 1.5 miles along the western side of I-15 valley, which establishes good sight lines for moving and dispersing avian species.
- South – Establishing open space along the southern portion of the property (referred to as Block 3; approximately 185 acres) maintains the integrity of the draft North County Plan reserve design by dedicating open space adjacent to and connected with the Escondido-Temecula Linkage area located south of the project Site.

Therefore, the proposed on-site biological open space would protect habitat of equal or greater value as that being impacted, and no isolated pockets of open space are proposed by the project.

Principle: Separate lots should be used whenever possible for on-site open space to help protect the biological value of the preserved areas.

- The proposed project’s on-site biological open space would be protected within individual lots, and this biological open space would be managed for its biological value for the long-term.

Principle: On-site open space shall contribute to regional conservation efforts.

- The proposed on-site and off-site biological open space would establish long-term protection for 1,420.9 acres of habitat for Covered Species and natural communities within the draft North County Plan proposed hardline area and off-site PAMA area, consistent with the conservation strategy for the draft North County Plan. Therefore, the proposed project would contribute to the regional conservation efforts on the County and the Wildlife Agencies under the MSCP draft North County Plan.

Biological Resources Technical Report for the Newland Sierra Project

Principle: Open space design, to the extent known, should not reduce the biological diversity found on the site.

- The proposed project's biological open space was designed to capture the range of plant and animal diversity found on Site in a system of interconnected open space blocks. All of the native vegetation communities and habitat types that occur on the project Site are represented within the proposed on-site biological open space. In addition to the California gnatcatcher movement corridors and coastal sage scrub that would be conserved by the project, the on-site biological open space would preserve unique communities like Mafic southern mixed chaparral and diverse riparian communities along a segment of Gopher Canyon Creek, which would contribute to the diversity of plant and animal communities preserved in the draft North County Plan. The proposed biological open space also captures an array of landscape features and microhabitats, like rock outcrops and varying landforms (ridgelines, valleys, and slopes), across a range of topographic gradients and differing aspects, which would contribute to the diversity of plant and animal communities preserved on Site. Therefore, the design of the proposed project biological open space, to the extent known using the best available information, would not reduce the biological diversity found on the Site.

Principle: Open space design shall maintain habitat connectivity between areas of high quality habitat.

- The proposed biological open space is interconnected within the project Site and also maintains connectivity to the remainder of the San Marcos–Merriam Mountains Core Area and adjacent PAMA linkages. The proposed project's development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity of the PAMA and retain the functionality of the reserve design of the draft North County Plan, as reflected by the designation of a proposed hardline area for the Site.. By situating a majority of the development area in the southwestern corner of the project Site, the proposed biological open space is connected to the areas of high-quality habitat off Site within the draft North County Plan PAMA in three key locations: north, east, and south. The northern connection is provided by the 870.2-acre Block 1 open space area, which connects to adjacent PAMA Core Area and existing reserves to the north and west of the project Site. The eastern connection is provided by the 153.9-acre Block 2 open space area, which maintains the connection to the Escondido-Temecula Linkage PAMA and facilitates California gnatcatcher and other avian movement both north–south along the I-15 stepping stone corridor and east–west across the I-15 valley.

Biological Resources Technical Report for the Newland Sierra Project

Principle: The most sensitive resources shall be protected to maximize long-term viability.

- The project Site is a large property characterized by predominantly (95 percent) native vegetation communities that support important biological resources, some of which are considered sensitive. A majority of the Site (91 percent), however, is characterized by chaparral communities that are fairly common in the region. Of the chaparral communities, southern mixed chaparral on mafic soils is considered more rare/sensitive, and the proposed project would include nearly all (99 percent) of this vegetation type in biological open space. All of the other vegetation groups found on the Site are also represented in the biological open space, including coastal scrub, oak woodlands, and riparian.

With respect to plant species considered sensitive, biological surveys of the project Site identified six special-status species, two of which are draft North County Plan Covered Species (summer holly and Engelmann oak). Additionally, the Site is considered to have the potential to support two other draft North County Plan Covered Species (sticky dudleya and felt-leaved monardella), but these species were not detected on the Site. The Site supports a relatively large population of summer holly (1,356 individuals), of which the proposed project would protect 86 percent (1,160 individuals). The Site supports a relatively small population of Engelmann oaks, and the proposed project would protect 36 percent (10 individuals).

With respect to wildlife species considered sensitive, the Site supports or has the potential to support 16 special-status wildlife species (SSC/County Group 1 species). The Site supports or has the potential to support 10 draft North County Plan Covered Species: western spadefoot, orange-throated whiptail, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion; however, the Site is not considered to support major or critical populations of these species. Habitat for all of these wildlife species would be protected within the proposed biological open space.

An important function of the proposed biological open space would be to protect open space in this key geographic location in the region in order to maintain the connectivity of the regional reserve design and to facilitate the continued movement of California gnatcatcher and other avian species. As described previously for other principles, the biological open space system blocks have been designed to protect these landscape functions for long-term viability.

Biological Resources Technical Report for the Newland Sierra Project

Principle: Edge effects and habitat fragmentation shall be minimized by maximizing the surface area to perimeter ratio, preserving large blocks of contiguous open space. Edge effects shall be further minimized by establishing buffers, providing fencing and/or permanent signs, and limiting trails and/or lighting.

- The proposed project's biological on-site open space is a large, interconnected system consisting of three open space blocks. These three open space blocks would be connected internally within the Site and externally to off-site PAMA and off-site existing reserves. Both the size and configuration of the proposed biological open space minimize edge effects and habitat fragmentation. In terms of open space patch size, the proposed biological open space system includes Block 1 (870.2 acres), Block 2 (153.9 acres), and Block 3 (185.0 acres). These are considered large open space patches when compared to existing reserves in the San Marcos–Merriam Mountains Core Area of the draft North County Plan PAMA. Based on a review of the Conserved Lands dataset maintained by the San Diego Association of Governments (SANDAG) (2015), there are approximately 532 acres of existing reserve within the San Marcos–Merriam Mountains Core Area in approximately 23 discrete open space patches. The largest existing reserve patch in this Core Area is currently 148 acres and the average open space size across these 23 patches is 24 acres. The three proposed open space blocks would also have very high Area-to-Perimeter ratios (expressed in units of square feet-to-feet): Block 1 (886), Block 2 (386), and Block 3 (384). By way of comparison, only one of the existing open space patches in the Core Area has a comparable Area-to-Perimeter ratio (an 89-acre square patch with a ratio of 413). The average Area-to-Perimeter ratio of the existing open space patches in the Core Area is 132. By designing the biological open space in large blocks with high Area-to-Perimeter ratios, the proposed project would minimize edge effects and habitat fragmentation. Additionally, the design features and mitigation measures of the proposed project include a LBZE, which is a required minimum 100-foot easement adjacent to biological open space that would prohibit the building of structures that would require vegetation clearing for fire purposes, would include directional lighting and other lighting specifications, and would include open space fencing and signage, all of which would minimize edge effects.

Biological Resources Technical Report for the Newland Sierra Project

San Marcos – Merriam Mountain Core Area Conservation Goals

The County is in the process of developing the draft North County Plan. The draft North County Plan includes conservation goals for each PAMA planning unit. The following describes the consistency of the proposed project with the draft conservation goals for the San Marcos–Merriam Mountains Core Area, which is the PAMA designated by the draft North County Plan adjacent to the Site (County of San Diego 2014).

- To the maximum extent practicable, conserve oak woodlands, coastal sage scrub (particularly in Twin Oaks) to maintain populations and connectivity of coastal California gnatcatcher and other coastal sage scrub-dependent species, and chaparral on mafic or gabbro soils that support sensitive plant species, such as chaparral beargrass and Parry’s tetracoccus, San Diego thornmint (particularly in San Marcos Mountains), or California adolphia. Refer to natural community and species goals and objectives in the Conservation Analysis (Volume II).
 - To the maximum extent practicable and in consideration of all the competing goals and principles that relate to this project Site, the proposed on-site biological open space of the proposed hardline area for the Site has been developed consistent within this conservation goal. Considering that this Site is predominantly characterized by chaparral habitats, chaparral plant and animal species are the primary species supported by the Site. Mafic chaparral communities would be 99 percent conserved in the proposed on-site biological open space. The chaparral-related plant species listed in this draft goal (i.e., chaparral beargrass, Parry’s tetracoccus, San Diego thornmint, and California adolphia) were not documented on the Site. At the regional scale, the importance of the Site is in its location and geographic position within the reserve design for the draft North County Plan. By designing the Site with three interconnected biological open space block covering over 1,209 acres, the proposed project would maintain populations and connectivity of California gnatcatcher and other avian species, particularly by maintaining the north–south I-15 “stepping-stone” corridor and the east–west movement corridor across the I-15 valley. Biological open space Block 2 would avoid coastal sage scrub found to be occupied by California gnatcatcher. A portion of the oak woodlands with buffers would also be conserved within the large interconnected open space system. Volume II of the draft North County Plan has not been made available; therefore, an evaluation of consistency with the natural community and species goals and objectives from the draft North County Plan Conservation Analysis was not possible.
- Ensure that a core community of coastal California gnatcatcher and other coastal sage scrub-dependent species remains in the coastal sage scrub block in Twin Oaks. Refer to species goals and objectives in the Conservation Analysis (Volume II).

Biological Resources Technical Report for the Newland Sierra Project

- The proposed project is not located in the Twin Oaks area of the San Marcos–Merriam Mountains Core Area; therefore, this draft conservation goal is not applicable. The proposed project would conserve California gnatcatcher habitat on Site and maintain generational movement of California gnatcatcher north and south, and east and west, across the Site.
- Conserve the north–south connectivity of coastal California gnatcatcher habitat along I-15 between the Riverside County line and the City of Escondido. Maintain the east–west connectivity of natural habitats on either side of I-15 for dispersal of coastal sage scrub community birds.
 - As above for previous draft conservation goals and in the principles above, the proposed open space design would conserve the north–south connectivity of coastal California gnatcatcher habitat along I-15. In addition, a potential east–west connection in the northwestern portion of the open space would be conserved over the long-term in the proposed biological open space.
- Promote conservation of riparian and upland habitats of Gopher Canyon Creek for water quality and sensitive species, such as southwestern pond turtle and least Bell’s vireo.
 - The proposed open space design includes preservation of a portion of the South Fork of Gopher Canyon that is located within the western edge of the project Site, which is a tributary to Gopher Canyon Creek and the San Luis Rey River. Inclusion of the headwaters to Gopher Canyon Creek into the proposed open space design assists in the maintenance of water quality and the conservation of riparian habitat. In addition, upland habitat surrounding this tributary is included in the proposed open space design. The Site was not found to support southwestern pond turtle or least Bell’s vireo, but the proposed project would protect upstream reaches of Gopher Canyon Creek that supports riparian habitat and resources.
- Ensure the San Diego thornmint population in the Palisades open space preserve is maintained and enhanced, if practicable. Refer to species goals and objectives in the Conservation Analysis (Volume II).
 - This draft conservation goal is not applicable to the Site and this species does not occur on the Site.

Overall, the proposed open space design is be consistent with planning guidelines for the adjacent San Marcos Hills–Merriam Mountains Core Area.

Biological Resources Technical Report for the Newland Sierra Project

7.2.3 Project Effects Relevant to Guideline 4.5.C (RPO Wetlands)

Impact P-1: Permanent Direct Impacts to RPO Wetlands

The project Site includes RPO wetlands and RPO wetland buffers. As described in Section 4.2.2, and shown in Table 2-5, there are permanent direct impacts to approximately 2.13 acres of County RPO wetlands, which is considered a significant impact (**Impact P-1**). The RPP provides information on the RPO resources, including sensitive habitat lands, RPO wetlands, steep slope lands, floodplains and lands containing significant prehistoric and historic sites (Dudek 2017a). The RPP includes a discussion of the project's general consistency with the RPO and how the RPO impacts meet the exemption criteria under Section 86.605 of the RPO. The on-site and off-site RMPs (Dudek 2017b, 2017c) describe the management activities for the open space preserve, which includes RPO wetlands and wetland buffers. This impact would be mitigated less than significant through implementation of mitigation measures M-BIO-8A (habitat preservation and management), M-BIO-8D (development of a resource management plan), and M-BIO-12 (federal and state agency permits).

In addition, there are impacts to RPO wetland buffers; these impacts are described in detail in Section 4.2.5.

7.2.4 Project Effects Relevant to Guideline 4.5.D (Coastal Sage Scrub)

The proposed project is designed to minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the Southern California Coastal Sage Scrub NCCP Process guidelines.

The Draft HLP, including 4(d) Findings, is included in Appendix E. These Findings describe how the project's mitigation for loss of coastal sage scrub habitat conforms with the NCCP Process Guidelines by incorporating the following features: (i) the project has been designed to minimize habitat loss; (ii) the project limits habitat loss to less than 5 percent, as recommended by guidelines; (iii) the project achieves connectivity among high-value habitat by preserving biological open space that is connected to most of the existing core populations in the 5-mile study area and maintaining the north/south I-15 stepping stone corridor; and (iv) the project ensures that development would not reduce the likelihood of the survival and recovery of listed species. Therefore, this impact would be less than significant.

7.2.5 Project Effects Relevant to Guideline 4.5.E (Regional Planning Efforts)

The proposed project conforms to the goals and requirements as outlined in the applicable regional planning efforts (draft North County Plan, NCCP, HLP, General Plan, and North County Metro Subarea Plan) and described in detail in Section 7.2.2. There are no habitat

Biological Resources Technical Report for the Newland Sierra Project

management plans or special are management plans for the project Site; therefore, there would be no impacts.

7.2.6 Project Effects Relevant to Guideline 4.5.F (Biological Mitigation Ordinance)

The BMO does not apply to the draft North County Planning area. Therefore, there are no impacts to BRCAs.

7.2.7 Project Effects Relevant to Guideline 4.5.G (Connectivity Between Areas of High Habitat Value)

The project would not preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub Natural Communities Conservation Planning Process (NCCP) Guidelines.

The project Site is characterized by approximately 95 percent native vegetation and 5 percent non-native communities and other land cover. A majority of the Site (nearly 91 percent; 1,803.8 acres) is characterized by chaparral communities. Approximately 4 percent (79.7 acres) of the Site is characterized by coastal scrub communities. The remainder of the Site supports oak woodland (0.5 percent; 9.1 acres) and riparian communities (0.4 percent; 8.3 acres).

The 79.7 acres of coastal scrub communities on the Site consist of the following types: 68.2 acres of Diegan coastal sage scrub, 2.0 acres of coastal sage scrub–Baccharis dominated, 1.7 acres of flat-topped buckwheat, and 7.8 acres of coastal sage–chaparral transition. Based on the 2009 draft North County Plan, there is approximately 29,888 acres of coastal sage scrub in the North County Plan area. Therefore, the project Site contains 0.27 percent of the total coastal sage scrub in the draft North County Plan area.

The 79.7 acres of coastal sage scrub on the project Site occurs in five general patch locations: three patch locations in the northern portion of the Site, one in the central portion of the Site, and one patch location in the southeastern portion of the Site. The coastal sage scrub patches in the northern portion of the Site are small, comprising 7.18 acres, 4.76 acres, and 2.90 acres. The central coastal sage scrub patch is the largest, with a combined acreage of all coastal sage scrub types of 48.73 acres. The southeastern coastal sage scrub patch totals 16.13 acres.

The draft North County Plan California Gnatcatcher Habitat Evaluation Model shows a majority of the project Site as “None” with several small patches of “Low” value for California gnatcatcher (County of San Diego 2008b). In terms of the draft North County Plan composite Habitat Evaluation Model, the majority of the project Site (58 percent) is considered moderate value. The remainder of the Site is classified as High or Very High (31

Biological Resources Technical Report for the Newland Sierra Project

percent) or Low, Agricultural, or Developed (11 percent). The High and Very High values from the North County Plan composite Habitat Evaluation Model on the project Site are not a result of habitat value for California gnatcatcher and do not correspond to the areas of mapped coastal sage scrub on the Site.

The conservation strategy for the draft North County Plan is based on a reserve design that includes existing preserves, PAMAs, and biological open space within proposed hardline areas. The project Site is designated as a proposed hardline area within the approximately 7,640-acre San Marcos–Merriam Mountains Core Area of the North County Plan PAMA. This Core Area comprises approximately 5 percent of the overall North County Plan PAMA.

In the reserve design of the draft North County Plan, the San Marcos–Merriam Mountains Core Area is connected to other portions of the reserve design through the adjacent Escondido-Temecula Linkage located along I-15 north and south of the Site, and through the Moosa Canyon Linkage and Lower San Luis Rey River Linkage that are both located north of the project Site. In the vicinity of the project Site, the largest and highest proportion of Very High and High habitat value areas occurs in the western portion of the San Marcos–Merriam Mountains Core Area, in the predominantly open space areas west of Twin Oaks Valley Road and west of the Vista Valley Country Club south and north of Gopher Canyon Road. Farther to the north, Very High and High habitat value areas are concentrated along Moosa Canyon (along Camino del Rey) and the Lower San Luis Rey River (along SR-76). Off Site along the I-15 corridor, smaller scattered areas of Very High and High habitat value occur that is often referred to as the coastal sage scrub “ladder” or “stepping stone” corridor. East of the I-15 corridor, patches of Very High and High habitat value occur on the open space slope east of Lawrence Welk Resort Village.

The loss of 56.7 acres of coastal sage scrub resulting from the proposed project would not preclude connectivity between areas of high habitat values. The proposed on-site biological open space maintains connectivity to the adjacent San Marcos–Merriam Mountains Core Area and adjacent PAMA linkages. The proposed project’s development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity to the adjacent PAMA and retain the functionality of the reserve design for the draft North County Plan. By situating a majority of the development area in the southwestern corner of the project Site, the proposed on-site biological open space is connected to the draft North County Plan PAMA in three key locations (north, east, and south), as discussed in Section 7.2.2.

The areas of Very High and High habitat value on the project Site that would be impacted by the proposed project are isolated from other areas of contiguous Very High or High value habitat areas by existing land uses (e.g., existing development areas and the I-15 corridor). Therefore, the proposed project would not increase or contribute to the isolation of high-value areas.

Biological Resources Technical Report for the Newland Sierra Project

Approximately 47 percent (291 acres) of the Very High and High habitat value areas on the project Site would be conserved in proposed on-site biological open space. Therefore, the proposed project would retain areas of high habitat value within an interconnected biological open space system developed consistent with the reserve design objectives of the draft North County Plan.

The proposed project would conserve additional coastal sage scrub habitat off-site in a location that contributes to the North County Plan PAMA. Contribution of off-site coastal sage scrub mitigation (106.4 acres) in addition to the on-site biological open space would further offset the effects of the loss of coastal sage scrub from the proposed project.

Overall, the entire proposed biological open space would contain a diversity of environmental characteristics present in the vicinity, including representative populations of special-status plant and animal species observed on Site; existing dirt trails and canyon bottoms currently used by wildlife for movement across the Site; and the north-south-trending tributary to Gopher Canyon along Twin Oaks Valley Road, which would provide linkage opportunities to the San Marcos Mountains.

Additionally, the off-site mitigation area in Ramona would connect segments of the Cleveland National Forest and San Diego County Parks land and provide protection for continued use by a variety of wildlife. The preservation of 211.8 acres of one large off-site parcel situated in a key natural gap in the adjacent agricultural (ranches, poultry farms) landscape amid cattle ranch lands and open space would provide for connectivity between segments of the Cleveland National Forest located approximately 2 miles to the east and west, and San Diego County Parks land located approximately 3 miles to the north and south.

7.2.8 Project Effects Relevant to Guideline 4.5.H (Movement Corridors Defined in the BMO)

The BMO does not apply to the draft North County Planning area. Therefore, there are no impacts to BRCAs.

7.2.9 Project Effects Relevant to Guideline 4.5.I (Narrow Endemics)

No narrow endemic species were documented on the project Site and no impacts would result.

7.2.10 Project Effects Relevant to Guideline 4.5.J (Listed Species)

California gnatcatcher occurs on Site; however, the project has been designed to avoid 33 percent (25.2 acres) of the suitable habitat and conserve coastal scrub in accordance with the County's guidelines. The resident pair is expected to remain after the project is implemented. Additional information is provided in Sections 7.2.2, 7.2.4, and 7.2.7, as well as in the draft HLP

Biological Resources Technical Report for the Newland Sierra Project

(Appendix E). The proposed project would not reduce the likelihood of survival and recovery of any listed species in the wild; therefore, impacts would be less than significant.

7.2.11 Project Effects Relevant to Guideline 4.5.K (Migratory Birds)

Impact P-2: Temporary Direct Impacts to Migratory Birds

Short-term, construction-related impacts to migratory birds and active migratory bird nests and/or eggs protected under the MBTA are considered a significant impact (**Impact P-2**). This impact would be mitigated through mitigation measure M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks). Preconstruction surveys would identify locations of nesting birds and provide suitable buffers between these locations and construction.

7.2.12 Project Effects Relevant to Guideline 4.5.L

No golden or bald eagles nest on Site. No eagles have been observed on Site during previous surveys (PSBS 2007) or in recent 2013–2014 surveys by Dudek.

7.3 Cumulative Impact Analysis

The ordinances and policies that protect biological resources are applied to each discretionary project in accordance with their associated legally established compliance requirements. One other project in the vicinity has had an approved RPO amendment: Harmony Grove Village.

7.4 Mitigation Measures and Design Considerations

The proposed project would mitigate for impacts to RPO wetlands through on-site and off-site conservation of open space.

Project construction would be phased, where appropriate, to avoid work during the bird breeding season (generally January through August). If construction activity is to commence during the breeding season, a biological survey for nesting bird species must be conducted within the proposed impact area 72 hours prior to each new construction activity, a waiver of nesting bird season prohibition obtained from the director of PDS, and implementation of the Nesting Bird Management, Monitoring, and Reporting Plan in coordination with the wildlife agencies as described in mitigation measure M-BIO-5, above.

No other mitigation is proposed for impacts to local policies, ordinances, and plans because the proposed project remains consistent with all approved planning documents/plans.

Biological Resources Technical Report for the Newland Sierra Project

7.5 Conclusions

Impact P-1

The significant permanent direct impacts to RPO wetlands would be significant and avoidable through a legislative amendment to RPO. The project's avoidance of the RPO wetlands and wetland buffers is infeasible because the development is concentrated in the southern portion of the property. While this results in permanent impacts to RPO wetlands, this design is intended to create a biological preserve in the northern portion of the property, providing a core habitat block in the Merriam Mountains, and required improvements to Deer Springs Road. The RPP provides information on the RPO resources, including sensitive habitat lands, RPO wetlands, steep slope lands, floodplains, and lands containing significant prehistoric and historic sites (Dudek 2017a). The on-site RMP provides for the management of RPO resources (M-BIO-8D). In addition, the project includes habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities (M-BIO-8A), and obtaining permits from the appropriate federal and state agencies to impact jurisdictional resources (M-BIO-12).

Impact P-2

The proposed project could result in the loss of active nests and/or young if construction activities occur during the nesting season. This impact would be considered a significant impact and would be mitigated through M-BIO-5, which requires preconstruction nesting bird surveys in suitable habitat and appropriate buffers if active nests are found.

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

8 SUMMARY OF PROJECT IMPACTS AND MITIGATION

Sections 3.5, 4.5, 5.5, 6.5, and 7.5 summarize the impacts and associated mitigation for each significant impact that may occur as a result of the proposed project. Table 8-1 summarizes the impacts and mitigation required for impacts to special-status species, vegetation community and jurisdictional areas.

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1

Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
Guideline 4.1: <i>The project would 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 California Department of Fish and Game or U.S. Fish and Wildlife Service.</i>						
3.2.1	Impact W-1	Special-Status Wildlife, Listed Species	Short-term (i.e., temporary) Direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-4 (reduction of invasive species through biological review of landscape plans) M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks) M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-7 (minimize night and outdoor lighting)	Less than significant	4.1, A
3.2.1	Impact W-2	Special-Status Wildlife, Listed Species	Long-term (i.e. permanent) direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management	Less than significant	4.1, A

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				plan) M-BIO-8E (open space fencing and signage)		
3.2.2.1	Impact SP-1	Special-Status Plant, County List A: Summer holly Ramona horkelia	Short-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-9 (relocation of Ramona horkelia through implementation of a Mitigation and Monitoring Plan)	Less than significant	4.1, B
3.2.2.1	Impact SP-2	Special-Status Plant, County List A: Summer holly Ramona horkelia	Long-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-9 (relocation of Ramona horkelia through implementation of a Mitigation and Monitoring Plan)	Less than significant	4.1, B
3.2.2.2	Impact W-3	Special-Status Wildlife, County Group 1 and/or SSC Species: Cooper's hawk Sharp-shinned hawk	Short-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction	Less than significant	4.1, B

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1

Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
		Bell's sparrow Red-shouldered hawk Turkey vulture Yellow warbler Coastal California gnatcatcher Western spadefoot Belding's orange-throated whiptail Red-diamond rattlesnake Blainville's horned lizard Coast patch-nosed snake San Diego desert woodrat Coronado skink San Diego pocket mouse		fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-4 (reduction of invasive species through biological review of landscape plans) M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks) M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-7 (minimize night and outdoor lighting)		
3.2.2.2	Impact W-4	Special-Status Wildlife, County Group 1 and/or SSC Species: Loss of suitable habitat	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	Less than significant	4.1, B

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
3.2.3.2	Impact W-5	Special-Status Wildlife, County Group 2: Impacts to active nests or young of nesting	Short-term direct	M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks)	Less than significant	4.1, C
3.2.6	Impact W-6	Special-Status Wildlife, Loss of foraging habitat for raptors	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	Less than significant	4.1, F
3.2.7	Impact CWA-1	Existing Core Wildlife Area	Short-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-7 (minimize night and outdoor lighting)	Less than significant	4.1, G
3.2.7	Impact	Existing Core Wildlife Area	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations	Less than	4.1, G

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1

Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
	CWA-2			of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	significant	
3.2.7	Impact CWA-3	Existing Core Wildlife Area	Short-term indirect	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-7 (minimize night and outdoor lighting)	Less than significant	4.1, G

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
3.2.8.1	Impact SP-3	Special-Status Plant, County List A: Summer holly Ramona horkelia	Short-term indirect	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report)	Less than significant	4.1, H
3.2.8.1	Impact SP-4	Special-Status Plant, County List A: Summer holly Ramona horkelia Rainbow manzanita (<i>Arctostaphylos rainbowensis</i>)	Long-term indirect	M-BIO-4 (reduction of invasive species through biological review of landscape plans) M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage) M-BIO-10 (regulated herbicide application to control invasive species) M-BIO-11 (implementation of a fire protection plan to minimize the potential exposure of the project Site to fire hazards)	Less than significant	4.1, H

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
3.2.8.2	Impact W-7	Special-Status Wildlife Detected or Potentially Occurring (Table 1-7)	Short-term Indirect	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-4 (reduction of invasive species through biological review of landscape plans) M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks) M-BIO-6 (revegetation plan for temporary impacts) M-BIO-7 (minimize night and outdoor lighting)	Less than significant	4.1, H
3.2.8.2	Impact W-8	Special-Status Wildlife Detected or Potentially Occurring (Table 1-7)	Long-term Indirect	M-BIO-4 (reduction of invasive species through biological review of landscape plans) M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement)	Less than significant	4.1, H

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1

Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage) M-BIO-11 (implementation of a fire protection plan to minimize the potential exposure of the project Site to fire hazards)		
3.2.12	Impact W-9	Special-Status Wildlife, Impacts to active nests or young of nesting raptors	Short-term direct	M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks)	Less than significant	4.1, L
3.2.12	Impact W-10	Special-Status Wildlife, Loss of foraging habitat for raptors	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	Less than significant	4.1, L

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
Guideline 4.2: <i>The project would have a substantial adverse effect on riparian habitat or another sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Game or U.S. Fish and Wildlife Service.</i>						
4.2.1	V-1	Special-status vegetation communities	Short-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-6 (revegetation plan for temporary impacts) M-BIO-7 (minimize night and outdoor lighting)	Less than significant	4.2, A
4.2.1	V-2	Special-status vegetation communities	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	Less than significant	4.2, A
4.2.2	V-3	Jurisdictional resources	Short-term direct	M-BIO-6 (revegetation plan for temporary vegetation impacts) M-BIO-12 (federal and state agency	Less than significant	4.2, B

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				permits)		
4.2.2	V-4	Jurisdictional resources	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage) M-BIO-12 (federal and state agency permits)	Less than significant	4.2, B
4.2.4	V-5	Special-status vegetation communities and jurisdictional resources	Short-term indirect	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-12 (federal and state agency permits)	Less than significant	4.2, D
4.2.4	V-6	Special-status vegetation communities and jurisdictional resources	Long-term indirect	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-4 (reduction of invasive	Less than significant	4.2, D

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				species through biological review of landscape plans) M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage) M-BIO-10 (regulated herbicide application to control invasive species) M-BIO-11 (implementation of a fire protection plan to minimize the potential exposure of the project Site to fire hazards) M-BIO-12 (federal and state agency permits)		
4.2.5	V-7	RPO wetlands and wetland buffers	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone	Less than significant	4.2, E

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1

Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage) M-BIO-12 (federal and state agency permits)		
Guideline 4.3: The project would 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.						
None						
Guideline 4.4: The project would interfere substantially with the movement of a 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.						
6.2.1	WM-1	Foraging and nesting habitat	Short-term direct	M-BIO-1 (biological monitoring to avoid unintentional construction impacts) M-BIO-2 (temporary construction fencing) M-BIO-3 (monitoring verification through preparation of a biological monitoring report) M-BIO-6 (revegetation plan for temporary vegetation impacts)	Less than significant	4.4, A
6.2.1	WM-2	Foraging and nesting habitat	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities)	Less than significant	4.4, A

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)		
6.2.1	WM-3	Foraging and nesting habitat	Short- and long-term indirect	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan) M-BIO-8E (open space fencing and signage)	Less than significant	4.4, A
6.2.2	WM-4	Habitat connectivity	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-8B (open space easement) M-BIO-8C (limited building zone easement) M-BIO-8D (resource management plan)	Less than significant	4.4, B

Biological Resources Technical Report for the Newland Sierra Project

Table 8-1
Summary of Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Areas

Section of Report Where Analysis Is Described	Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	Guideline Number and Letter
				M-BIO-8E (open space fencing and signage)		
6.2.4	WM-5	Wildlife behavior	Short- and long-term indirect	M-BIO-7 (minimize night and outdoor lighting) M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities)	Less than significant	4.4, D
Guideline 4.5: <i>The project would conflict with one or more local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, and/or would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state HCP.</i>						
7.2.3	P-1	RPO wetlands	Long-term direct	M-BIO-8A (habitat preservation and management of existing populations of sensitive species, suitable habitat, and special-status vegetation communities) M-BIO-12 (federal and state agency permits)	Less than significant	4.5, C
7.2.11	P-2	MBTA	Short-term direct	M-BIO-5 (avoidance by preconstruction surveys for nesting birds and setbacks)	Less than significant	4.5, K

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

Biological Resources Technical Report for the Newland Sierra Project

9 REFERENCES

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 16 U.S.C. 1531–1544. Endangered Species Act, as amended.
- 16 U.S.C. 668a–d. Bald and Golden Eagle Protection Act.
- 16 U.S.C. 703–712. Migratory Bird Treaty Act, as amended.
- 33 CFR 328.1–328.5. Definition of Waters of the United States.
- 66 FR 3853–3856. Executive Order 13186 of January 10, 2001: “Responsibilities of Federal Agencies to Protect Migratory Birds.” Presidential Documents. January 17, 2001.
- 74 FR 46836–46879. Eagle Permits; Take Necessary To Protect Interests in Particular Localities.
- 65 FR 63680. Final Rule: Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Coastal California Gnatcatcher. 2000.
- ACOE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetland Delineation Manual*. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.
- ACOE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. Accessed May 2012. http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf.
- ACOE and EPA (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency). 2008. “Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States* & *Carabell v. United States*.” Washington, D.C.: EPA. December 2, 2008.
- AOU (American Ornithologists’ Union). 2016. “Check-List of North American Birds: List of the 2,127 Bird Species Known from the A.O.U. Check-List Area.” Accessed October 14, 2016. <http://checklist.aou.org/>.

Biological Resources Technical Report for the Newland Sierra Project

- Atwood, J.L. 1990. *Status Review of the California Gnatcatcher* (*Polioptila californica*). Manomet, Massachusetts: Manomet Bird Observatory.
- Atwood, J.L. 1993. "California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing." In *Interface between Ecology and Land Development in California*, edited by J.E. Keeley, 149–169. Los Angeles, California: Southern California Academy of Sciences.
- Atwood, J.L., and J.S. Bolsinger. 1992. Elevational Distribution of California Gnatcatchers in the United States. *Journal of Field Ornithology* 63:159–168.
- Atwood, J.L., S.H. Tsai, C.H. Reynolds, and M.R. Fugagli. 1998. Distribution and Population Size of California Gnatcatchers on the Palos Verdes Peninsula, 1993–1997. *Western Birds* 29:340–350.
- Beier, P., and S. Loe. 1992. A Checklist for Evaluating Impacts to Wildlife Movement Corridors. *Wildlife Society Bulletin* 20:434–440.
- Beier, P. 1995. Dispersal of Juvenile Cougars in Fragmented Habitat. *Journal of Wildlife Management* 59:228–237.
- Bodeman, B. 2014. The Effect of Soil Moisture on the Susceptibility to Invasion by the Argentine Ant (*Linepithema humile*) in Chaparral Communities. Master's thesis, California State University, San Marcos.
- Bolger, D.T. 2007. Spatial and Temporal Variation in the Argentine Ant Edge Effect: Implications for the Mechanism of Edge Limitation. *Biological Conservation* 136:295–305.
- Bond, S. I. 1977. An Annotated List of the Mammals of San Diego County, California. *Transactions of the San Diego Society of Natural History* 18:229–248.
- Bontrager, D.R. 1991. *Habitat Requirements, Home Range, and Breeding Biology of the California Gnatcatcher* (*Polioptila californica*) in South Orange County, California. Prepared for Santa Margarita Company. April 1991.
- Bossard, C.C., J.M. Randall, and M.C. Hoshovsky. 2000. *Invasive Plants of California's Wildlands*. Berkeley, California: University of California Press.
- Bowman, R.H. 1973. *Soil Survey, San Diego Area, California, Part I*. U.S. Department of the Agriculture. December 1973.

Biological Resources Technical Report for the Newland Sierra Project

- Braden, G.T., R.L. McKernan, and S.M. Powell. 1997. Association of Within-Territory Vegetation Characteristics and Fitness Components of California Gnatcatchers. *Auk* 114:601–609.
- Brehme, C.S., J.A. Tracey, L.R. McClenaghan, and R.N. Fisher. 2013. Permeability of Roads to Movement of Scrubland Lizards and Small Mammals. *Conservation Biology* 27(4): 710–720.
- Brock, R.E., and D.A. Kelt. Influence of Roads on the Endangered Stephens' Kangaroo Rat (*Dipodomys stephensi*): Are Dirt and Gravel Roads Different? *Biological Conservation* 118.5 (2004):633–640.
- Burger, J.C., M.A. Patten, J.T. Rotenberry, and R.A. Redak. 1999. Foraging Ecology of the California Gnatcatcher Deduced from Fecal Samples. *Oecologia* 120:304–310.
- California Fish and Game Code, Section 2050–2098. California Endangered Species Act.
- CDFG (California Department of Fish and Game). 2000. *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*. December 9, 1983. Revised May 8, 2000. http://www.slocounty.ca.gov/Assets/PL/environmental/CDFG_botanical_survey_guidelines.pdf.
- CDFG. 2010. *List of Vegetation Alliances and Associations: Natural Communities List Arranged Alphabetically by Life Form*. September 2010. Accessed April 2013. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp.
- CDFG. 2012a. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012. Accessed 2013. <http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf>.
- CDFG. 2012b. *Natural Communities – Background Information*. Vegetation Classification and Mapping Program, Sacramento, California: CDFG. Accessed April 2012. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp.
- CDFG and CRA (California Department of Fish and Game and California Resources Agency). 1993a. *Southern California Coastal Sage Scrub NCCP Conservation Guidelines*. August 1993.
- CDFG and CRA. 1993b. *Southern California Coastal Sage Scrub NCCP Process Guidelines*. November 1993.

Biological Resources Technical Report for the Newland Sierra Project

- CDFW (California Department of Fish and Wildlife). 2014a. RareFind, Version 3.1.0 (Commercial Subscription), California Natural Diversity Database (CNDDB). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed September 2014. <http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp>.
- CDFW. 2014b. "State and Federally Listed Endangered, Threatened, and Rare Plants of California." California Natural Diversity Database. CDFW, Biogeographic Data Branch. July 2014. Accessed September 2014. <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEPlants.pdf>.
- CDFW. 2014c. *Special Vascular Plants, Bryophytes, and Lichens List*. California Natural Diversity Database. July 2014. Accessed September 2014. <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf>.
- CDFW. 2014d. "Special Animals (900 taxa)." CDFW, Biogeographic Data Branch. September 2014. Accessed September 2014. <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPAnimals.pdf>.
- CDFW. 2015. California Natural Diversity Database GIS layer. May 2015.
- Chesser, R.T., R.C. Banks, F.K. Barker, C. Ciero, J.L. Dunn, A.W. Kratter, I.J. Lovette, P.C. Rasmussen, J.V. Remsen, Jr., J.D. Rising, D.F. Stotz, and K. Winker. 2013. Fifty-Fourth Supplement to the American Ornithologists' Union Check-List of North American Birds. *Auk* 130(3):558–571.
- CNPS (California Native Plant Society). 2001. *CNPS Botanical Survey Guidelines*. December 9, 1983. Revised June 2, 2001. Accessed March 2013. http://cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf.
- CNPS. 2014. *Inventory of Rare and Endangered Plants*. Online ed. Version 8-02. Sacramento, California: CNPS. Accessed September 2014. <http://www.rareplants.cnps.org>.
- County of Riverside. 2008. "Bell's Sage Sparrow." In *Understanding the Plants and Animals of the Western Riverside County MSHCP (Multiple Species Habitat Conservation Plan)*. Prepared by Dudek.
- County of San Diego. 1997. *Multiple Species Conservation Program County of San Diego Subarea Plan*. Prepared in association with the U.S. Fish and Wildlife Service and California Department of Fish and Game. Adopted October 22, 1997.

Biological Resources Technical Report for the Newland Sierra Project

County of San Diego. 2008a. "Planning Agreement by and among the County of San Diego, the California Department of Fish and Game, and the United States Fish and Wildlife Services Regarding the North and East County Multiple Species Conservation Program Plans: Natural Community Conservation Program Plans and Habitat Conservation Plan." October 29, 2008.

County of San Diego. 2008b. North County Plan California Gnatcatcher Habitat Evaluation Model. Accessed June 2016. http://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/071121_cagn_11x17.pdf.

County of San Diego. 2009. *Draft North County Multiple Species Conservation Program*. February 2009.

County of San Diego. 2010a. *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*. Fourth Revision. Land Use and Environment Group, Department of Land Use and Planning & Development Services, Department of Public Works. September 15, 2010.

County of San Diego. 2010b. *County of San Diego Report Format and Content Requirements: Biological Resources*. Fourth Revision. September 15, 2010.

County of San Diego. 2010c. County of San Diego Biological Mitigation Ordinance. Ordinance No. 8845. April 2, 2010.

County of San Diego. 2010d. *Final Environmental Impact Report: Volume I. Merriam Mountains Specific Plan*. County of San Diego Department of Planning and Land Use, San Diego, California. March 2010. County of San Diego. 2012. County of San Diego Department of Planning and Land Use Staff Letter. January 12, 2012.

County of San Diego. 2011a. An Ordinance Codifying and Amending the Resource Protection Ordinance, Relating to Wetlands, Prehistoric and Historic Sites, Agricultural Operations, Enforcement, and Other Matters. Ordinance No. 9842. March 21, 2007. Amended by Ord. No. 10167 on October 14, 2011.

County of San Diego. 2011b. *North County Metropolitan Subregional Plan; San Diego County General Plan*, as amended. County of San Diego Department of Planning and Land Use, San Diego, California. Last amended December 19, 1990. Adopted August 3, 2011. http://www.sandiegocounty.gov/pds/docs/CP/NC_Metro_CP.pdf

Biological Resources Technical Report for the Newland Sierra Project

- County of San Diego. 2014. Planning Agreement by and among the County of San Diego, California Department of Fish and Wildlife and the United States Fish and Wildlife Service Regarding the North and East County Multiple Species Conservation Program Plans and Habitat Conservation Plans. Revised and Amended May 12, 2014. http://www.sandiegocounty.gov/pds/mscp/docs/P_A_SIGNED.pdf.
- County of San Diego. 2016. Figure 4-1 Pre-Approved Mitigation Area (PAMA); Multiple Species Conservation Program North County Plan. Working Draft December 2016.
- Crother, B.I. 2012. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding*. Seventh ed. Herpetological Circular No. 39. Prepared by the Standard English and Scientific Names Committee. Shoreview, Minnesota: Society for the Study of Amphibians and Reptiles. August 2012.
- Cypher, E.A. 2002. *General Rare Plant Survey Guidelines*. Bakersfield, California: USFWS. Revised July 2002.
- Dickson, B.G, J.S. Jenness, and P. Beier. 2005. Influence of Vegetation, Topography, and Roads on Cougar Movement in Southern California. *Journal of Wildlife Management* 69:264–276.
- Diffendorfer, J.E., R.E. Chapman, J.M. Duggan, G.M. Fleming, M. Mitrovitch, M.E. Rahn, and R. del Rosario. 2002. *Coastal Sage Scrub Response to Disturbance. A Literature Review and Annotated Bibliography*. Prepared for the California Department of Fish and Game. Prepared by Department of Biology, San Diego State University, San Diego, California. February 28, 2002.
- Dudek. 2009. *Biological Resources Technical Memorandum for the Merriam Mountains Specific Plan and the General Plan Amendment/Circulation Element, San Diego County, California*. Memorandum to the County of San Diego Department of Planning and Land Use. January 15, 2009.
- Dudek. 2013. Coastal California Gnatcatcher Survey Report for the Newland Sierra Project.
- Dudek. 2014. “Newland Sierra – Proposed Open Space Design and Relationship to Draft North County MSCP – September 2014 Update.” Memorandum from B. Ortega (Dudek) to M. Slovick (County of San Diego). September 18, 2014.

Biological Resources Technical Report for the Newland Sierra Project

- Dudek. 2017a. Resource Protection Plan for the Newland Sierra Project. Prepared for County of San Diego Department of Planning and Land Use. Prepared by Dudek: Encinitas, California. June 2017.
- Dudek. 2017b. On-Site Conceptual Resource Management Plan for the Newland Sierra Project. Prepared for County of San Diego Department of Planning and Land Use. Prepared by Dudek: Encinitas, California. April 2017.
- Dudek. 2017c. Off-Site Conceptual Resource Management Plan for the Newland Sierra Project. Prepared for County of San Diego Department of Planning and Land Use. Prepared by Dudek: Encinitas, California. April 2017.
- Dykstra, C.R., J.L. Hays, and S.T. Crocoll. 2008. "Red-Shouldered Hawk (*Buteo lineatus*).” In *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. <http://bna.birds.cornell.edu/bna/species/107>.
- Emmel, T.C., and J.F. Emmel. 1973. *The Butterflies of Southern California*. Science Series 26:1–148. Natural History Museum of Los Angeles County. November 30, 1973.
- Fuscoe Engineering. 2017. *Preliminary Drainage Study for Newland Sierra*.
- Gaines, D. 1977. *Birds of the Yosemite Sierra*. Oakland, California: California Syllabus.
- Garrett, K., and J. Dunn. 1981. *The Birds of Southern California: Status and Distribution*. Los Angeles, California: Los Angeles Audubon Society.
- Grinnell, J., and A.H. Miller. 1944. *The Distribution of the Birds of California*. Pacific Coast Avifauna, No. 27. Berkeley, California: Copper Ornithological Club. December 30, 1944. Reprinted in Lee Vining, California: Artemisia Press. April 1986.
- Goldberg, S.R. 1995. Reproduction in the Western Patchnose Snake, *Salvadora hexalepis*, and the Mountain Patchnose Snake, *Salvadora grahamiae* (Colubridae), from Arizona. *Southwestern Naturalist* 40:119–120.
- Hall, E.R. 1981. *The Mammals of North America*. 2nd ed. New York, New York: John Wiley and Sons Inc.

Biological Resources Technical Report for the Newland Sierra Project

- Heath, S.K. 2008. "Yellow Warbler (*Dendroica petechia*).” In *California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California*, edited by W.D. Shuford and T. Gardali, 332–339. In *Studies of Western Birds I*. California: Western Field Ornithologists (Camarillo) and California Department of Fish and Game (Sacramento). February 4, 2008. <http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html>.
- Hinojosa, H. 1998. "A Compilation of Plant and Animal Species for LANL and Surrounding Areas." Los Alamos National Laboratory, New Mexico. LA-UR-97-4501
- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, California Department of Fish and Game. October 1986.
- Holland, D.C., and R.H. Goodman. 1998. *A Guide to the Amphibians and Reptiles of MCB Camp Pendleton, San Diego County, California*. Prepared for AC/S Environmental Security Resource Management Division MCB Camp Pendleton, California. Contract M00681-94-C-0039. Fallbrook, California: Camp Pendleton Amphibian and Reptile Survey. November 6, 1998.
- Holway, D.A., L. Lach, A.V. Suarez, N.D. Tsutsui, and T.J. Case. 2002. The Causes and Consequences of Ant Invasions. *Annual Review of Ecology and Systematics* 33:181–233.
- Jepson Flora Project. 2014. *Jepson eFlora*. Berkeley, California: University of California. Accessed September 2014. http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl.
- Jepson Online Interchange. 2014. *The Jepson Online Interchange California Floristics*. University of California, Berkeley. Accessed September 2014. <http://ucjeps.berkeley.edu/interchange/>.
- Jennings, M.R., and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final report. Commissioned by the California Department of Fish and Game, Inland Fisheries Division Endangered Species Project. November 1, 1994. Accessed February 9, 2010. http://www.dfg.ca.gov/wildlife/nongame/publications/docs/herp_ssc.pdf.
- Keeley, J.E. 1987. Role of Fire in Seed Germination of Woody Taxa in California Chaparral. *Ecology* 68: 434–442.

Biological Resources Technical Report for the Newland Sierra Project

- Kirk, D.A., and M.J. Mossman. 1998. "Turkey Vulture." In *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. Accessed February 8, 2008. <http://bna.birds.cornell.edu/bna/species/339>.
- Lemm, Jeffrey M. 2006. *Field Guide to Amphibians and Reptiles of the San Diego Region*. Berkley, California: University of California Press.
- Lovallo, M.J., and E.M. Anderson. 1996. Bobcat Movements and Home Ranges Relative to Roads in Wisconsin. *Wildlife Society Bulletin* 24:71–76.
- Lovich, J.E., and J.R. Ennen. 2011. Wildlife Conservation and Solar Energy Development in the Desert Southwest, United States. *BioScience* 61(12):982–992.
- Lowe, C.H., C.J.C. Wright, and R.L. Bezy. 1970. Chromosomes and Evolution of the Species Groups *Cnemidophorus* (Reptilia: Teiidae). *Systematic Zoology* 19:128–141.
- Lowther, P.E., C. Celada, N.K. Klein, C.C. Rimmer, and D.A. Spector. 1999. "Yellow Warbler (*Dendroica petechia*)." In *The Birds of North America*, edited by A. Poole and F. Gill. No. 454. Ithaca, New York: Cornell Laboratory of Ornithology.
- MacWhirter, R.B., and K.L. Bildstein. 2011. "Northern Harrier (*Circus cyaneus*)," revised by K.G. Smith and S.R. Wittenberg. In *The Birds of North America Online*, edited by A. Poole. Ithaca, New York: Cornell Lab of Ornithology. doi: 10.2173/bna.210.
- Malanson, G.P., and J.F. O'Leary. 1982. Post-Fire Regeneration Strategies in California Coastal Sage Shrubs. *Oecologia* 53:355–358.
- Menke, S.B., and D.A. Holway. 2006. Abiotic Factors Control Invasion by Argentine Ants at the Community Scale. *Journal of Animal Ecology* 75:368–376
- Moyle, P.B. 2002. *Inland Fishes of California*, University of California Press, Berkeley and Los Angeles, 502 pp.
- NABA (North American Butterfly Association). 2016. "Checklist of North American Butterflies Occurring North of Mexico." Adapted from North American Butterfly Association (NABA) Checklist & English Names of North American Butterflies, eds. B. Cassie, J. Glassberg, A. Swengel, and G. Tudor. 2nd ed. Morristown, New Jersey: NABA. Accessed October 14, 2016. http://www.naba.org/pubs/enames2_3.html
- Nafis, G. 2014. *A Guide to the Reptiles and Amphibians of California*. Accessed September 2014. <http://www.californiaherps.com>.

Biological Resources Technical Report for the Newland Sierra Project

- NatureServe. 2014. NatureServe Explorer: An Online Encyclopedia of Life. Version 7.1. Arlington, Virginia: NatureServe. Accessed April 3, 2014. <http://www.natureserve.org/explorer>.
- Newland Sierra LLC. 2017. *Newland Sierra Specific Plan*. June 2017.
- Nogeire T.M., F.W. Davis, J.M. Duggan, K.R. Crooks, and E.E. Boydston. 2013. Carnivore Use of Avocado Orchards Across an Agricultural-Wildland Gradient. PLoS ONE 8(7): e68025. doi:10.1371/journal.pone.0068025.
- Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008. <http://www.sdcanyonlands.org/canyon-groups/canyon-group-resources/canyon-enhancement-guide/189-canyon-enhancement-planning-guide-materials>.
- O’Leary, J.F., D. Murphy, and P. Brussard. 1992. *The Coastal Sage Scrub Community Conservation Planning Region: An NCCP Special Report*. Natural Community Conservation Planning/Coastal Sage Scrub Special Report 2.
- Preston, K.L., P.J. Mock, M.A. Grishaver, E.A. Bailey, and D.F. King. 1998. California Gnatcatcher Territorial Behavior. *Western Birds* 29:242–257.
- PSBS (Pacific Southwest Biological Services). 2003. Draft Merriam Mountains North San Diego County, California Preliminary Wildlife Movement Study. September 15, 2003.
- PSBS. 2007. *Merriam Mountains Project Biological Technical Report: Summary of Studies and Impact Analysis*. June 15, 2007.
- Quinn, R.D. 1990. “Habitat Preferences and Distribution of Mammals in California Chaparral.” USDA Forest Service Research Paper PSW-202. Berkeley, California: Pacific Southwest Research Stations. September 1990. http://www.fs.fed.us/psw/publications/documents/psw_rp202/psw_rp202.pdf.
- Reid, F. 2006. *Peterson Field Guide to Mammals of North America*. 4th edition. New York, New York: Houghton Mifflin Company.
- SANDAG (San Diego Association of Governments). 2015. Conserved Lands dataset.
- SDNHM (San Diego Natural History Museum). 2002. "Butterflies of San Diego County. Revised September 2002." Accessed October 14, 2016. <http://www.sdnhm.org/archive/research/entomology/sdbutterflies.html>.

Biological Resources Technical Report for the Newland Sierra Project

- SDNHM. 2014a. Data retrieved from Herbarium and Plant Atlas databases for grid squares F8-F10, G8-G10, and H8-H10. *San Diego County Plant Atlas Project*. Online ed. Version: February 2014. Accessed September 2014.
<http://www.sdplantatlas.org/publicsearch.aspx>.
- SDNHM. 2014b. Data retrieved for grid squares F8-F10, G8-G10, and H8-H10. *San Diego County Bird Atlas*. Google Earth presentation. Accessed September 2014.
<http://www.sdnhm.org/science/birds-and-mammals/projects/san-diego-county-bird-atlas/>.
- Shilling, F., S. Sommarstrom, R. Kattelman, B. Washburn, J. Florsheim, and R. Henly. 2005. California Watershed Assessment Manual: Volume I. May 2005. Prepared for the California Resources Agency and the California Bay-Delta Authority.
<http://cwam.ucdavis.edu>.
- Small, A. 1994. *California Birds: Their Status and Distribution*. Vista, California: Ibis Publishing Company.
- Sogge, M.K., D. Ahlers, and S.J. Sferra. 2010. *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher*. U.S. Geological Survey Techniques and Methods 2A-10.
- Sommer, M.L., R.L. Barboza, R.A. Botta, E.B. Kleinfelter, M.E. Schauss, and J.R. Thompson. 2007. Habitat Guidelines for Mule Deer: California Woodland Chaparral Ecoregion. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies.
- Staubus, W.J., E.S. Boyd, T.A. Adams, D.M. Spear, M.M. Dipman, and W.M. Meyer III. 2015. Ant Communities in Native Sage Scrub, Non-Native Grassland, and Suburban Habitats in Los Angeles County, USA: Conservation Implications. *Journal of Insect Conservation* 19:669–680.
- Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*. 3rd edition. New York, New York: Houghton Mifflin Company.
- Stoltz, G.M. 1993. *Reptiles and Amphibians of the Bosque del Apache National Wildlife Refuge*. United States Fish and Wildlife Service.
- SWRCB (State Water Resources Control Board). 2011. "Total Maximum Daily Load Program." Accessed October 2014. http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists.shtml.

Biological Resources Technical Report for the Newland Sierra Project

- SWRCB. 2012. "Chapter 2 – Beneficial Uses." In *Water Quality Control Plan for San Diego – Region 9*. http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/update082812/Chpt_2_2012.pdf.
- Suarez, A.V., D.T. Bolger, and T.J. Case. 1998. Effects of Fragmentation and Invasion on Native Ant Communities in Coastal Southern California. *Ecology* 79:2,041–2,056.
- USDA (U.S. Department of Agriculture). 2014. "California." State PLANTS Checklist. Accessed September 2014. http://plants.usda.gov/dl_state.html.
- Unitt, P. 2004. *San Diego County Bird Atlas*. San Diego, California: San Diego Natural History Museum.
- Urquhart, F.A. 1987. *The Monarch Butterfly: International Traveler*. Toronto, Canada: University of Toronto Press.
- USFWS (U.S. Fish and Wildlife Service). 1997. *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Protocol*. July 28, 1997.
- USFWS. 2001. *Least Bell's Vireo Survey Guidelines*. January 19, 2001.
- USFWS. 2008. *Birds of Conservation Concern 2008*. December 2008.
- USFWS. 2010. *Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations*. Carlsbad, California: USFWS, Ecological Services; Arlington, Virginia: USFWS, Division of Migratory Bird Management. February 2010. http://www.fws.gov/southwest/es/oklahoma/Documents/Wind%20Power/Documents/USFWS_Interim_GOEA_Monitoring_Protocol_10March2010.pdf.
- USFWS. 2011. *Baccharis vanessae* (Encinitas baccharis) 5-Year Review: Summary and Evaluation. Carlsbad, California: USFWS. December 2011. http://ecos.fws.gov/docs/five_year_review/doc3974.pdf.
- USFWS. 2014. "Critical Habitat and Occurrence Data" [map]. Accessed September 2014. <http://www.fws.gov/data>.
- USFWS. 2015. *Survey Guidelines for the Listed Large Branchiopods*. Sacramento, California: USFWS Pacific Southwest Region. May 31.
- USFWS. 2017. "Critical Habitat and Occurrence Data" [map]. Accessed February 2017. <http://www.fws.gov/data>.

Biological Resources Technical Report for the Newland Sierra Project

- Van Dyke, F.G., R.H. Brocke, H.G. Shaw, B.B Ackerman, T.P. Hemker, and F.G. Lindzey. 1986. Reactions of Mountain Lions to Logging and Human Activity. *Journal of Wildlife Management* 50(1):95–102.
- Weaver, K.L. 1998. “Coastal Sage Scrub Variations of San Diego County and Their Influence on the Distribution of the California Gnatcatcher.” *Western Birds* 29:392–405.
- Western Regional Climate Center. 2014. Historical Climate Information: Vista 1 NE. Accessed March 2014: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca9378>.
- MesoWest. 2017. University of Utah, Department of Atmospheric Sciences Accessed from: http://mesowest.utah.edu/cgi-bin/droman/download_api2.cgi?stn=E3309&hour1=19&min1=45&timetype=LOCAL&unit=0&graph=0 date. Location 85 – Hidden Meadows
- Wiggett, D.R., D.A. Boag, and A.D. Wiggett. 1989. Movements of Intercolony Natal Dispersers in the Columbian Ground Squirrel. *Canadian Journal of Zoology* 67(6):1447–1452.
- Wilcove, D.S., C.H. McLellan, and A.P. Dobson. 1986. “Habitat Fragmentation in the Temperate Zone.” In *Conservation Biology: The Science of Scarcity and Diversity*, edited by M.E. Soulé, 237–256. Sunderland, Massachusetts: Sinauer Associates Inc.
- Wilcox, B., and D. Murphy. 1985. Conservation Strategy: The Effects of Fragmentation on Extinction. *The American Naturalist* 125:879–887.
- Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd ed. Online version. Baltimore, Maryland: Johns Hopkins University Press. Accessed August 17, 2010. <http://www.bucknell.edu/msw3/>.
- Zeiner, D.C., W.F. Laudenslayer Jr., and K.E. Mayer. 1988. *California’s Wildlife: Volume I. Amphibians and Reptiles*. Sacramento, California: California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990a. *California’s Wildlife: Volume II. Birds*. Sacramento, California: California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990b. *California’s Wildlife: Volume III. Mammals*. Sacramento, California: California Department of Fish and Game.

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

10 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

This report was prepared by Callie Ford, Patricia Schuyler, and Melissa Blundell, with senior review provided by Brock Ortega and Vipul Joshi. GIS analysis and figure preparation was provided by Mark McGinnis. Editorial and formatting was provided by Amy Seals, David Mueller, and Devin Brookhart.

Biological Resources Technical Report for the Newland Sierra Project

INTENTIONALLY LEFT BLANK

APPENDIX A

Plant Compendium

APPENDIX A

Plant Compendium

VASCULAR SPECIES

DICOTS

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

AIZOACEAE—FIG-MARIGOLD FAMILY

* *Aptenia cordifolia*—heartleaf iceplant

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

- * *Schinus molle*—Peruvian peppertree
- Malosma laurina*—laurel sumac
- Rhus integrifolia*—lemonade sumac
- Rhus ovata*—sugar sumac
- Toxicodendron diversilobum*—Pacific poison oak

APIACEAE—CARROT FAMILY

- * *Anthriscus caucalis*—bur chervil
- * *Foeniculum vulgare*—sweet fennel
- Apiastrum angustifolium*—mock parsley
- Daucus pusillus*—American wild carrot
- Lomatium dasycarpum*—woollyfruit desertparsley
- Sanicula bipinnatifida*—purple sanicle
- Sanicula tuberosa*—turkey pea
- Tauschia arguta*—southern umbrellawort

APOCYNACEAE—DOGBANE FAMILY

- * *Nerium oleander*—oleander

ASTERACEAE—SUNFLOWER FAMILY

- * *Carduus pycnocephalus* ssp. *pycnocephalus*—Italian plumeless thistle
- * *Centaurea melitensis*—Maltese star-thistle
- * *Cynara cardunculus* ssp. *cardunculus*—globe artichoke
- * *Delairea odorata*—Cape-ivy
- * *Hedypnois cretica*—Cretanweed
- * *Helminthotheca echioides*—bristly oxtongue
- * *Hypochaeris glabra*—smooth cat's ear
- * *Lactuca serriola*—prickly lettuce
- * *Logfia gallica*—narrowleaf cottonrose

APPENDIX A (Continued)

- * *Matricaria discoidea*—disc mayweed
- * *Pseudognaphalium luteoalbum*—Jersey cudweed
- * *Sonchus asper*—spiny sowthistle
- * *Sonchus oleraceus*—common sowthistle
- Acourtia microcephala*—sacapellote
- Ambrosia psilostachya*—Cuman ragweed
- Artemisia californica*—coastal sagebrush
- Baccharis pilularis* ssp. *consanguinea*—coyotebrush
- Baccharis salicifolia*—mulefat
- Brickellia californica*—California brickellbush
- Chaenactis artemisiifolia*—white pincushion
- Chaenactis glabriuscula*—yellow pincushion
- Corethrogyne filaginifolia*—common sandaster
- Deinandra fasciculata*—clustered tarweed
- Erigeron canadensis*—Canadian horseweed
- Erigeron foliosus*—leafy fleabane
- Eriophyllum confertiflorum* var. *confertiflorum*—golden-yarrow
- Euthamia occidentalis*—western goldentop
- Hazardia squarrosa*—sawtooth goldenbush
- Heterotheca grandiflora*—telegraphweed
- Isocoma menziesii* var. *menziesii*—Menzies' goldenbush
- Isocoma menziesii* var. *vernonioides*—Menzies' goldenbush
- Logfia filaginoides*—California cottonrose
- Osmadenia tenella*—false rosinweed
- Porophyllum gracile*—slender poreleaf
- Pseudognaphalium biolettii*—two-color rabbit-tobacco
- Pseudognaphalium californicum*—ladies' tobacco
- Pseudognaphalium leucocephalum*—white rabbit-tobacco
- Rafinesquia californica*—California plumeseed
- Stephanomeria virgata*—rod wirelettuce
- Stylocline gnaphaloides*—mountain neststraw
- Venegasia carpesioides*—canyon sunflower

BORAGINACEAE—BORAGE FAMILY

- Cryptantha micromeres*—pygmyflower cryptantha
- Emmenanthe penduliflora*—whisperingbells
- Eriodictyon crassifolium* var. *crassifolium*—thickleaf yerba santa
- Eucrypta chrysanthemifolia* var. *chrysanthemifolia*—spotted hideseed
- Phacelia cicutaria*—caterpillar phacelia

APPENDIX A (Continued)

Phacelia grandiflora—largeflower phacelia

Phacelia parryi—Parry's phacelia

BRASSICACEAE—MUSTARD FAMILY

- * *Brassica nigra*—black mustard
- * *Hirschfeldia incana*—shortpod mustard
- * *Raphanus sativus*—cultivated radish
- Cardamine californica*—milkmaids
- Lepidium virginicum*—Virginia pepperweed
- Nasturtium officinale*—watercress

CACTACEAE—CACTUS FAMILY

- * *Opuntia ficus-indica*—Barbary fig

CAPRIFOLIACEAE—HONEYSUCKLE FAMILY

Lonicera subspicata—southern honeysuckle

CARYOPHYLLACEAE—PINK FAMILY

- * *Polycarpon tetraphyllum*—fourleaf manyseed
- * *Silene gallica*—common catchfly
- * *Spergula arvensis*—corn spurry
- * *Stellaria media*—common chickweed
- Silene laciniata*—cardinal catchfly

CHENOPODIACEAE—GOOSEFOOT FAMILY

- * *Kochia scoparia*—no common name
- * *Salsola tragus*—prickly Russian thistle
- Atriplex canescens* var. *canescens*—fourwing saltbush

CISTACEAE—ROCK-ROSE FAMILY

Crocanthemum scoparium—no common name

CONVOLVULACEAE—MORNING-GLORY FAMILY

Calystegia macrostegia—island false bindweed

Cuscuta californica—chaparral dodder

CRASSULACEAE—STONECROP FAMILY

Crassula connata—sand pygmyweed

Dudleya pulverulenta—chalk dudleya

APPENDIX A (Continued)

CUCURBITACEAE—GOURD FAMILY

- Cucurbita foetidissima*—Missouri gourd
- Marah macrocarpa*—Cucamonga manroot

ERICACEAE—HEATH FAMILY

- Arctostaphylos glandulosa* ssp. *glandulosa*—Eastwood's manzanita
- Arctostaphylos pungens*—pointleaf manzanita
- Comarostaphylis diversifolia* ssp. *diversifolia*—summer holly
- Xylococcus bicolor*—mission manzanita

EUPHORBIACEAE—SPURGE FAMILY

- * *Ricinus communis*—castorbean
- Euphorbia albomarginata*—whitemargin sandmat

FABACEAE—LEGUME FAMILY

- * *Melilotus indicus*—annual yellow sweetclover
- * *Vicia villosa* ssp. *villosa*—winter vetch
- Acmispon americanus* var. *americanus*—American bird's-foot trefoil
- Acmispon argophyllus*—silver bird's-foot trefoil
- Acmispon glaber* var. *glaber*—common deerweed
- Lupinus bicolor*—miniature lupine
- Lupinus truncatus*—collared annual lupine

FAGACEAE—OAK FAMILY

- Quercus agrifolia* var. *agrifolia*—California live oak
- Quercus berberidifolia*—scrub oak
- Quercus engelmannii*—Engelmann oak

GENTIANACEAE—GENTIAN FAMILY

- Zeltnera venusta*—charming centaury

GERANIACEAE—GERANIUM FAMILY

- * *Erodium botrys*—longbeak stork's bill
- * *Erodium cicutarium*—redstem stork's bill
- Geranium carolinianum*—Carolina geranium

GROSSULARIACEAE—GOOSEBERRY FAMILY

- Ribes californicum*—hillside gooseberry
- Ribes indecorum*—whiteflower currant

APPENDIX A (Continued)

LAMIACEAE—MINT FAMILY

- * *Marrubium vulgare*—horehound
- Salvia apiana*—white sage
- Salvia clevelandii*—fragrant sage
- Salvia mellifera*—black sage
- Salvia munzii*—Munz’s sage
- Stachys* spp. —hedgenettle

MALVACEAE—MALLOW FAMILY

- * *Malva parviflora*—cheeseweed mallow
- Malacothamnus fasciculatus* var. *fasciculatus*—Mendocino bushmallow

MELIACEAE—MAHOGANY FAMILY

- * *Melia azedarach*—Chinaberrytree

MONTIACEAE—MONTIA FAMILY

- Claytonia parviflora*—streambank springbeauty

MYRSINACEAE—MYRSINE FAMILY

- * *Anagallis arvensis*—scarlet pimpernel

MYRTACEAE—MYRTLE FAMILY

- * *Eucalyptus* sp. —no common name

NYCTAGINACEAE—FOUR O’CLOCK FAMILY

- Mirabilis laevis*—desert wishbone-bush

ONAGRACEAE—EVENING PRIMROSE FAMILY

- Clarkia epilobioides*—canyon clarkia
- Epilobium canum* ssp. *canum*—hummingbird trumpet

OROBANCHACEAE—BROOM-RAPE FAMILY

- Cordylanthus rigidus*—stiffbranch bird’s beak

PAPAVERACEAE—POPPY FAMILY

- Eschscholzia californica*—California poppy

PHRYMACEAE—LOPSEED FAMILY

- Mimulus aurantiacus* var. *aurantiacus*—orange bush monkeyflower
- Mimulus pilosus*—false monkeyflower

APPENDIX A (Continued)

PLANTAGINACEAE—PLANTAIN FAMILY

- * *Plantago lanceolata*—narrowleaf plantain
- * *Plantago major*—common plantain
- Antirrhinum nuttallianum* ssp. *nuttallianum*—violet snapdragon
- Antirrhinum nuttallianum*—violet snapdragon
- Keckiella antirrhinoides*—snapdragon penstemon
- Keckiella cordifolia*—heartleaf keckiella

PLATANACEAE—PLANE TREE, SYCAMORE FAMILY

- Platanus racemosa*—California sycamore

POLEMONIACEAE—PHLOX FAMILY

- Navarretia hamata* ssp. *hamata*—hooked pincushionplant
- Navarretia hamata* ssp. *leptantha*—hooked pincushionplant

POLYGONACEAE—BUCKWHEAT FAMILY

- * *Rumex crispus*—curly dock
- Chorizanthe fimbriata*—fringed spineflower
- Eriogonum fasciculatum* var. *fasciculatum*—Eastern Mojave buckwheat
- Eriogonum fasciculatum* var. *foliolosum*—Eastern Mojave buckwheat
- Pterostegia drymarioides*—woodland pterostegia
- Rumex californicus*—toothed willow dock

RANUNCULACEAE—BUTTERCUP FAMILY

- Clematis ligusticifolia*—western white clematis
- Clematis pauciflora*—ropevine clematis
- Delphinium* spp. —no common name
- Thalictrum fendleri*—Fendler's meadow-rue

RESEDACEAE—MIGNONETTE FAMILY

- * *Reseda luteola*—weld

RHAMNACEAE—BUCKTHORN FAMILY

- Ceanothus tomentosus*—woollyleaf ceanothus
- Rhamnus ilicifolia*—hollyleaf redberry
- Rhamnus pilosa*—hollyleaf buckthorn

ROSACEAE—ROSE FAMILY

- Adenostoma fasciculatum* var. *fasciculatum*—chamise
- Cercocarpus betuloides* var. *betuloides*—birchleaf mountain mahogany
- Cercocarpus minutiflorus*—smooth mountain mahogany

APPENDIX A (Continued)

Heteromeles arbutifolia—toyon
Horkelia truncata—Ramona horkelia
Prunus ilicifolia ssp. *ilicifolia*—hollyleaf cherry

RUBIACEAE—MADDER FAMILY

Galium angustifolium—narrowleaf bedstraw
Galium aparine—stickywilly
Galium nuttallii ssp. *nuttallii*—climbing bedstraw

RUTACEAE—RUE FAMILY

Cneoridium dumosum—bush rue

SALICACEAE—WILLOW FAMILY

Populus fremontii ssp. *fremontii*—Fremont cottonwood
Salix gooddingii—Goodding's willow
Salix laevigata—red willow
Salix lasiolepis—arroyo willow

SCROPHULARIACEAE—FIGWORT FAMILY

* *Myoporum laetum*—ngaio tree
Scrophularia californica—California figwort

SIMAROUBACEAE—QUASSIA OR SIMAROUBA FAMILY

* *Ailanthus altissima*—tree of heaven

SOLANACEAE—NIGHTSHADE FAMILY

* *Nicotiana glauca*—tree tobacco
Datura wrightii—sacred thorn-apple
Solanum xanti—chaparral nightshade

TAMARICACEAE—TAMARISK FAMILY

* *Tamarix ramosissima*—saltcedar

URTICACEAE—NETTLE FAMILY

* *Urtica urens*—dwarf nettle
Hesperocnide tenella—western stingingnettle

VITACEAE—GRAPE FAMILY

Vitis girdiana—desert wild grape

APPENDIX A (Continued)

ZYGOPHYLLACEAE—CALTROP FAMILY

- * *Tribulus terrestris*—puncturevine

FERNS AND FERN ALLIES

BLECHNACEAE—DEER FERN FAMILY

- Woodwardia fimbriata*—giant chainfern

DRYOPTERIDACEAE—WOOD FERN FAMILY

- Dryopteris arguta*—coastal woodfern

POLYPODIACEAE—POLYPODY FAMILY

- Polypodium californicum*—California polypody

PTERIDACEAE—BRAKE FAMILY

- Cheilanthes clevelandii*—Cleveland's lipfern

- Pellaea andromedifolia*—coffee cliffbrake

- Pellaea mucronata*—birdfoot cliffbrake

- Pentagramma triangularis*—goldback fern

SELAGINELLACEAE—SPIKE-MOSS FAMILY

- Selaginella cinerascens*—ashy spike-moss

MONOCOTS

AGAVACEAE—AGAVE FAMILY

- Hesperoyucca whipplei*—chaparral yucca

- Yucca schidigera*—Mojave yucca

ALLIACEAE—ONION FAMILY

- Allium praecox*—early onion

ARECACEAE—PALM FAMILY

- * *Washingtonia robusta*—Washington fan palm

ASPHODELACEAE—ASPHODEL FAMILY

- * *Asphodelus fistulosus*—onionweed

CYPERACEAE—SEDGE FAMILY

- Carex praegracilis*—clustered field sedge

- Carex spissa*—San Diego sedge

- Cyperus eragrostis*—tall flatsedge

APPENDIX A (Continued)

JUNCACEAE—RUSH FAMILY

Juncus dubius—questionable rush

Juncus mexicanus—Mexican rush

Juncus xiphioides—irisleaf rush

LILIACEAE—LILY FAMILY

Calochortus splendens—splendid mariposa lily

Calochortus spp. —no common name

MELANTHIACEAE—FALSE HELLEBORE FAMILY

Toxicoscordion fremontii—Fremont's deathcamas

ORCHIDACEAE—ORCHID FAMILY

Piperia cooperi—chaparral rein orchid

POACEAE—GRASS FAMILY

- * *Arundo donax*—giant reed
- * *Avena barbata*—slender oat
- * *Avena fatua*—wild oat
- * *Brachypodium distachyon*—purple false brome
- * *Bromus catharticus*—rescuegrass
- * *Bromus diandrus*—ripgut brome
- * *Bromus hordeaceus*—soft brome
- * *Bromus madritensis* ssp. *madritensis*—compact brome
- * *Bromus madritensis* ssp. *rubens*—red brome
- * *Cortaderia selloana*—Uruguayan pampas grass
- * *Cynodon dactylon*—Bermudagrass
- * *Ehrharta calycina*—perennial veldtgrass
- * *Festuca myuros*—rat-tail fescue
- * *Festuca perennis*—Italian ryegrass
- * *Hordeum murinum*—mouse barley
- * *Lamarckia aurea*—goldentop grass
- * *Melinis repens*—rose Natal grass
- * *Paspalum dilatatum*—dallisgrass
- * *Pennisetum setaceum*—crimson fountaingrass
- * *Polypogon monspeliensis*—annual rabbitsfoot grass
- * *Stipa miliacea* var. *miliacea*—smilgrass
- Agrostis pallens*—seashore bentgrass
- Melica imperfecta*—smallflower melicgrass
- Muhlenbergia rigens*—deergrass

APPENDIX A (Continued)

Poa secunda—Sandberg bluegrass

Stipa coronata—giant ricegrass

Stipa lepida—foothill needlegrass

Stipa pulchra—purple needlegrass

THEMIDACEAE—BRODIAEA FAMILY

Dichelostemma capitatum—bluedicks

Brodiaea orcuttii—Orcutt's brodiaea

* Signifies introduced (non-native) species.

APPENDIX B

Wildlife Compendium

APPENDIX B

Wildlife Compendium

AMPHIBIAN

HYLIDAE—TREEFROGS

Pseudacris regilla—Northern Pacific treefrog

Pseudacris hypochondriaca—Baja California treefrog

BUFONIDAE—TRUE TOADS

Anaxyrus boreas—Western toad

PELOBATIDAE—SPADEFOOTS

Spea hammondi—western spadefoot

BIRD

ICTERIDAE—BLACKBIRDS

Agelaius phoeniceus—Red-winged blackbird

Euphagus cyanocephalus—Brewer's blackbird

Icterus bullockii—Bullock's oriole

Quiscalus mexicanus—Great-tailed grackle

Sturnella neglecta—Western meadowlark

* *Molothrus ater*—Brown-headed cowbird

Icterus cucullatus—Hooded oriole

PHALACROCORACIDAE—CORMORANTS

Phalacrocorax auritus—Double-crested cormorant

EMBERIZIDAE—EMBERIZIDS

Melospiza melodia—Song sparrow

Melospiza crissalis—California towhee

Pipilo maculatus—Spotted towhee

Spizella atrogularis—Black-chinned sparrow

Zonotrichia leucophrys—White-crowned sparrow

Artemisiospiza belli—Bell's sparrow

Artemisiospiza nevadensis—Sagebrush sparrow

TYRANNIDAE—TYRANT FLYCATCHERS

Myiarchus cinerascens—Ash-throated flycatcher

Sayornis nigricans—Black phoebe

Sayornis saya—Say's phoebe

Tyrannus verticalis—Western kingbird

APPENDIX B (Continued)

Tyrannus vociferans—Cassin’s kingbird
Empidonax difficilis—Pacific-slope flycatcher

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna’s hummingbird
Calypte costae—Costa’s hummingbird
Selasphorus rufus—Rufous hummingbird
Selasphorus sasin—Allen’s hummingbird

REGULIDAE—KINGLETS

Regulus calendula—Ruby-crowned kinglet

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

SITTIDAE—NUTHATCHES

Sitta carolinensis—White-breasted nuthatch

SYLVIIDAE—SYLVIID WARBLERS

Poliophtila caerulea—Blue-gray gnatcatcher
Poliophtila californica—California gnatcatcher

TYTONIDAE—BARN OWLS

Tyto alba—Barn owl

STRIGIDAE—TYPICAL OWLS

Bubo virginianus—Great horned owl

COLUMBIDAE—PIGEONS AND DOVES

Patagioenas fasciata—Band-tailed pigeon
Zenaida macroura—Mourning dove
* *Columba livia*—Rock pigeon (rock dove)

PTILOGONATIDAE—SILKY-FLYCATCHERS

Phainopepla nitens—Phainopepla

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

HIRUNDINIDAE—SWALLOWS

Hirundo rustica—Barn swallow
Petrochelidon pyrrhonota—Cliff swallow

APPENDIX B (Continued)

APODIDAE—SWIFTS

Aeronautes saxatalis—White-throated swift

TURDIDAE—THRUSHES

Catharus ustulatus—Swainson's thrush

Sialia mexicana—Western bluebird

Turdus migratorius—American robin

BOMBYCILLIDAE—WAXWINGS

Bombycilla cedrorum—Cedar waxwing

PARULIDAE—WOOD-WARBLERS

Geothlypis trichas—Common yellowthroat

Oreothlypis celata—Orange-crowned warbler

Cardellina pusilla—Wilson's warbler

Setophaga coronata—Yellow-rumped warbler

Setophaga petechia—Yellow warbler

Setophaga townsendi—Townsend's warbler

TROGLODYTIDAE—WRENS

Catherpes mexicanus—Canyon wren

Salpinctes obsoletus—Rock wren

Thryomanes bewickii—Bewick's wren

Troglodytes aedon—House wren

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Accipiter cooperii—Cooper's hawk

Accipiter striatus—Sharp-shinned hawk

Buteo jamaicensis—Red-tailed hawk

Buteo lineatus—Red-shouldered hawk

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltiriparus minimus—Bushtit

ANATIDAE—DUCKS, GEESE, AND SWANS

Anas platyrhynchos—Mallard

Branta canadensis—Canada goose

ARDEIDAE—HERONS, BITTERNS, AND ALLIES

Ardea alba—Great egret

Ardea herodias—Great blue heron

Egretta thula—Snowy egret

APPENDIX B (Continued)

CARDINALIDAE—CARDINALS AND ALLIES

Piranga ludoviciana—Western tanager

Passerina caerulea—Blue grosbeak

Pheucticus melanocephalus—Black-headed grosbeak

CATHARTIDAE—CARDINALS AND ALLIES

Cathartes aura—Turkey vulture

CHARADRIIDAE—LAPWINGS AND PLOVERS

Charadrius vociferus—Killdeer

CORVIDAE—CROWS AND JAYS

Apelocoma californica—Western scrub-jay

Corvus brachyrhynchos—American crow

Corvus corax—Common raven

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—Greater roadrunner

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Carpodacus mexicanus—House finch

Spinus psaltria—Lesser goldfinch

Spinus tristis—American goldfinch

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—Northern mockingbird

Toxostoma redivivum—California thrasher

PARIDAE—CHICKADEES AND TITMICE

Baeolophus inornatus—Oak titmouse

PICIDAE—WOODPECKERS AND ALLIES

Melanerpes formicivorus—Acorn woodpecker

Picoides nuttallii—Nuttall's woodpecker

Sphyrapicus nuchalis—Red-naped sapsucker

Colaptes auratus—Northern flicker

APPENDIX B (Continued)

THRESKIORNITHIDAE—IBISES AND SPOONBILLS

Plegadis chihi—White-faced ibis

TIMALIIDAE—BABBLERS

Chamaea fasciata—Wrentit

INVERTEBRATE

LYCAENIDAE—BLUES, HAIRSTREAKS, AND COPPERS

Callophrys augustinus—Brown elfin

Philotes sonorensis—Sonoran blue

Plebejus acmon—Acmon blue

Brephidium exile—Western pygmy-blue

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Adelpha bredowii—California sister

Danaus gilippus—Queen

Danaus plexippus—Monarch

Euphydryas chalcedona chalcedona—Chalcedon variable checkerspot

Junonia coenia—Common buckeye

Limenitis lorquini—Lorquin's admiral

Nymphalis antiopa—Mourning cloak

Vanessa atalanta—Red admiral

Vanessa cardui—Painted lady

RIODINIDAE—METALMARKS

Apodemia mormo virgulti—Behr's metalmark

HESPERIIDAE—SKIPPERS

Erynnis funeralis—Funereal duskywing

PAPILIONIDAE—SWALLOWTAILS

Papilio eurymedon—Pale swallowtail

Papilio rutulus—Western tiger swallowtail

Papilio zelicaon—Anise swallowtail

PIERIDAE—WHITES AND SULFURS

Anthocharis sara sara—Pacific sara orangetip

Pieris rapae—Cabbage white

Pontia protodice—Checkered white

APPENDIX B (Continued)

FAIRY SHRIMP

BRANCHINECTIDAE—FAIRY SHRIMP

Branchinecta lindahli—Versatile fairy shrimp

MAMMAL

HETEROMYIDAE—POCKET MICE AND KANGAROO RATS

Dipodomys agilis—Agile kangaroo rat

CANIDAE—WOLVES AND FOXES

Canis latrans—Coyote

Urocyon cinereoargenteus—Gray fox

FELIDAE—CATS

Lynx rufus—Bobcat

MUSTELIDAE—WEASELS, SKUNKS, AND OTTERS

Mustela frenata—Long-tailed weasel

LEPORIDAE—HARES AND RABBITS

Sylvilagus bachmani—Brush rabbit

GEOMYIDAE—POCKET GOPHERS

Thomomys bottae—Botta's pocket gopher

PROCYONIDAE—RACCOONS AND RELATIVES

Procyon lotor—Raccoon

MURIDAE—RATS AND MICE

Neotoma lepida intermedia—San Diego desert woodrat

Neotoma lepida—Desert woodrat

CERVIDAE—DEERS

Odocoileus hemionus—Mule deer

MEPHITIDAE—SKUNKS

Mephitis mephitis—Striped skunk

SCIURIDAE—SQUIRRELS

Spermophilus (Otospermophilus) beecheyi—California ground squirrel

APPENDIX B (Continued)

REPTILE

PHRYNOSOMATIDAE—IGUANID LIZARDS

Phrynosoma blainvillii—Blainville's horned lizard

Sceloporus occidentalis—Western fence lizard

Uta stansburiana—Common side-blotched lizard

ANGUIDAE—ALLIGATOR LIZARDS

Elgaria multicarinata—Southern alligator lizard

COLUBRIDAE—COLUBRID SNAKES

Lampropeltis californiae—California kingsnake

Salvadora hexalepis—Coast patch-nosed snake

Diadophis punctatus—Ringneck snake

Pituophis catenifer—Gophersnake

TEIIDAE—WHIPTAIL LIZARDS

Aspidoscelis tigris stejnegeri—Coastal whiptail

* Signifies introduced (non-native) species.

APPENDIX B (Continued)

INTENTIONALLY LEFT BLANK

APPENDIX C

2013 Least Bell's Vireo and Southwestern Willow Flycatcher Focused Survey Results

October 10, 2013

7608-01

Recovery Permit Coordinator
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

***Subject: 2013 Least Bell's Vireo and Southwestern Willow Flycatcher Focused Survey
Results for the Newland Sierra Project, San Diego County, California***

Dear Recovery Permit Coordinator:

This report documents the results of eight protocol-level presence/absence surveys for the state- and federally listed endangered least Bell's Vireo (*Vireo bellii pusillus*; vireo), and the state- and federally listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*; flycatcher). The surveys were conducted in all areas of suitable vireo and flycatcher habitat within the Newland Sierra Project (formerly known as the Merriam Mountains project site, Study Area).

The southwestern willow flycatcher and least Bell's vireo are closely associated with riparian habitats, especially densely vegetated willow scrub and riparian forest vegetation. These species are threatened primarily by loss, degradation, and fragmentation of riparian habitats. They also are impacted by brown-headed cowbird (*Molothrus ater*) nest parasitism.

LOCATION AND EXISTING CONDITIONS

The Newland Sierra Project study area consists of approximately 2,242 acres located within the north-central portion of the Merriam Mountains of northern San Diego County (Figures 1 and 2). The site is bounded by I-15 on the east, Deer Springs Road (County Road S12) on the south, and Twin Oaks Valley Road on the west, with a small portion of the northwestern edge of the site traversed by Twin Oaks Valley Road. Gopher Canyon Road is located approximately one-half mile north of the site. Map location of the site includes the following UTM's [NAD 83]: 487,903mE; 3,672,770mN on the south, to 485,405mE; 3,677,609mN near the northern boundary of the project; western boundary: 482,877mE; 3,675,968mN and 486,648mE; 3,675,725mN on the eastern boundary.

Elevation of the site ranges widely, from approximately 660 feet above mean sea level (AMSL) along Twin Oaks Valley Road traversing the northwestern portion of the site to 1,750 feet AMSL directly northeast of Twin Oaks Crest Drive. The perimeter of the Project site has an overall gentle sloping topography. Within the project site the topography is more complex. Overall, there are

approximately 5 locations where elevation is above 1,500 feet AMSL (one in the southern and four in the north-central areas of the project site). In some locations the gentle sloping perimeter gradually rises to higher elevations whereas in other areas the slopes are more acute.

Ongoing human disturbance in the study area appears to be moderate at this time, and includes foot traffic associated with residences immediately adjacent to the site, light roadside trash occurs on site along Twin Oaks Valley Road and occasional dense trash dumping and other debris (particularly within a decommissioned rock quarry in along Twin Oaks Valley Road and adjacent to Mesa Rock Road).

Twenty-three soils types within ten soil series occur on site: acid igneous rock land (AcG); Cieneba rocky coarse sandy loam (9-30% slopes, eroded)(CmE2); Cieneba very rocky coarse sandy loam (30-75% slopes)(CmrG); Cieneba-Fallbrook rocky sandy loams (9-30% slopes, eroded)(CnE2); Cieneba-Fallbrook rocky sandy loams (30-65% slopes, eroded)(CnG2); Fallbrook sandy loam (9-15% slopes, eroded)(FaD2); Fallbrook sandy loam (15-30% slopes, eroded)(FaE2); Friant rocky fine sandy loam (30-70% slopes)(FxG); Las Posas fine sandy loam (9-15% slopes, eroded)(LpD2); Las Posas fine sandy loam (15-30% slopes, eroded)(LpE2); Las Posas stony fine sandy loam (9-30% slopes)(LrE); Las Posas stony fine sandy loam (30-65% slopes)(LrG); Placentia sandy loam (2-9% slopes)(PeC); Placentia sandy loam (5-9% slopes, eroded)(PeC2); Placentia sandy loam (9-15% slopes, eroded)(PeD2); Ramona sandy loam (2-5% slopes)(RaB); Ramona sandy loam (5-9% slopes, eroded)(RaC2); Ramona sandy loam (9-15% slopes, eroded)(RaD2); Visalia sandy loam (2-5% slopes)(VaB); Visalia sandy loam (5-9% slopes)(VaC); Vista rocky coarse sandy loam (15-30% slopes)(VvE); Wyman loam (2-5% slopes)(WmB); and Wyman loam (5-9% slopes)(WmC).

VEGETATION COMMUNITIES

Twenty-five vegetation communities or land covers were mapped by Dudek within the project site (Figures 4a-f). These vegetation communities include Agriculture (AGR), Unvegetated Channels (CHAN), Coast Live Oak Woodland (CLOW; including disturbed [dCLOW]), CLOW California Department Fish and Wildlife/Riparian (CLOW CDFG/RPO), Coastal Sage Scrub (CSS; including disturbed [dCSS]), Coastal Sage Scrub – Baccharis (CSSB; including disturbed [dCSSB]), Coastal Sage – Chaparral Transition (CSS-CHP), disturbed Flat-topped Buckwheat (dBSC), Developed (DEV), Disturbed Habitat (DH), South Mixed Scrub (SMX; including disturbed [dSMX]), Eucalyptus Woodland (EUC), Freshwater Marsh (FWM), Intensive Agriculture (IA), Mulefat Scrub (MFS), Non-native Grasslands (NNG), Orchard and Vineyards (ORC), Oak Riparian Forest (ORF), Scrub Oak Chaparral (SOC), Southern Willow Scrub (SWS), Southern Willow Scrub/Tamarisk Scrub (SWS/TS).

Consistent with the latest County of San Diego *Report Format and Content Requirements: Biological Resources* (County of San Diego 2010), vegetation community classifications and descriptions used in this report follow Oberbauer et al. (2008) where feasible, with modifications to accommodate the lack of conformity of the observed communities to those of Oberbauer et al. (2008).

Suspected riparian habitats were also examined prior to surveys for suitability but were subsequently considered as Unsuitable Riparian Habitat (shown on Figure 3). These areas include disturbed Coast Live Oak Woodlands (dCLOW) and a Channel (CHAN). The dCLOW is located at the intersection of Sarver Lane and Vista Merriam. This area is dominated by oak (*Quercus* sp.) and pine (*Pinus* sp.) species along a ditch. The understory of this habitat was either bare or mainly consisted of non-native grasses and low growing scattered herbs. The CHAN runs parallel along the western border of Deer Springs Road. This area is composed of an earthen channel and contained no suitable habitat.

Riparian vegetation communities suitable for vireo and/or flycatcher occurring within the Project site are described below and shown on Figure 3 and Figures 4a-f.

Mulefat Scrub (63310)

This vegetation is a tall, herbaceous riparian scrub strongly dominated by mulefat (*Baccharis salicifolia*) (Oberbauer et al. 2008). This early seral community is maintained by frequent flooding and contains intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Characteristic species include mulefat, Santa Barbara sedge (*Carex barbarae*), narrowleaf willow (*Salix hindsiana*), arroyo willow (*S. lasiolepis*), and stinging nettle (*Urtica dioica* ssp. *holosericea*). This community type is based on the County of San Diego's Mulefat Scrub (Element Codes 63310) (Oberbauer et al. 2008). There are approximately 0.2 acres of mulefat scrub within the project site mapped approximately 1.1 miles north of Deer Springs Road (north of Site 4) and was excluded from the survey. This area consists of few scattered mulefat individuals lining a dirt road adjacent to a steep hillside. These individuals were supported by a water source. However, no other riparian habitat was detected around these individuals. Consequently this area was designated as "Unsuitable Riparian Habitat" (Figure 3).

Southern Coast Live Oak Riparian Forest (61310)

Oak riparian forests consist of dense riparian forests dominated by California live oak (*Quercus agrifolia*) with a closed or nearly-closed canopy. This community may be richer in herbs and poorer in understory shrubs than other riparian communities. Site factors for this community include bottomlands and outer floodplains along larger streams on fine-grained, rich alluvium. Characteristic species in this community include bigleaf maple (*Acer macrophyllum*), Douglas' sagewort (*Artemisia douglasiana*), milkmaids (*Cardamine californica*), spotted hideseed

(*Eucrypta chrysanthemifolia*), toyon (*Heteromeles arbutifolia*), heartleaf keckiella (*Keckiella cordifolia*), pink honeysuckle (*Lonicera hispidula*), Cucamonga manroot (*Marah macrocarpa*), blue fiestaflower (*Pholistoma auritum*), California live oak, skunkbush sumac (*Rhus aromatic*), California wildrose (*Rosa californica*), California blackberry (*Rubus ursinus*), blue elderberry (*Sambucus nigra* ssp. *caerulea*), creeping snowberry (*Symphoricarpos mollis*), Pacific poison oak (*Toxicodendron diversilobum*), and California laurel (*Umbellularia californica*).

Oak riparian forests on site consist largely of Goodding's willow (*S. gooddingii*) and arroyo willow, with occasional coast live oaks. On site, this vegetation type occurs in in four locations: within the northwestern-most project area (parallel with Twin Oaks Valley Road), in two locations along the eastern project boundary (approximately 0.2 and 1.8 miles north of Mesa Rock Road along I-15), and along the south-central project boundary (along Gist Road north of Sarver Lane). The largest occurrence of this vegetation on site is along Gist Road north of Sarver Lane consisting of approximately 4.0 acres. It also occurs just off site, along the creek south of Deer Springs Road. Southern coast live oak riparian forest extends beyond the site from the southern valley and is dominated by coast live oaks. Riparian habitats of any kind are usually considered by wildlife agencies to have very high wildlife value for the cover, nesting habitat, and food sources they provide. There are approximately 7.75 acres of southern coast live oak riparian forest within the project site. Habitat 1.8 miles north of Mesa Rock Road were excluded from the survey due to safety concerns. In addition, this location is planned as Open Space and, as such, no impacts are planned for this area.

Southern Willow Scrub (63320)

Southern willow scrub consists of dense, broadleaved, winter-deciduous riparian thickets dominated by several *Salix* species with scattered emergent Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) and California sycamore (*Platanus racemosa*). Most stands are too dense which does not allow much understory development. Characteristic species in this community include arrowweed (*Pluchea sericea*), Fremont cottonwood, Goodding's willow, narrowleaf willow, arroyo willow, red willow (*S. laevigata*), and Pacific willow (*S. lasiandra*).

This vegetation primarily occurs along Twin Oaks Valley Road. Smaller isolated patches of this vegetation occur within an abandoned aircraft landing area in the northwest quadrant of the site and approximately 0.2 miles north of Deer Springs Place. Southern willow scrub on site contains a mix of arroyo willow, red willow, and narrowleaf willow (*Salix exigua*) with scattered Fremont's cottonwood. There are approximately 2.76 acres of southern willow scrub within the project site. Two small patches of southern willow scrub are mapped approximately 0.2 miles north of Deer Springs Road (east of Site 4) and excluded from the survey. This area consists of few large standing willow trees surrounded by dense and impassable chaparral. As a result, a close-up survey of this

area was not possible. However, no other riparian habitat was detected around these few trees. Consequently this area was designated as "Unsuitable Riparian Habitat" (Figure 3).

Southern Willow Scrub (63320)/Tamarisk Scrub (63810)

Southern willow scrub/tamarisk scrub consists of community characteristics of both community types. Southern willow scrub community is described above. Tamarisk scrub community is a weedy, virtual monoculture of any several *Tamarix* species which typically supplant native vegetation following major disturbance. This community type occurs in sandy or gravelly braided washes or intermittent streams often in areas where high evaporation increases the stream's saltiness. Tamarisk is known aggressive competitor in disturbed riparian corridors. Characteristic species of this community type include big saltbush (*Atriplex lentiformis*), Palmer's crinklemat (*Tiquilia palmeri*), saltgrass (*Distichlis spicata*), arrowweed, narrowleaf willow, five-stamen tamarisk (*Tamarix chinensis*) and saltcedar (*T. ramosissima*).

A small amount of southern willow scrub/tamarisk scrub exists in a previously graded area adjacent to the abandoned aircraft landing area in the northwest quadrant of the site. The topography of this area allows rainwater to pond and promotes this artificial wetland-like habitat, consisting of scattered willows and tamarisk. There are approximately 0.5 acres of southern willow scrub/tamarisk scrub within the project site.

METHODS

Suitable flycatcher and vireo habitat areas within the project study area, as described above, were surveyed eight times by Dudek wildlife biologists Brock A. Ortega (BAO, Permit #TE813545), Paul M. Lemons (PML, Permit # TE051248), and Melissa A. Blundell (MAB). Focused surveys for these species were initiated on May 3, 2013, and continued through July 13, 2013. Weather conditions, time of day and season were appropriate for the detection of flycatcher and vireo (Table 1).

Table 1
Survey Conditions

Date	Hours	Personnel	Focus	Conditions
5/3/13	0630–1030	MAB	LBVI	10–0% cloud cover (% cc), 0–5 mile per hour (mph) wind, 50–80 degrees Fahrenheit (°F)
5/14/13	0700–1015	MAB	LBVI	0% cc, 0–4 mph wind, 65°F–75°F
5/23/13	0530–1100	BAO	LBVI/SWFL	50–100% cc, 0–3 mph wind, 58°F–70°F
6/02/13	0530–1045	BAO	LBVI/SWFL	25–100% cc, 0–3 mph wind, 62°F–73°F
6/17/13	0620–1100	MAB	LBVI	10–5% cc, 0–4 mph wind, 60°F–75°F
6/24/13	0605–1100	PML	LBVI/SWFL	100–40% cc, 0–4 mph wind, 10mph gusts, 62°F–75°F
7/03/13	0515–1045	BAO	LBVI/SWFL	0–20% cc, 0–3 mph wind, 62°F–80°F
07/13/13	0530–1100	BAO	LBVI/SWFL	0–50% cc, 0–5 mph wind, 65°F–82°F

Surveys for flycatcher were conducted concurrently with the vireo surveys. All surveys consisted of slowly walking a methodical, meandering transect within and adjacent to all riparian habitat. This route was arranged to cover all suitable habitat on site and within 500 feet of the site (depicted on Figure 4). A vegetation map (1 inch=100 feet) of the project site was available to record any detected vireo or flycatcher. Binoculars (10×50) were used to aid in detecting and identifying wildlife species.

The five surveys conducted for flycatcher followed survey methods described in accordance with *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (Sogge et al. 2010). Because there is a project planned in this area, a total of five surveys of the suitable habitat were conducted, with one visit between May 15 and May 31, two visits between June 1 and June 24, and two visits between June 25 and July 17. The surveys during the final period were separated by more than 5 days, per protocol requirements. A tape of recorded flycatcher vocalizations was used, approximately every 50–100 feet within suitable habitat, to induce flycatcher responses. If a flycatcher had been detected, playing of the tape would have ceased to avoid harassment.

A Section 10(a)(1)(A) permit is not required to conduct presence/absence surveys for vireo. The eight surveys for vireo followed the currently accepted *Least Bell's Vireo Survey Guidelines* (USFWS 2001), which states that a minimum of eight survey visits should be made to all riparian areas and any other potential vireo habitats during the period from April 10 to July 31. The site visits are required to be conducted at least 10 days apart to maximize the detection of early and late arrivals, females, non-vocal birds, and nesting pairs. Taped playback of vireo vocalizations were not used during the surveys. Surveys were conducted between dawn and 1200 and were not conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather.

RESULTS

No southwestern willow flycatchers or least Bell's vireos were observed during the focused surveys. Six special-status species were observed during the surveys: Bell's sparrow¹ (*Artemisiospiza belli*), a USFWS Bird of Conservation Concern (BCC), CDFW Watch List species (CDFW WL), and American Bird Conservancy - U. S. Watch List of Birds of Conservation

1 The recently designated Bell's sparrow (*Artemisiospiza belli*) consists of *A. b. belli* and *A. b. canescens*, both formerly considered subspecies of the sage sparrow (*A. belli*) and now split from the sagebrush sparrow (*A. nevadensis*). The nominate form of Bell's sparrow (*A. b. belli*), as Bell's sage sparrow, is designated as a described above. It occurs in chaparral and coastal scrub communities along the Coast Ranges of central California and in the Transverse Ranges of southern California.

Recovery Permit Coordinator

Subject: 2013 Least Bell's Vireo and Southwestern Willow Flycatcher Focused Survey Results for the Newland Sierra Project, San Diego County, California

Concern (ABC WLBC); Cooper's Hawk (*Accipiter cooperii*), a CDFW WL species; sharp-shinned hawk (*Accipiter striatus*), a CDFW WL species; Coastal California gnatcatcher (*Poliophtila californica californica*), a federally threatened, CDFW Species of Special Concern, and ABC WLBC; oak titmouse (*Baeolophus inornatus*), a BCC and ABC WLBC; Nuttall's woodpecker (*Picoides nuttallii*), a BCC and ABC WLBC.

Seventy-four wildlife species were observed during the focused surveys. A full list of wildlife species observed during the survey is provided in Appendix A. Data forms (Sogge et al. 2010) for willow flycatcher are included as Appendix B.

I certify that the information in this survey report and attached exhibits fully and accurately represent my work. Please feel free to contact me at 760.479.4238 with questions or if you require additional information.

Sincerely,



Brock Ortega
Survey Coordinator
Permit # TE813545



Paul Lemons
Permit # TE051248

Att: *Figures 1–4f*
Appendices A–B

cc: *Rita Brandin, Newland*
Melissa Blundell, Dudek

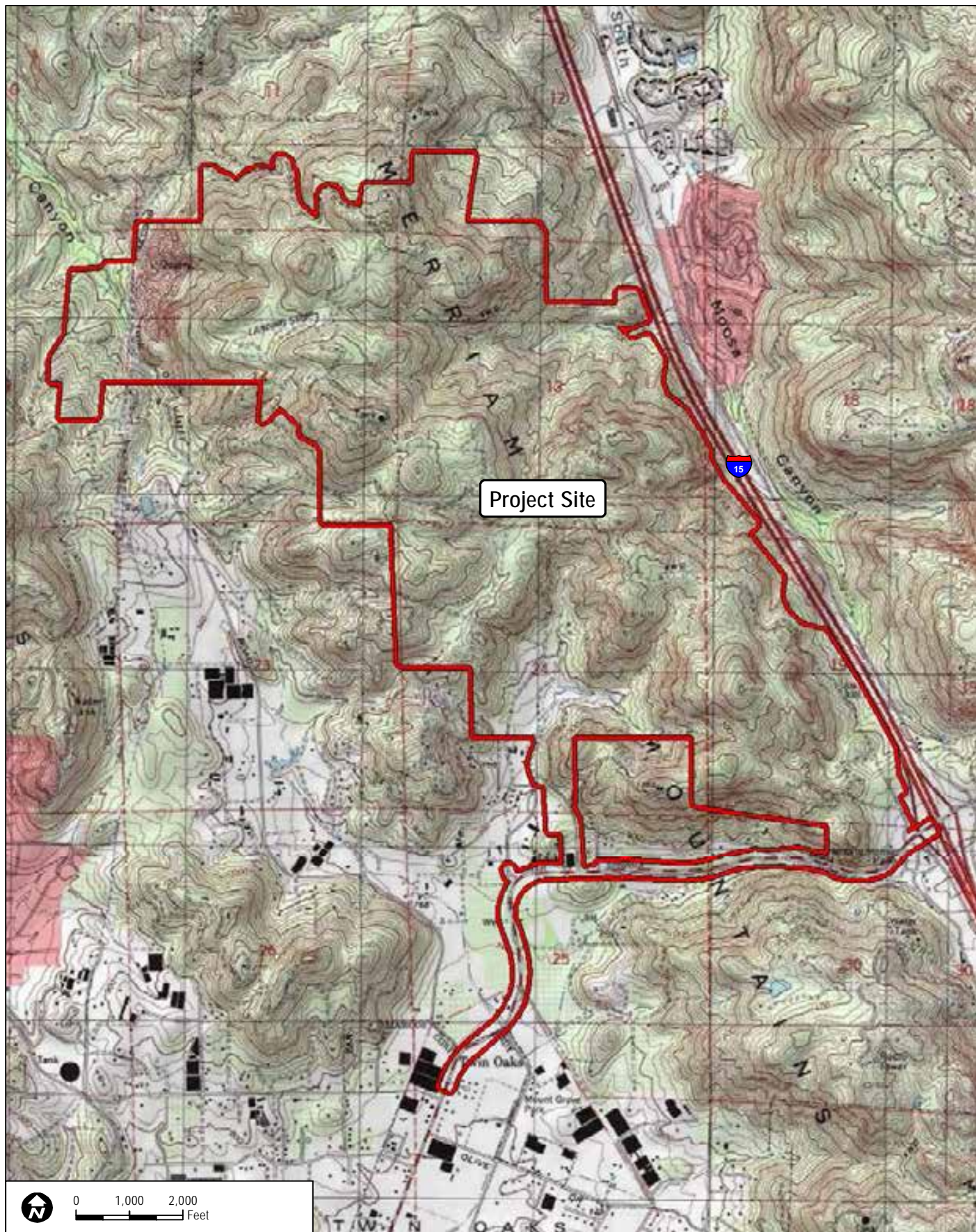
REFERENCES

County of San Diego. 2010. *Report Format and Content Requirements: Biological Resources*. Land Use and Environmental Group, County of San Diego, California. Fourth Revision: September 15, 2010.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County*. March 2008.

Sogge, M.K., Ahlers, Darrell, and Sferra, S.J., 2010, A natural history summary and survey protocol for the southwestern willow flycatcher: U.S. Geological Survey Techniques and Methods 2A-10, 38 p.

USFWS. 2001. Least Bell's Vireo Survey Guidelines. January 19.



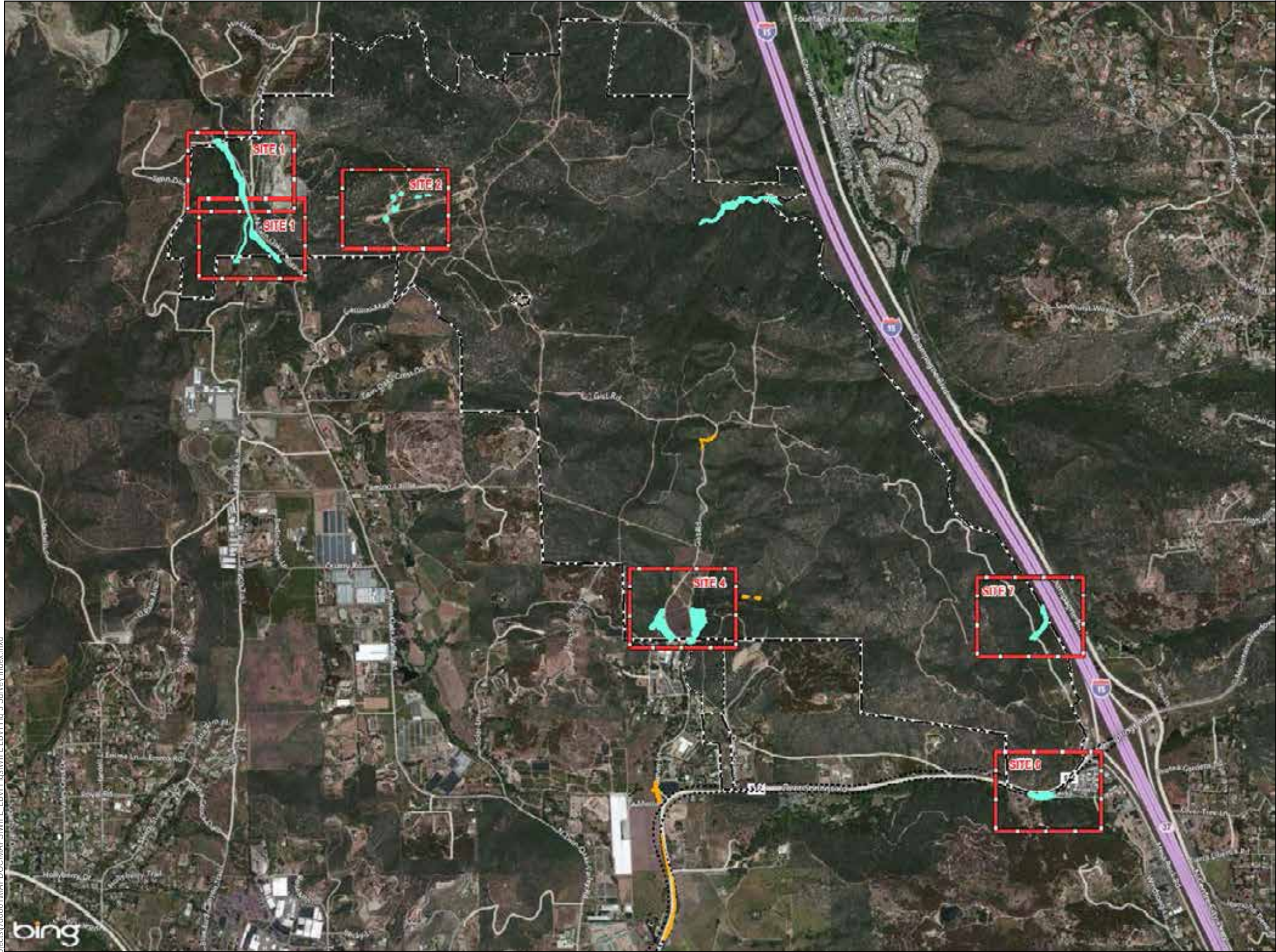
DUDEK

7608







SOURCE: USGS 7.5-Minute Series Quadrangle.

Newland Sierra WLF/LBVI Survey Report

FIGURE 2
Vicinity Map



Legend

-  WIFL/LBVI Suitable Habitat
-  Unsuitable Riparian Habitat
-  Survey Area
-  Project Boundary
-  Off-Site Access Easement (Meadow Park Lane)
-  Deer Springs Rd. EIR Project-Level Impacts



0 900 1,800 Feet

Document Path: Z:\Projects\1760801\MAPDOC\MAPS\WIFL_LBVI_Fig3\WIFL_LBVI_Fig 3 Survey Index.mxd



AERIAL SOURCE: BING MAPPING SERVICE

FIGURE 3
WIFL/LBVI Survey Route Index Map



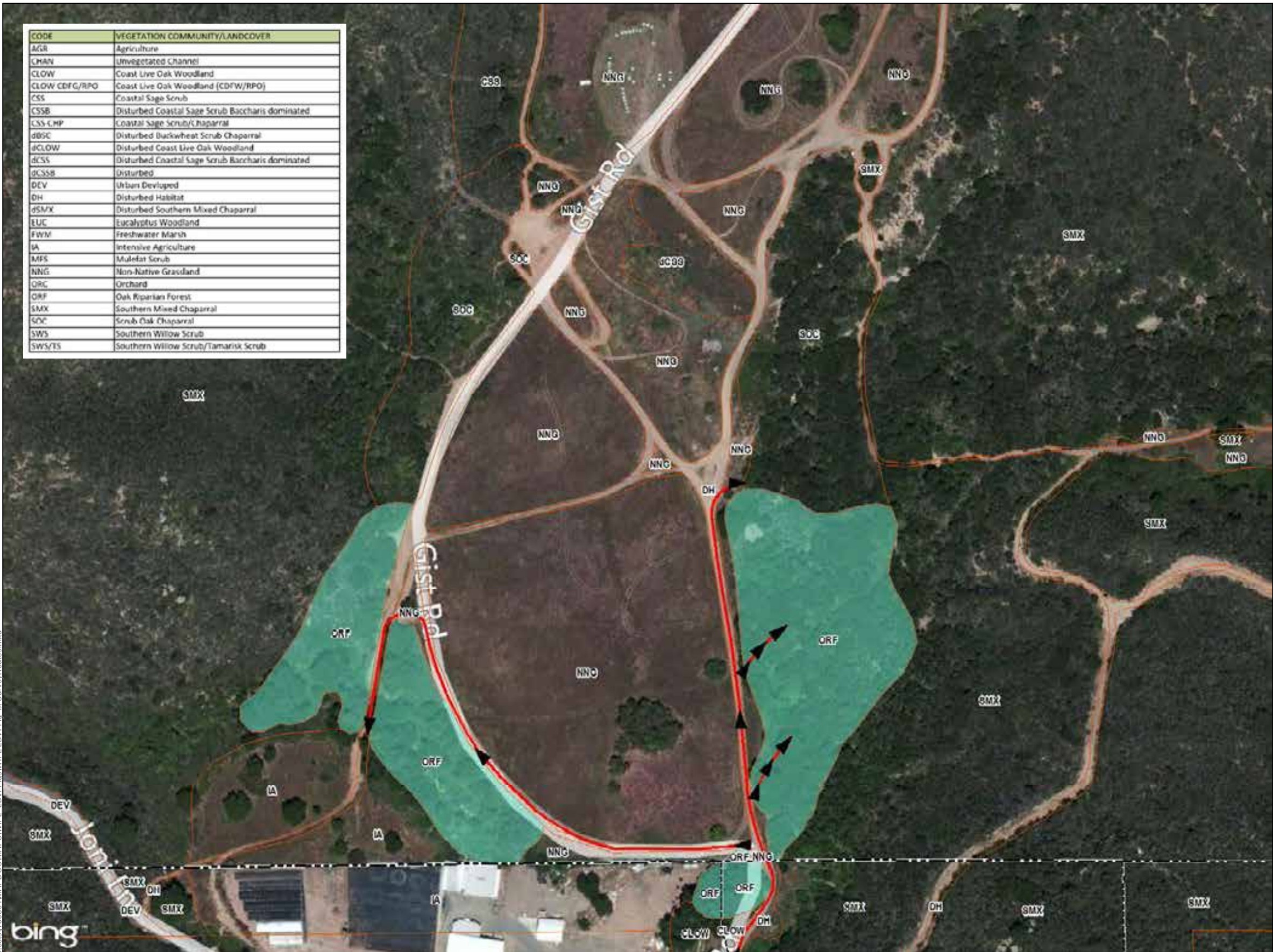


- Legend**
- Survey Route
 - Project Boundary
 - Off-Site Access Easement
 - WIFL/LBVI Suitable Habitat
 - Vegetation Communities

CODE	VEGETATION COMMUNITY/LANDCOVER
AGR	Agriculture
CHAN	Unvegetated Channel
CLOW	Coast Live Oak Woodland
CLOW CDIFG/RPO	Coast Live Oak Woodland (CDIFG/RPO)
CSS	Coastal Sage Scrub
CSSB	Disturbed Coastal Sage Scrub Baccharis dominated
CSS-LMP	Coastal Sage Scrub/Chaparral
dBSC	Disturbed Buckwheat Scrub Chaparral
dCLOW	Disturbed Coast Live Oak Woodland
dCSS	Disturbed Coastal Sage Scrub Baccharis dominated
dCSSB	Disturbed
DEV	Urban Developed
DH	Disturbed Habitat
dSMX	Disturbed Southern Mixed Chaparral
EUC	Eucalyptus Woodland
FWM	Freshwater Marsh
IA	Intensive Agriculture
MFS	Mulefat Scrub
NNG	Non-Native Grassland
JRC	Orchard
ORF	Oak Riparian Forest
SMX	Southern Mixed Chaparral
SOC	Scrub Oak Chaparral
SWS	Southern Willow Scrub
SWS/TS	Southern Willow Scrub/Tamarisk Scrub

Document Path: Z:\Projects\1760801\MAPDOC\MAPSWIFL_LBVI_Figs\WIFL_LBVI_Fig 4x Survey Routes.mxd

CODE	VEGETATION COMMUNITY/LANDCOVER
AGR	Agriculture
CHAN	Unvegetated Channel
CLOW	Coast Live Oak Woodland
CLOW CDWG/RPO	Coast Live Oak Woodland (CDWG/RPO)
CSS	Coastal Sage Scrub
CSSB	Disturbed Coastal Sage Scrub Baccharis dominated
CSS-CHP	Coastal Sage Scrub/Chaparral
dBSC	Disturbed Blackwheat Scrub Chaparral
dcLOW	Disturbed Coast Live Oak Woodland
dcSS	Disturbed Coastal Sage Scrub Baccharis dominated
dcSSB	Disturbed
DEV	Urban Developed
DH	Disturbed Habitat
dSMX	Disturbed Southern Mixed Chaparral
EUC	Eucalyptus Woodland
FWM	Freshwater Marsh
IA	Intensive Agriculture
MFS	Mulefat Scrub
NNG	Non-Native Grassland
ORC	Orchard
ORF	Oak Riparian Forest
SMX	Southern Mixed Chaparral
SOC	Scrub Oak Chaparral
SWS	Southern Willow Scrub
SWS/TS	Southern Willow Scrub/Tamarisk Scrub



Legend

- Survey Route
- Project Boundary
- Off-Site Access Easement
- WIFL/LBVI Suitable Habitat
- Vegetation Communities

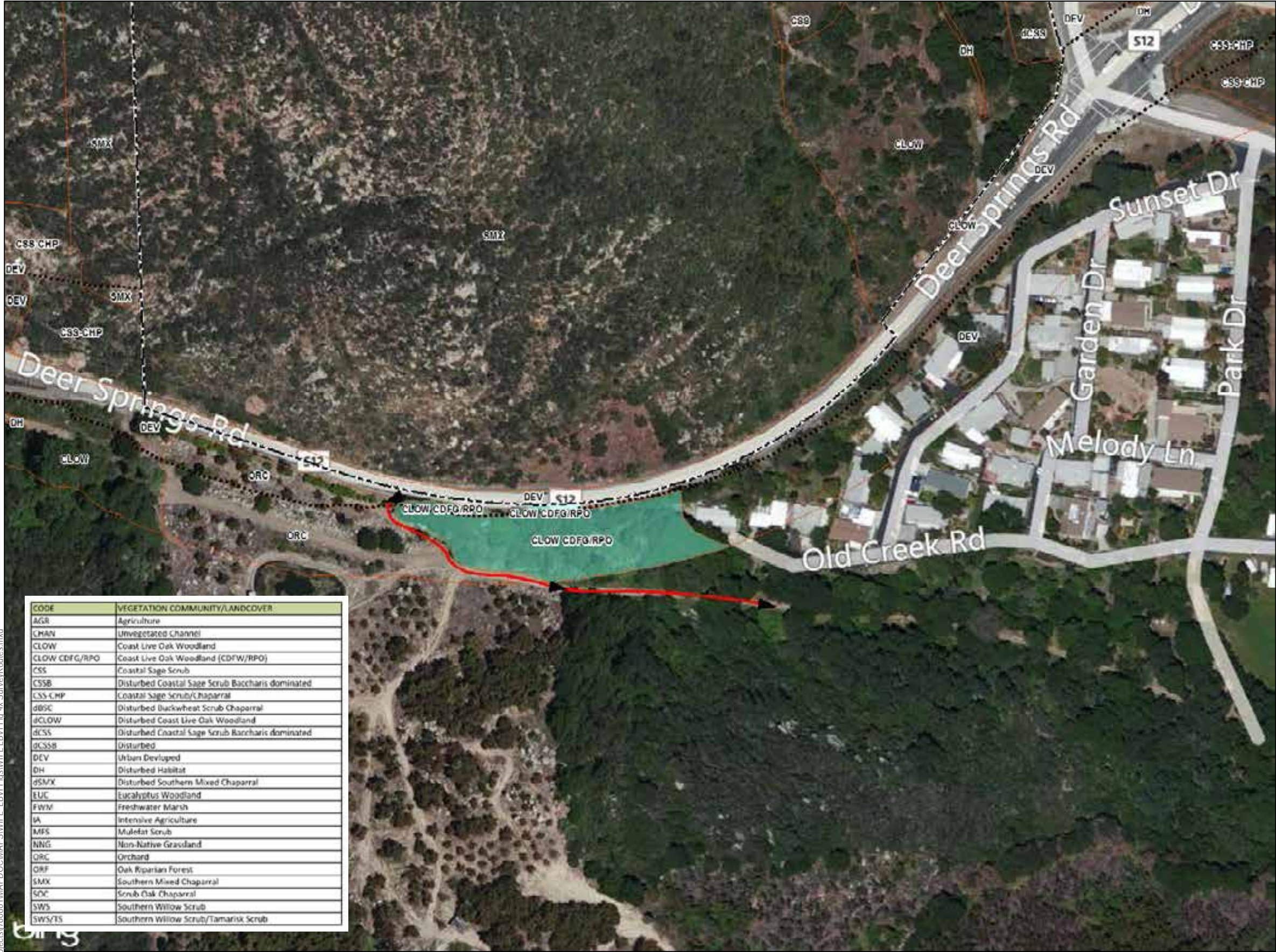


0 75 150 Feet

DUDEK

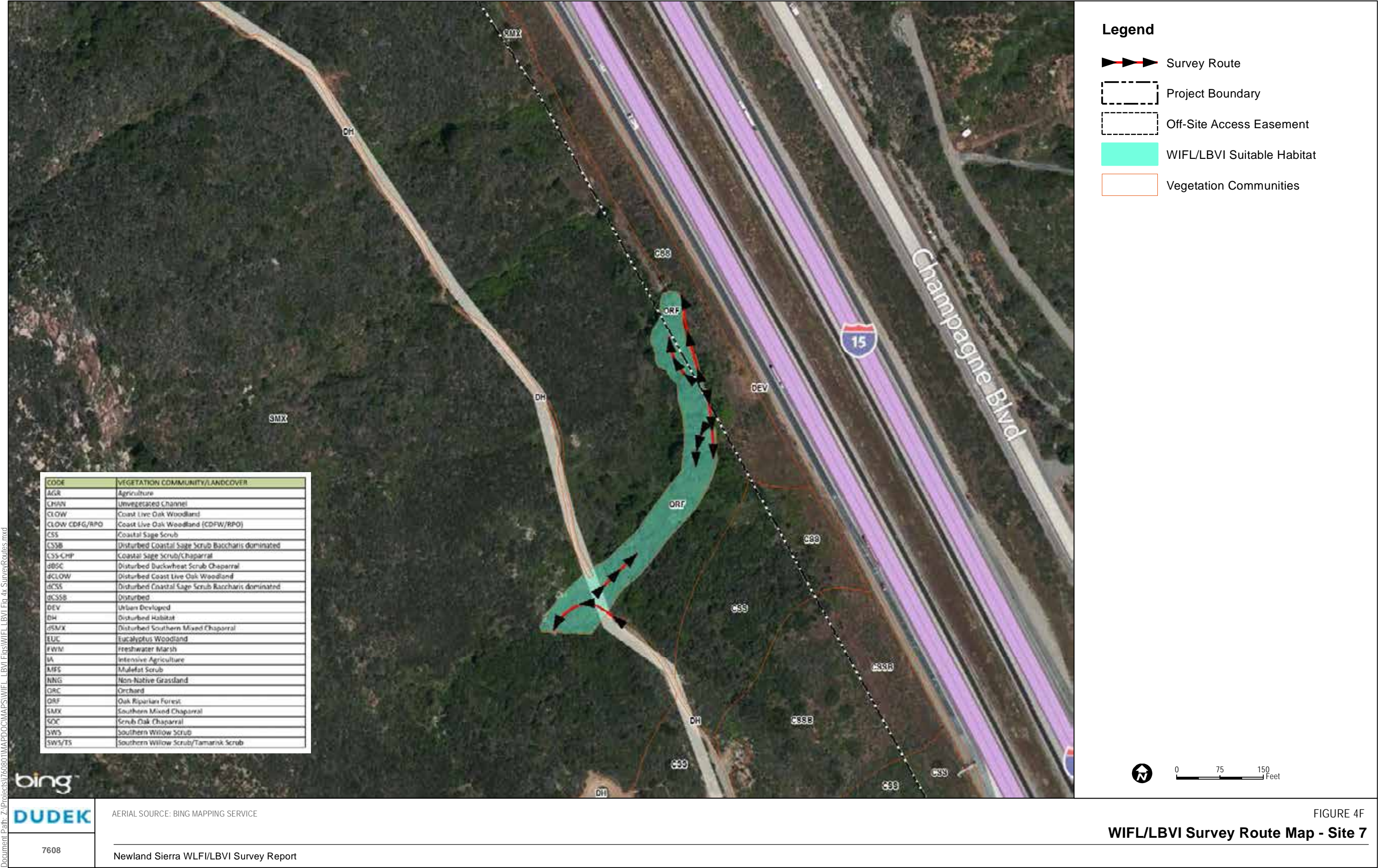
AERIAL SOURCE: BING MAPPING SERVICE

FIGURE 4D
WIFL/LBVI Survey Route Map - Site 4



- Legend**
- Survey Route
 - WIFL/LBVI Suitable Habitat
 - Project Boundary
 - Off-Site Access Easement
 - Deer Springs Rd. EIR Project-Level Impacts
 - Vegetation Communities

CODE	VEGETATION COMMUNITY/LANDCOVER
AGR	Agriculture
CHAN	Unvegetated Channel
CLOW	Coast Live Oak Woodland
CLOW CDFG/RPO	Coast Live Oak Woodland (CDFG/RPO)
CSS	Coastal Sage Scrub
CSSB	Disturbed Coastal Sage Scrub Baccharis dominated
CSS-CHP	Coastal Sage Scrub/Chaparral
dBSC	Disturbed Blackwheat Scrub Chaparral
dCLOW	Disturbed Coast Live Oak Woodland
dCSS	Disturbed Coastal Sage Scrub Baccharis dominated
dCSSB	Disturbed
DEV	Urban Developed
DH	Disturbed Habitat
dSMX	Disturbed Southern Mixed Chaparral
EUC	Eucalyptus Woodland
FWM	Freshwater Marsh
IA	Intensive Agriculture
MFS	Mulefat Scrub
NNG	Non-Native Grassland
ORC	Orchard
ORF	Oak Riparian Forest
SMX	Southern Mixed Chaparral
SOC	Scrub Oak Chaparral
SWS	Southern Willow Scrub
SWS/TS	Southern Willow Scrub/Tamarisk Scrub



Document Path: Z:\Projects\1760801\MAPDOC\MAPSWIFL_LBVI_Fig4F_SurveyRoutes.mxd

APPENDIX A

Wildlife Species Observed in Study Area

APPENDIX A

Wildlife Species Observed in Study Area

AMPHIBIAN

FROGS

***HYLIDAE*—TREEFROGS**

Pseudacris regilla—Northern Pacific treefrog

TOADS

***BUFONIDAE*—TRUE TOADS**

Anaxyrus boreas—Western toad

BIRD

BLACKBIRDS, ORIOLES AND ALLIES

***ICTERIDAE*—BLACKBIRDS**

Euphagus cyanocephalus—Brewer's blackbird

Quiscalus mexicanus—Great-tailed grackle

Sturnella neglecta—Western meadowlark

**Molothrus ater*—Brown-headed cowbird

Icterus cucullatus—Hooded oriole

BUSHTITS

***AEGITHALIDAE*—LONG-TAILED TITS AND BUSHTITS**

Psaltiriparus minimus—Bushtit

CARDINALS, GROSBEAKS AND ALLIES

***CARDINALIDAE*—CARDINALS AND ALLIES**

Passerina caerulea—Blue grosbeak

Pheucticus melanocephalus—Black-headed grosbeak

EMBERIZINES

***EMBERIZIDAE*—EMBERIZIDS**

Artemisiospiza belli—Bell's sparrow

Melospiza melodia—Song sparrow

Melospiza crissalis—California towhee

Pipilo maculatus—Spotted towhee

Zonotrichia leucophrys—White-crowned sparrow

APPENDIX A (Continued)

FALCONS

***FALCONIDAE*—CARACARAS AND FALCONS**

Falco sparverius—American kestrel

FINCHES

***FRINGILLIDAE*—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES**

Carpodacus mexicanus—House finch

Spinus psaltria—Lesser goldfinch

Spinus tristis—American goldfinch

FLYCATCHERS

***TYRANNIDAE*—TYRANT FLYCATCHERS**

Myiarchus cinerascens—Ash-throated flycatcher

Sayornis nigricans—Black phoebe

Tyrannus verticalis—Western kingbird

Tyrannus vociferans—Cassin's kingbird

Empidonax difficilis—Pacific-slope flycatcher

HAWKS

***ACCIPITRIDAE*—HAWKS, KITES, EAGLES, AND ALLIES**

Accipiter cooperii—Cooper's hawk

Accipiter striatus—Sharp-shinned hawk

Buteo jamaicensis—Red-tailed hawk

Buteo lineatus—Red-shouldered hawk

HUMMINGBIRDS

***TROCHILIDAE*—HUMMINGBIRDS**

Calypte anna—Anna's hummingbird

JAYS, MAGPIES AND CROWS

***CORVIDAE*—CROWS AND JAYS**

Aphelocoma californica—Western scrub-jay

Corvus brachyrhynchos—American crow

Corvus corax—Common raven

APPENDIX A (Continued)

MOCKINGBIRDS AND THRASHERS

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—Northern mockingbird

Toxostoma redivivum—California thrasher

NEW WORLD QUAIL

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

NEW WORLD VULTURES

CATHARTIDAE—CARDINALS AND ALLIES

Cathartes aura—Turkey vulture

OLD WORLD WARBLERS AND GNATCATCHERS

SYLVIIDAE—SYLVIID WARBLERS

Poliophtila caerulea—Blue-gray gnatcatcher

Poliophtila californica—Coastal California gnatcatcher

PIGEONS AND DOVES

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—Mourning dove

ROADRUNNERS AND CUCKOOS

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—Greater roadrunner

STARLINGS AND ALLIES

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

SWALLOWS

HIRUNDINIDAE—SWALLOWS

Hirundo rustica—Barn swallow

Petrochelidon pyrrhonota—Cliff swallow

APPENDIX A (Continued)

THRUSHES

***TURDIDAE*—THRUSHES**

Sialia mexicana—Western bluebird

TITMICE

***PARIDAE*—CHICKADEES AND TITMICE**

Baeolophus inornatus—Oak titmouse

WOOD WARBLERS AND ALLIES

***PARULIDAE*—WOOD-WARBLERS**

Geothlypis trichas—Common yellowthroat

Oreothlypis celata—Orange-crowned warbler

Cardellina pusilla—Wilson’s warbler

Setophaga coronata—Yellow-rumped warbler

WOODPECKERS

***PICIDAE*—WOODPECKERS AND ALLIES**

Melanerpes formicivorus—Acorn woodpecker

Picoides nuttallii—Nuttall’s woodpecker

Colaptes auratus—Northern flicker

WRENS

***TROGLODYTIDAE*—WRENS**

Thryomanes bewickii—Bewick’s wren

Troglodytes aedon—House wren

WRENTITS

***TIMALIIDAE*—BABBLERS**

Chamaea fasciata—Wrentit

INVERTEBRATE

BUTTERFLIES

***LYCAENIDAE*—BLUES, HAIRSTREAKS, AND COPPERS**

Plebejus acmon—Acmon blue

APPENDIX A (Continued)

NYMPHALIDAE—BRUSH-FOOTED BUTTERFLIES

Adelpha bredowii—California sister
Danaus gilippus—Queen
Junonia coenia—Common buckeye
Limenitis lorquini—Lorquin's admiral
Nymphalis antiopa—Mourning cloak

RIODINIDAE—METALMARKS

Apodemia mormo virgulti—Behr's metalmark

PAPILIONIDAE—SWALLOWTAILS

Papilio rutulus—Western tiger swallowtail

PIERIDAE—WHITES AND SULFURS

Anthocharis sara sara—Pacific sara orangetip

MAMMAL

CANIDS

CANIDAE—WOLVES AND FOXES

Canis latrans—Coyote

CATS

FELIDAE—CATS

Lynx rufus—Bobcat

HARES AND RABBITS

LEPORIDAE—HARES AND RABBITS

Sylvilagus bachmani—Brush rabbit

MUSTELIDS

MEPHITIDAE—SKUNKS

Mephitis mephitis—Striped skunk

SQUIRRELS

SCIURIDAE—SQUIRRELS

Spermophilus (Otospermophilus) beecheyi—California ground squirrel

APPENDIX A (Continued)

REPTILE

LIZARDS

***PHRYNOSOMATIDAE*—IGUANID LIZARDS**

Sceloporus occidentalis—Western fence lizard

Uta stansburiana—Common side-blotched lizard

***TEIIDAE*—WHIPTAIL LIZARDS**

Aspidoscelis tigris—Tiger whiptail

SNAKES

***COLUBRIDAE*—COLUBRID SNAKES**

Pituophis catenifer—Gophersnake

***VIPERIDAE*—VIPERS**

Crotalus oreganus—Southern Pacific Rattlesnake

* signifies introduced (non-native) species

APPENDIX B

Willow Flycatcher Data Forms

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: Merriam Site 1 State: California County: San Diego
 USGS Quad Name: San Marcos Elevation: 62-76 (meters)
 Creek, River, or Lake Name: South Fork of Gopher Canyon

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?

Yes X No

Survey Coordinates: Start: Lat. 33°13'31.37"N Long. 117°10'37.05"W UTM Datum: WGS84 (See instructions)
 Stop: Lat. 33°13'10.73"N Long. 117°10'24.89"W UTM Zone: N/A

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

****Fill in additional site information on back of this page****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Survey # 2 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1045									
Total hrs:										
	5.3									
Survey # 3 Observer(s): Paul M. Lemon	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0605									
	Stop:									
	1100									
Total hrs:										
	5.1									
Survey # 4 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	515									
	Stop:									
	1045									
Total hrs:										
	5.5									
Survey # 5 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs: <u>26.9</u>		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
		0	0	0	0					

Reporting Individual: Paul M. Lemons and Brock A. Ortega Date Report Completed: 10/2/2013
 US Fish & Wildlife Service Permit #: TE-051248 (PML) and TE-813545 (BAO) State Wildlife Agency Permit #: SC-10690 (PML)

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Paul M. Lemons and Brock A. Ortega Phone # 760-479-4238
Affiliation Consultant (Dudek) E-mail plemons@dudek.com/
bortega@dudek.com
Site Name Merriam Site 1 Date report Completed 10/2/2013
Was this site surveyed in a previous year? Yes ☐ No ☒ Unknown ☐
Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☒
If name is different, what name(s) was used in the past? No known prior WIFL surveys conducted at this site.
If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize below.
Did you survey the same general area during each visit to this site this year? Yes ☐ No ☐ If no, summarize below.
Management Authority for Survey Area: Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒
Name of Management Entity or Owner (e.g., Tonto National Forest) Newland Merriam Mountain, LLC
Length of area surveyed: 1.1 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☒ Mixed native and exotic plants (mostly native, 50 - 90% native)
☐ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)
☐ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Salix lasiolepis, Salix laevigata, Salix exigua, Platanus racemosa, Populus fremontii ssp. fremontii

Average height of canopy (Do not include a range): 4 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features.
Attach additional sheets if necessary.

Other plants present at site include *Plantanus racemosa*, *Baccharis salicifolia*, *Baccharis pilularis*, *Toxicodendron diversilobum*, *Baccharis pilularis*, non-native grasses, and *Arundo donax*. Oak riparian forest within this site also include *Quercus agrifolia* and *S. gooddingii*. Overall, site has a moderate to dense understory aligned with tall trees (*Salix spp.*, *Platanus racemosa*). A total of three to six cowbirds were detected throughout the five project sites on all WIFL surveys except 6/24/2013. An additional nine cowbirds were detected at Merriam Site 1 on 06/17/2013 during least Bell's vireo (*Vireo bellii pusillus*) surveys.

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: Merriam Site 2 State: California County: San Diego
 USGS Quad Name: San Marcos Elevation: 408-421 (meters)
 Creek, River, or Lake Name: Unnamed Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No

Survey Coordinates: Start: Lat. 33°13'17.70"N Long. 117°10'3.63"W UTM Datum: WGS84 (See instructions)
 Stop: Lat. 33°13'22.02"N Long. 117° 9'53.97"W UTM Zone: N/A

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

****Fill in additional site information on back of this page****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Survey # 2 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1045									
Total hrs:										
	5.3									
Survey # 3 Observer(s): Paul M. Lemon	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0605									
	Stop:									
	1100									
Total hrs:										
	5.1									
Survey # 4 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	515									
	Stop:									
	1045									
Total hrs:										
	5.5									
Survey # 5 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs: 26.9		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
		0	0	0	0					

Reporting Individual: Paul M. Lemons and Brock A. Ortega Date Report Completed: 10/2/2013
 US Fish & Wildlife Service Permit #: TE-051248 (PML) and TE-813545 (BAO) State Wildlife Agency Permit #: SC-10690 (PML)

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Paul M. Lemons and Brock A. Ortega Phone # 760-479-4238

Affiliation Consultant (Dudek) E-mail plemons@dudek.com/
bortega@dudek.com

Site Name Merriam Site 2 Date report Completed 10/2/2013

Was this site surveyed in a previous year? Yes ☐ No ☒ Unknown ☐

Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☒

If name is different, what name(s) was used in the past? No known prior WIFL surveys conducted at this site.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize below.

Did you survey the same general area during each visit to this site this year? Yes ☐ No ☐ If no, summarize below.

Management Authority for Survey Area: Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒

Name of Management Entity or Owner (e.g., Tonto National Forest) Newland Merriam Mountain, LLC

Length of area surveyed: 0.2 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

☐ Native broadleaf plants (entirely or almost entirely, > 90% native)

☐ Mixed native and exotic plants (mostly native, 50 - 90% native)

☒ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

☐ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Tamarisk sp., Salix lasiolepis/Salix laevigata, Baccharis pilularis

Average height of canopy (Do not include a range): 2.5 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features.
Attach additional sheets if necessary.

Small patches of suitable vegetation within Southern Mixed Chaparral landscape. A total of three to six cowbirds were detected throughout the five project sites on all WIFL surveys except 6/24/2013. An additional nine cowbirds were detected at Merriam Site 1 on 06/17/2013 during least Bell's vireo (*Vireo bellii pusillus*) surveys

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: Merriam Site 4 State: California County: San Diego
 USGS Quad Name: San Marcos Elevation: 253-263 (meters)
 Creek, River, or Lake Name: Unnamed Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No

Survey Coordinates: Start: Lat. 33°12'8.59"N Long. 117° 9'6.84"W UTM Datum: WGS84 (See instructions)
 Stop: Lat. 33°12'12.06"N Long. 117° 8'59.58"W UTM Zone: N/A

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

****Fill in additional site information on back of this page****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1100									
Total hrs:	5.5									
Survey # 2 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1045									
Total hrs:	5.3									
Survey # 3 Observer(s): Paul M. Lemon	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0605									
	Stop:									
	1100									
Total hrs:	5.1									
Survey # 4 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	515									
	Stop:									
	1045									
Total hrs:	5.5									
Survey # 5 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	530									
	Stop:									
	1100									
Total hrs:	5.5									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs: <u>26.9</u>		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Paul M. Lemons and Brock A. Ortega Date Report Completed: 10/2/2013
 US Fish & Wildlife Service Permit #: TE-051248 (PML) and TE-813545 (BAO) State Wildlife Agency Permit #: SC-10690 (PML)

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Paul M. Lemons and Brock A. Ortega Phone # 760-479-4238

Affiliation Consultant (Dudek) E-mail plemons@dudek.com/
bortega@dudek.com

Site Name Merriam Site 4 Date report Completed 10/2/2013

Was this site surveyed in a previous year? Yes ☐ No ☒ Unknown ☐

Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☒

If name is different, what name(s) was used in the past? No known prior WIFL surveys conducted at this site.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize below.

Did you survey the same general area during each visit to this site this year? Yes ☐ No ☐ If no, summarize below.

Management Authority for Survey Area: Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒

Name of Management Entity or Owner (e.g., Tonto National Forest) Newland Merriam Mountain, LLC

Length of area surveyed: 0.4 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
- ☒ Mixed native and exotic plants (mostly native, 50 - 90% native)
- ☐ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)
- ☐ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Quercus agrifolia, Salix gooddingii, Salix lasiolepis

Average height of canopy (Do not include a range): 2.5 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features.

Attach additional sheets if necessary.

In some locations, habitat composed of a light understory composed of *Toxicodendron diversilobum*, *Vitis californica*, non-native grasses, and other herbaceous vegetation. Denser understory as habitat transitioned into surrounding Southern Mixed Chaparral. A total of three to six cowbirds were detected throughout the five project sites on all WIFL surveys except 6/24/2013. An additional nine cowbirds were detected at Merriam Site 1 on 06/17/2013 during least Bell's vireo (*Vireo bellii pusillus*) surveys

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: Merriam Site 6 State: California County: San Diego
 USGS Quad Name: San Marcos Elevation: 287-290 (meters)
 Creek, River, or Lake Name: Unnamed Creek

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No

Survey Coordinates: Start: Lat. 33°11'40.05"N Long. 117° 7'51.54"W UTM Datum: WGS84 (See instructions)
 Stop: Lat. 33°11'39.15"N Long. 117° 7'45.47"W UTM Zone: N/A

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

****Fill in additional site information on back of this page****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Survey # 2 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1045									
Total hrs:										
	5.3									
Survey # 3 Observer(s): Paul M. Lemon	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0605									
	Stop:									
	1100									
Total hrs:										
	5.1									
Survey # 4 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	515									
	Stop:									
	1045									
Total hrs:										
	5.5									
Survey # 5 Observer(s): Brock A. Ortega	Date:	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	530									
	Stop:									
	1100									
Total hrs:										
	5.5									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs: 26.9		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
		0	0	0	0					

Reporting Individual: Paul M. Lemons and Brock A. Ortega Date Report Completed: 10/2/2013
 US Fish & Wildlife Service Permit #: TE-051248 (PML) and TE-813545 (BAO) State Wildlife Agency Permit #: SC-10690 (PML)

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Paul M. Lemons and Brock A. Ortega Phone # 760-479-4238

Affiliation Consultant (Dudek) E-mail plemons@dudek.com/
bortega@dudek.com

Site Name Merriam Site 6 Date report Completed 9/24/2013

Was this site surveyed in a previous year? Yes ☐ No ☒ Unknown ☐

Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☒

If name is different, what name(s) was used in the past? No known prior WIFL surveys conducted at this site.

If site was surveyed last year, did you survey the same general area this year? Yes ☐ No ☐ If no, summarize below.

Did you survey the same general area during each visit to this site this year? Yes ☐ No ☐ If no, summarize below.

Management Authority for Survey Area: Federal ☐ Municipal/County ☐ State ☐ Tribal ☐ Private ☒

Name of Management Entity or Owner (e.g., Tonto National Forest) Newland Merriam Mountain, LLC

Length of area surveyed: 0.1 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

☐ Native broadleaf plants (entirely or almost entirely, > 90% native)

☒ Mixed native and exotic plants (mostly native, 50 - 90% native)

☐ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

☐ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

S. gooddingii, S. lasiolepis, Quercus agrifolia

Average height of canopy (Do not include a range): 3 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features.
Attach additional sheets if necessary.

Active running stream present. Willow species scattered with oak and an understory with *Vitis californica*, *Toxicodendron diversilobum*, and additional herbaceous species. Non-native species included *Arundo donax*. A total of three to six cowbirds were detected throughout the five project sites on all WIFL surveys except 6/24/2013. An additional nine cowbirds were detected at Merriam Site 1 on 06/17/2013 during least Bell's vireo (*Vireo bellii pusillus*) surveys

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: Merriam Site 7 State: California County: San Diego
 USGS Quad Name: San Marcos Elevation: 285-305 (meters)
 Creek, River, or Lake Name: Unnamed Creek
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: Lat. 33°12'7.07"N Long. 117° 7'50.57"W UTM Datum: WGS84 (See instructions)
 Stop: Lat. 33°12'12.32"N Long. 117° 7'48.44"W UTM Zone: N/A

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

****Fill in additional site information on back of this page****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats (livestock, cowbirds, <i>Diorhabda</i> spp.)). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): Brock A. Ortega	Date: 5/23/2013	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1100									
Total hrs: 5.5										
Survey # 2 Observer(s): Brock A. Ortega	Date: 6/2/2013	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0530									
	Stop:									
	1045									
Total hrs: 5.3										
Survey # 3 Observer(s): Paul M. Lemon	Date: 6/24/2013	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	0605									
	Stop:									
	1100									
Total hrs: 5.1										
Survey # 4 Observer(s): Brock A. Ortega	Date: 7/3/2013	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	515									
	Stop:									
	1045									
Total hrs: 5.5										
Survey # 5 Observer(s): Brock A. Ortega	Date: 7/13/2013	0	0	0	N	No WIFL's detected during survey.	0	N/A	N/A	N/A
	Start:									
	530									
	Stop:									
	1100									
Total hrs: 5.5										
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: 26.9	0	0	0	0						

Reporting Individual: Paul M. Lemons and Brock A. Ortega Date Report Completed: 10/2/2013
 US Fish & Wildlife Service Permit #: TE-051248 (PML) and TE-813545 (BAO) State Wildlife Agency Permit #: SC-10690 (PML)

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Paul M. Lemons and Brock A. Ortega Phone # 760-479-4238
Affiliation Consultant (Dudek) E-mail plemons@dudek.com/
bortega@dudek.com
Site Name Merriam Site 7 Date report Completed 10/2/2013
Was this site surveyed in a previous year? Yes No X Unknown
Did you verify that this site name is consistent with that used in previous yrs? Yes No Not Applicable X
If name is different, what name(s) was used in the past? No known prior WIFL surveys conducted at this site.
If site was surveyed last year, did you survey the same general area this year? Yes No If no, summarize below.
Did you survey the same general area during each visit to this site this year? Yes No If no, summarize below.
Management Authority for Survey Area: Federal Municipal/County State Tribal Private X
Name of Management Entity or Owner (e.g., Tonto National Forest) Newland Merriam Mountain, LLC

Length of area surveyed: 0.2 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

 Native broadleaf plants (entirely or almost entirely, > 90% native)

X Mixed native and exotic plants (mostly native, 50 - 90% native)

 Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

 Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Salix gooddingii, S. lasiolepis, Quercus agrifolia

Average height of canopy (Do not include a range): 3 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;

2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;

3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

A total of three to six cowbirds were detected throughout the five project sites on all WIFL surveys except 6/24/2013. An additional nine cowbirds were detected at Merriam Site 1 on 06/17/2013 during least Bell's vireo (*Vireo bellii pusillus*) surveys

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

APPENDIX D
*2013 California Gnatcatcher
Focused Survey Results*

October 22, 2013

7608-1

U.S. Fish and Wildlife Service
Recovery Permit Coordinator
6010 Hidden Valley Road
Carlsbad, California 92011

Subject: California Gnatcatcher Presence-Absence Survey Report For Newland Sierra Project, San Diego County, California, Permit # TE813545

Dear Permit Coordinator:

This report documents the results of three focused presence-absence surveys conducted by Dudek for the federally listed threatened coastal California gnatcatcher (*Poliophtila californica californica*; CAGN) at the Newland Sierra Project Site located in northern unincorporated San Diego County, California.

The Newland Sierra project site consists of approximately 1,988 acres located within an unincorporated area of the north-central portion of the Merriam Mountains of northern San Diego County, California (Figures 1 and 2). The site is bounded by Interstate 15 (I-15) on the east, Deer Springs Road (County Road S12) on the south, and Twin Oaks Valley Road on the west, with a small portion of the northwestern edge of the site traversed by Twin Oaks Valley Road. Gopher Canyon Road is located approximately 0.50 mile north of the site. The cities of Escondido and San Marcos are approximately 1 mile south of the site. The project site lies within the central portion of the Merriam Mountains, a narrow chain of mountains generally running north and south with a variety of east–west trending ridgelines and scattered peaks. Land uses surrounding the site include large-lot single-family residences and avocado groves to the north, west, and south, and open space to the north, west, and on the east side of I-15.

Elevation of the site ranges widely, from approximately 660 feet above mean sea level (AMSL) along Twin Oaks Valley Road traversing the northwestern portion of the site to 1,750 feet AMSL directly northeast of Twin Oaks Crest Drive. The perimeter of the project site has an overall gentle sloping topography. Within the project site the topography is more varied. Overall, there are approximately five locations where elevation is above 1,500 feet AMSL (one in the southern and four in the north–central areas of the project site). Topography generally increases toward the center of the site, forming a number of ridgelines and some prominent rock outcrops. In some locations the gentle sloping perimeter gradually rises to higher elevations whereas in other areas the slopes are more acute.

SPECIES ACCOUNT

The CAGN occurs in coastal Southern California and Baja California year-round, where it depends on a variety of arid scrub habitats. The CAGN occurs mainly on cismontane slopes (coastal side of the mountains) in Southern California, ranging from Ventura and northern Los Angeles counties south through the Palos Verdes Peninsula to Orange, Riverside, San Bernardino, and San Diego counties. The species' range continues south to El Rosario, Mexico. Initially it was reported that 99% of all CAGN locality records occurred at or below an elevation of 984 feet AMSL Atwood (1990; Atwood and Bolsinger 1992). Since that time, data collected at higher elevations show that the species may occur as high as 3,000 feet AMSL, but that more than 99% of the known CAGN locations occurred below 2,500 feet AMSL (65 FR 63680). Because of the natural topography of the Southern California hills and mountain ranges, most of the higher-elevation locations are more inland, where population densities tend to be much lower than coastal populations.

The CAGN typically occurs in or near coastal scrub, vegetation that is composed of relatively low-growing, dry-season deciduous and succulent plants. Characteristic plants of this community include California sagebrush (*Artemisia californica*), various species of sage (*Salvia* spp.), California buckwheat (*Eriogonum fasciculatum*), lemonadeberry (*Rhus integrifolia*), California bush sunflower (*Encelia californica*), and cactus (e.g., *Opuntia* spp.). CAGNs also occur in chaparral, grassland, and riparian vegetation communities where the coastal scrub community is close by (Bontrager 1991). The use of these vegetation communities appears to be most frequent during late summer, autumn, and winter, with smaller numbers of birds using such areas during the breeding season. The CAGN tends to occur most frequently within the California sagebrush-dominated stands on mesas, gently sloping areas, and along the lower slopes of the Coast Ranges (Atwood 1990). The CAGN occurs in high frequencies and densities in coastal scrub communities with an open or broken canopy, whereas it is absent from coastal scrub dominated by tall shrubs and occurs in low frequencies and densities in low coastal scrub with a closed canopy (Weaver 1998).

CAGNs glean insects and spiders from foliage of shrubs, primarily California buckwheat and coastal sagebrush (Atwood 1993). Their diet is primarily composed of spiders but is also composed of wasps, bees, and ants (Burger et al. 1999). CAGN habitat use has been positively associated with total insect species richness and total individual insect abundance (County of Riverside 2008).

CAGNs nests usually are located in a small shrub or cactus one to three feet above the ground. Territory size varies and is influenced by season and locale (Preston et al. 1998), but is unrelated to vegetation structure (Braden et al. 1997). During the breeding season, territories in coastal areas are often smaller—averaging 5.7 acres (Atwood et al. 1998)—than those in more inland regions, which average 8.4 acres (Braden et al. 1997). Bailey and Mock (1998) observed juvenile dispersal distances averaging less than 1.9 miles from the nest territory and the longest documented juvenile dispersal is about 9.9 miles (Mock 2004). Based on an exponential dispersal model fitted to Rancho San Diego dispersal data, Bailey and Mock (1998) estimated that the CAGN is capable of dispersing up to 13.5 miles.

The CAGN has declined due to widespread destruction of its coastal scrub habitat (Atwood 1990). It was estimated as early as the 1970s that up to 90% of coastal scrub has been lost as a result of development and land conversion (Westman 1981; Barbour and Major 1977), and coastal scrub is considered to be one of the most depleted habitat types in the United States (Kirkpatrick and Hutchinson 1977; Axelrod 1978; Klopatek et al. 1979; Westman 1987; O'Leary 1990). In addition, agricultural use, such as grazing and field crops, urbanization, air pollution, increases in fire frequency, and the introduction of exotics have all had an adverse impact on the extant coastal scrub vegetation community. In particular, high fire frequencies and the lag period associated with recovery of the vegetation may significantly reduce the viability of affected subpopulations of the CAGN (56 FR 47053-47060). Increased competition with introduced Mediterranean annual grasses may cause coastal scrub stand-thinning (Minnich and Dezzani 1998). Another significant threat to the CAGN is the increased risk of predation, which is the most common cause of nest failures for the CAGN (Grishaver et al. 1998). Nest predators are numerous and especially include native snakes, but also urban-adapted birds such as ravens (*Corvus corax*) and crows (*Corvus brachyrhynchos*), mesopredators such as common raccoon (*Procyon lotor*) and Virginia opossum (*Didelphis virginiana*), California ground squirrel (*Spermophilus beecheyi*), and coyote (*Canis latrans*) (Grishaver et al. 1998). The CAGN also may be parasitized by the brown-headed cowbird (*Molothrus ater*), although the cowbird's contribution to nest failure varies in different areas (Grishaver et al. 1998). Several other potential human- or development-related factors may affect CAGNs. Construction-related impacts include dust; noise and ground vibration; increased human activity in close proximity to nesting and foraging areas; and lighting, which may alter behavior, induce physiological stress, and increase predation risk. Long-term effects related to development include increased human activity; noise; lighting; pesticides, which may reduce prey and cause secondary poisoning; and predation and harassment by pet, stray, and feral cats and dogs.

VEGETATION COMMUNITIES

Thirteen vegetation communities and six non-native communities or land cover types were mapped by Dudek within the proposed project area (Table 1). Native vegetation communities within the project area include southern mixed chaparral, southern mixed chaparral (including disturbed and mafic), coastal sage – chaparral transition, scrub oak chaparral, Diegan coastal sage scrub (including disturbed), coastal sage scrub – baccharis (including disturbed), disturbed flat-topped buckwheat –, freshwater marsh, coast live oak woodland (including disturbed), oak riparian forest, mulefat scrub, southern willow scrub, and southern willow scrub/tamarisk scrub. Two non-native vegetation communities, eucalyptus woodland and non-native grassland, occurs within the project area. Four land cover types (non-vegetated area) occur within the project area: agriculture (including intensive agriculture), orchards and vineyards, developed land, and disturbed habitat.

Table 1
Vegetation Communities and Land Cover Types

General Vegetation Community/Land Cover Type	Code ¹	Acres
Chaparral		
Southern mixed chaparral (including mafic soils)	37120/37122	1,748.13
Southern mixed chaparral (disturbed)	37120	12.41
Coastal sage – chaparral transition*	37G00	8.33
Scrub oak chaparral*	37900	43.69
<i>Subtotal</i>		<i>1,812.56</i>
Coastal Scrub		
Diegan coastal sage scrub (including disturbed)	32500	67.70
Coastal sage scrub – baccharis (including disturbed)	32530	1.97
Flat-topped buckwheat - disturbed*	32800	1.74
<i>Subtotal</i>		<i>71.41</i>
Woodland		
Coast Live Oak Woodland	71160	6.93
Riparian		
Freshwater marsh	52400	0.07
Oak riparian forest	61310	7.23
Mulefat scrub	63310	0.19
Southern willow scrub	a. 63320	B. 2.34
Southern willow scrub/tamarisk scrub	c. 63320/ 63810	d. 0.50
<i>Subtotal</i>		<i>10.32</i>

Table 1
Vegetation Communities and Land Cover Types

General Vegetation Community/Land Cover Type	Code ¹	Acres
<i>Non-Native Communities and Land Covers</i>		
Eucalyptus woodland	79100	0.47
Agriculture /Intensive Agriculture	1800/18200	4.70
Orchard and vineyards	18100	1.95
Developed land	12000	6.99
Disturbed habitat	11300	57.28
Non-native grasslands	42200	16.11
<i>Subtotal</i>		<i>87.50</i>
<i>Total</i>		<i>1,988.72</i>

¹ Holland (1986) as modified by Oberbauer et al. (2008)

The site is largely dominated by undisturbed chaparral which covers 91% of the project site. Pockets of coastal sage scrub habitat are scattered throughout the chaparral and cover approximately 4% of the project site. In general, riparian habitats (mulefat scrub, oak riparian forest, southern willow scrub, and southern willow scrub/tamarisk) are located along Twin Oaks Road in the northwest, scattered within the old airplane landing strip in the north, directly north of the junction of Gist Road and Sarver Lane, and adjacent to I-15, with a few additional scattered locations throughout the site. The project site is composed of approximately 3% of developed and disturbed habitat. Disturbed habitat on site is mainly associated with the old quarry located in the northwestern section of the project site and also includes numerous dirt roads which traverse the site. Developed areas are primarily located in the southern portion of the project site and include paved roads and residential areas.

CAGN-specific communities are discussed below.

Coastal Sage – Chaparral Transition (37G00)

Coastal sage – chaparral transition habitats include a mix of sclerophyllous, woody chaparral species and drought-deciduous, malacophyllous sage scrub species (Oberbauer et al. 2008). Chamise and coastal sagebrush (*Artemisia californica*) are dominant in equal cover. Generally, laurel sumac (*Malosma laurina*), black sage (*Salvia mellifera*), and lemonade sumac (*Rhus integrifolia*) are more common in coastal sage scrub, while *Ceanothus* spp. and mission manzanita (*Xylococcus bicolora*) are more common in chaparrals. Areas mapped as coastal sage – chaparral transition within the project site are dominated by coastal sagebrush. Within the project site, there are 8.33 acres mapped east of Gist Road.

Diegan Coastal Sage Scrub (32500)

Diegan coastal sage scrub is the wide-spread coastal sage scrub in coastal southern California from Los Angeles into Baja California (Oberbauer et al. 2008). The community mostly consists of drought deciduous species such as California sagebrush, Eastern Mojave buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), laurel sumac, and black sage. Diegan coastal sage scrub is typical on low moisture-available sites, such as steep, xeric slopes or clay-rich soils that release stored water slowly. This community integrates with types of chaparral at higher elevations. Areas mapped as Diegan coastal sage scrub within the project site are dominated by California sagebrush. Within the project site, there are 63.18 acres mapped in five main locations along the length of the project site including north and adjacent to Mesa Road, along Gist Road (with a small patch occurring at the intersection of Gist Road and Country Garden Lane), along North Twin Oaks Valley Road, and two patches of habitat west of I-15 and east of the abandoned airstrip. Disturbed Diegan coastal sage scrub (4.52 acres) occurs in small patches along Mesa Rock Road, Gist Road, and within the old rock quarry.

Coastal Sage Scrub – Baccharis (32530)

Diegan coastal sage scrub – baccharis dominated is similar to Diegan Coastal Sage Scrub but dominated by Baccharis species (desert broom [*B. sarothroides*] and/or coyotebrush [*B. pilularis*])(Oberbauer et al. 2008). This community typically occurs on disturbed sites or those with nutrient-poor soils and often found within other forms of Diegan Coastal Sage Scrub and on upper terraces of river valleys. This community is distributed along coastal and foothills areas in San Diego County. Areas mapped as coastal sage scrub - baccharis within the project site are dominated by California sagebrush and coyotebrush. Within the project site, there are 1.65 acres mapped directly north of Mesa Rock Road adjacent to the I-15 and 0.32 acres of disturbed habitat mapped within the old rock quarry.

Flat-topped Buckwheat (32800)

Flat-topped buckwheat is a nearly monoculture community usually resulting from disturbance and transitioning to coastal sage scrub or chaparral Oberbauer et al. 2008. Species characteristic of this community, Eastern Mojave buckwheat and common deerweed (*Acmispon glaber*), appear over time. This community often occurs in disturbed areas in the coastal and foothill areas of San Diego County and often intergrades with Diegan coastal sage scrub. Areas mapped as flat-topped buckwheat within the project site are dominated by Eastern

Permit Coordinator

Subject: California Gnatcatcher Presence-Absence Survey Report For Newland Sierra Project, San Diego County, California, Permit # TE813545

Mojave buckwheat (*Eriogonum fasciculatum*). Within the project site, there are 1.74 acres mapped only within the old rock quarry.

METHODS

CAGN surveys were conducted during the CAGN breeding season between May 9 and June 7, 2013 (Table 1). Surveys were conducted by Dudek biologist Brock A. Ortega (TE813545). The surveys were conducted to determine CAGN occupancy of the study area.

Table 1
2013 Survey Conditions – Coastal California Gnatcatcher Survey

Survey Pass	Date	Biologist's Initials	Time	Survey Conditions (skies, wind, temp)
1	5/9/13	BAO	0600-1200	55-70 degrees Fahrenheit (°F); 80-20% cloud cover (cc), 0–0 mile per hour (mph) winds
2	5/18/13	BAO	0530-1200	100–50% cc, 58-70°F, 3-0 mph wind
3	5/25/13	BAO	0600-1200	100-50% cc, 57-71°F, 0–5 mph wind

The surveys consisted of walking meandering transects within suitable habitat to determine locations of occupied CAGN territories if any. All identified CAGN locations were mapped in the field onto a 200-scale (1 inch = 200 feet) aerial map of the site. While surveying, a tape recording of CAGN vocalizations was played approximately every 50–100 feet when in suitable habitat to induce CAGN responses. Once a CAGN was detected, tape playback stopped to minimize harassment. During monitoring of occupied CAGN territories, tape playback was restricted to pair detection when the birds could not otherwise be found, or areas where CAGN had not yet been found. If they were difficult to locate, then tape playback was used.

The surveys were generally conducted in conformance with current USFWS survey guidelines for the Natural Community Conservation Plan (NCCP) enrolled areas. Weather conditions, time of day, and season were appropriate for the detection of CAGN and other wildlife (Table 1).

RESULTS

One pair of gnatcatchers were observed during focused surveys. These occurred along the I-15 corridor. Previously noted location near the northern cul de sac portion of Mesa Rock Road was

Permit Coordinator

*Subject: California Gnatcatcher Presence-Absence Survey Report For Newland Sierra Project,
San Diego County, California, Permit # TE813545*

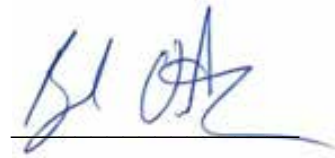
shown to be unoccupied. This is likely due to the obvious intense human pressure associated with the sage scrub. The area appears to be used as a dump and human restroom area. Much human presence occurs throughout all habitat as evidenced by the abundant paths and trash.

Eighty-four species of wildlife were observed during the surveys. A full list of wildlife species observed during the survey is provided in Appendix B. Brown-headed cowbirds were observed on two occasions.

Please feel free to contact biologist Brock Ortega at 760.479.4254 with questions or if you require additional information.

I certify that the information in this survey report and attached exhibits fully and accurately represent my work.

Sincerely,



Brock A. Ortega
Principal, Senior Wildlife Biologist
TE813545

REFERENCES

56 FR 47053–47060. Proposed rule: “Endangered and Threatened Wildlife and Plants: Proposed Rule to List the Coastal California Gnatcatcher as Endangered.”. 1991.

65 FR 63680. Final rule: “Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Coastal California Gnatcatcher.” 2000.

68 FR 20228–20312. Proposed rule: “Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*) and Determination of Distinct Vertebrate Segment for the California Gnatcatcher (*Polioptila californica*).” April 24, 2003.

69 FR 18515–18516. Proposed rule; reopening of public comment period: “Endangered and Threatened Wildlife and Plants; Reopening of the Public Comment Period for the

Permit Coordinator

Subject: California Gnatcatcher Presence-Absence Survey Report For Newland Sierra Project,
San Diego County, California, Permit # TE813545

Determination of Distinct Vertebrate Segment for the California Gnatcatcher (*Polioptila californica*).” April 8, 2004.

72 FR 72010–72213. “Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*).” 2007.

Atwood, J.L. 1990. *Status Review of the California Gnatcatcher* (*Polioptila californica*). Manomet, Massachusetts: Manomet Bird Observatory.

Atwood, J.L. 1993. “California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing.” In *Interface between Ecology and Land Development in California*, ed. J.E. Keeley, 149–169. Los Angeles, California: Southern California Academy of Sciences.

Atwood, J.L. and J.S. Bolsinger. 1992. “Elevational Distribution of California Gnatcatchers in the United States.” *Journal of Field Ornithology* 63:159–168.

Atwood, J.L., S.H. Tsai, C.H. Reynolds, J.C. Luttrell and M.R. Fugagli. 1998. Factors Affecting Estimates of California Gnatcatcher Territory Size. *Western Birds* 29:269–279.

Axelrod, D. 1978. “The Origin of Coastal Sage Vegetation, Alta and Baja California.” *American Journal of Botany* 65(10):1117–1131.

Bailey, E.A. and P.J. Mock. 1998. “Dispersal Capability of the California Gnatcatcher: A Landscape Analysis of Distribution Data.” *Western Birds* 29:351–360.

Barbour, M., and J. Major. 1977. *Terrestrial Vegetation of California*. New York, New York: John Wiley and Sons.

Bontrager, D.R. 1991. *Habitat Requirements, Home Range, and Breeding Biology of the California Gnatcatcher* (*Polioptila californica*) in South Orange County, California. Prepared for Santa Margarita Co.; Rancho Santa Margarita, California. April.

Braden, G.T., R.L. McKernan, and S.M. Powell. 1997. “Association of Within-Territory Vegetation Characteristics and Fitness Components of California Gnatcatchers.” *Auk* 114:601–609.

Permit Coordinator

Subject: California Gnatcatcher Presence-Absence Survey Report For Newland Sierra Project, San Diego County, California, Permit # TE813545

- Burger, J.C., M.A. Patten, J.T. Rotenberry, and R.A. Redak. 1999. "Foraging Ecology of the California Gnatcatcher Deduced from Fecal Samples." *Oecologia* 120:304–310.
- County of Riverside. 2008. "BIRDS." Volume 2 - The MSHCP Reference Document. *Western Riverside County Multiple Species Habitat Conservation Plan*. County of Riverside Transportation and Land Management Agency (TLMA). Accessed October 20, 2008, at: <http://www.rctlma.org/mshcp/volume2/birds.html>.
- Grishaver, M.A., P.J. Mock, and K.L. Preston. 1998. "Breeding Behavior of the California Gnatcatcher in Southwestern San Diego County, California." *Western Birds* 29:299–322.
- Kirkpatrick, J.B. and C.F. Hutchinson. 1977. "The Community Composition of California Coastal Sage Scrub." *Vegetation* 35:21–33.
- Klopatek, J., R. Oson, C. Emerson, and J. Jones. 1979. "Land Use Conflicts with Natural Vegetation in the United States." *Environmental Conservation* 6:191–199.
- Minnich, R.A. and R.J. Dezzani. 1998. "Historical Decline of Coastal Sage Scrub in the Riverside-Perris Plain, California." *Western Birds* 29:366–391.
- Mock, P.J. 2004. "California Gnatcatcher (*Poliophtila californica*)." California Partners in Flight Coastal Scrub and Chaparral Bird Conservation Plan. Accessed February 11, 2008.
- O'Leary, J.F. 1990. Post-Fire Diversity Patterns in Two Subassociations of California Coastal Sage Scrub. *Journal of Vegetation Science* 1:173–180.
- Preston, K.L., P.J. Mock, M.A. Grishaver, E.A. Bailey, and D.F. King. 1998. "California Gnatcatcher Territorial Behavior." *Western Birds* 29:242–257.
- Weaver, K.L. 1998. "Coastal Sage Scrub Variations of San Diego County and Their Influence on the Distribution of the California Gnatcatcher." *Western Birds* 29:392–405.
- Westman, W.E. 1981. "Diversity Relations and Succession in Californian Coastal Sage Scrub." *Ecology* 62:439–455.
- Westman, W.E. 1987. "Implications of Ecological Theory for Rare Plant Conservation in Coastal Sage Scrub." In *Proceedings of the Conference on Conservation and Management of Rare and Endangered Plants*, 133–140. Sacramento, California: California Native Plant Society.

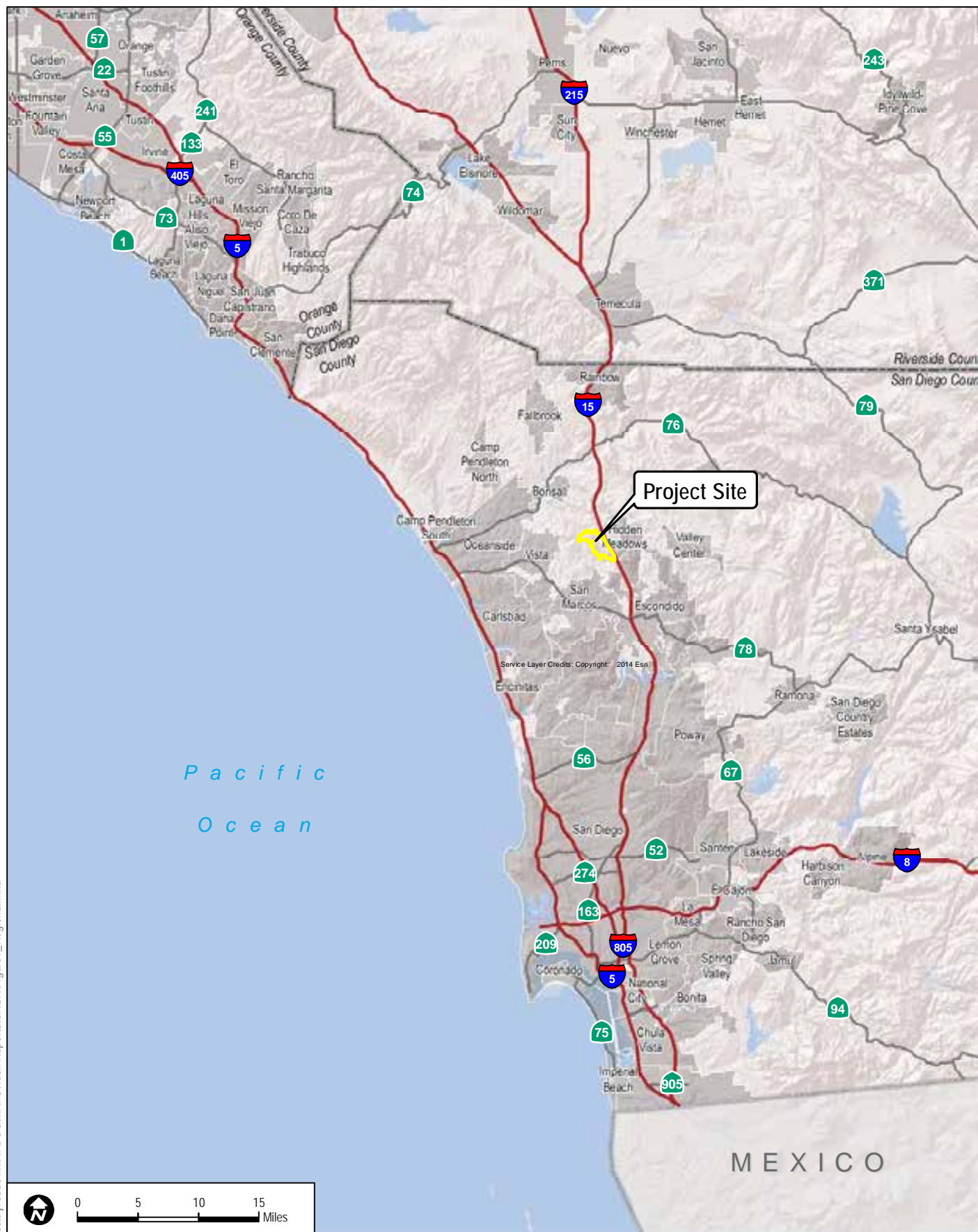
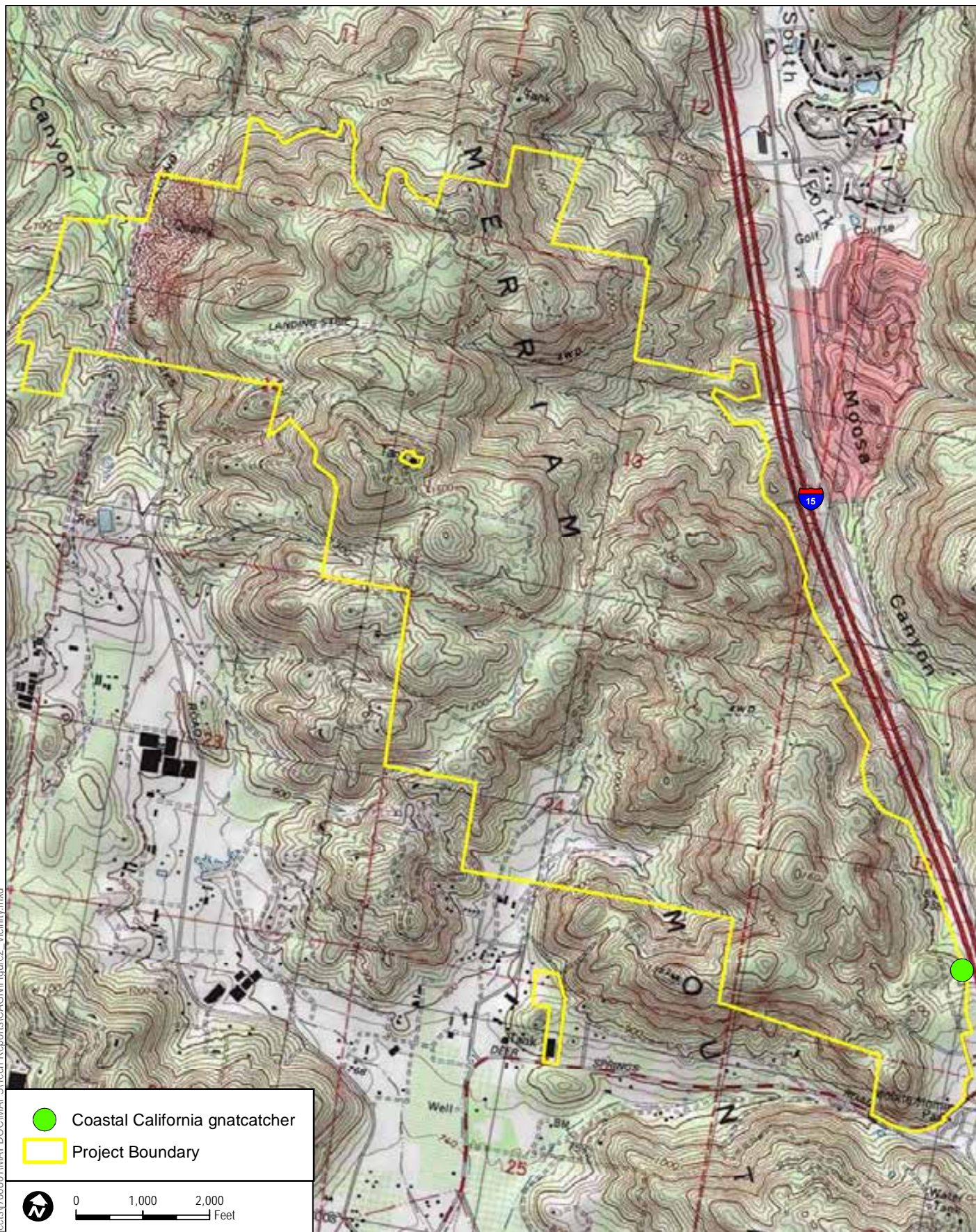


FIGURE 1
Regional Map

DUDEK

7608

Newland Sierra



DUDEK

7608

SOURCE: USGS 7.5-Minute Series San Marcos Quadrangle.

Newland Sierra

FIGURE 2
Vicinity Map

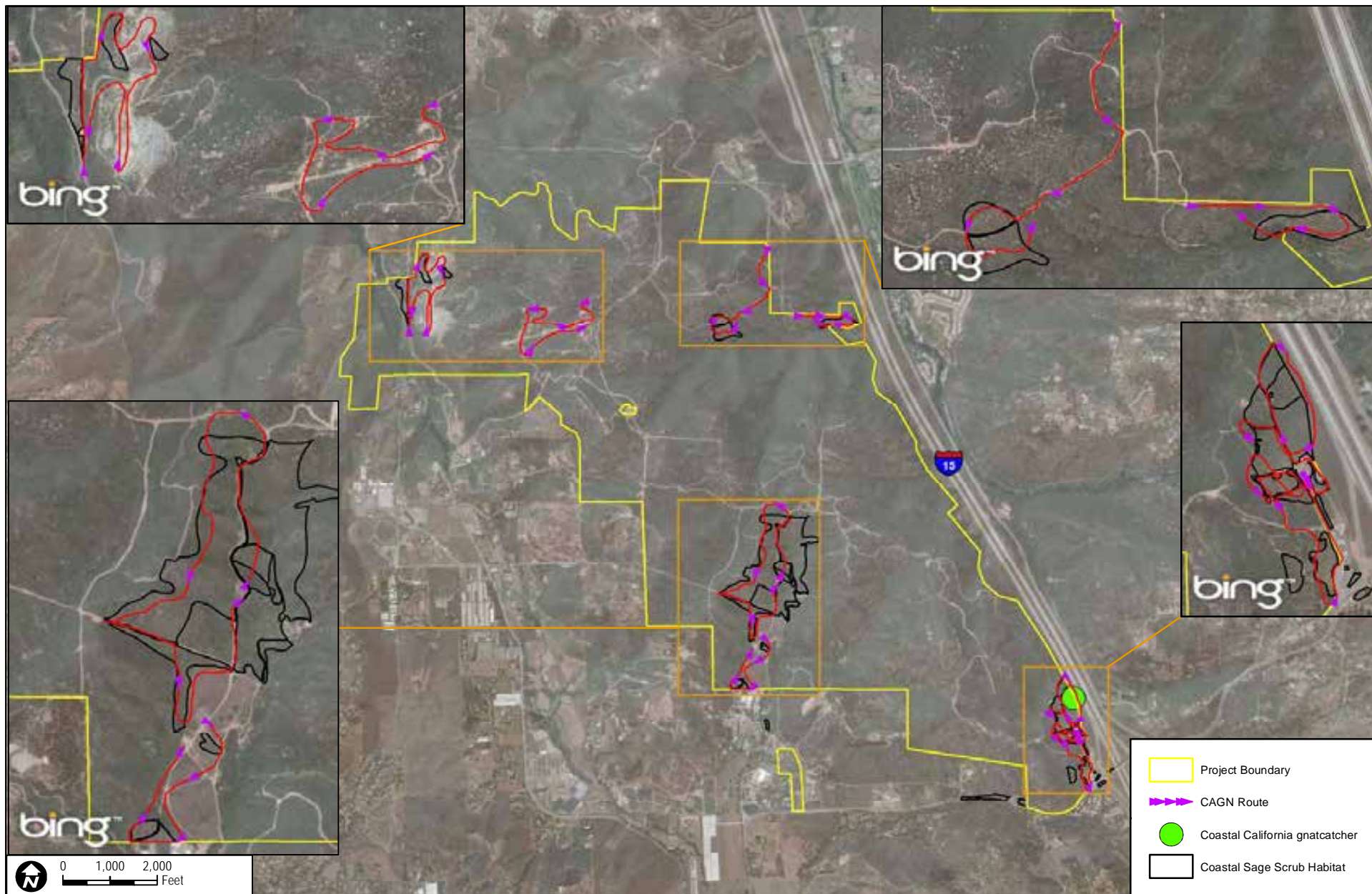


FIGURE 3
Biological Resources

DUDEK

SOURCE: Bing Aerial

7608-01

Newland Sierra Project Biological Resources Report

APPENDIX A

List of Wildlife Species

Observed or Detected at the Project Site

APPENDIX A

List of Wildlife Species Observed or Detected at the Project Site

WILDLIFE SPECIES – VERTEBRATES

AMPHIBIAN

HYLIDAE—TREEFROGS

Pseudacris hypochondriaca—Baja California treefrog

BUFONIDAE—TRUE TOADS

Anaxyrus boreas—Western toad

BIRD

ICTERIDAE—BLACKBIRDS

Agelaius phoeniceus—Red-winged blackbird

Euphagus cyanocephalus—Brewer's blackbird

Quiscalus mexicanus—Great-tailed grackle

Sturnella neglecta—Western meadowlark

* *Molothrus ater*—Brown-headed cowbird

EMBERIZIDAE—EMBERIZIDS

Melospiza melodia—Song sparrow

Melospiza crissalis—California towhee

Pipilo maculatus—Spotted towhee

Spizella atrogularis—Black-chinned sparrow

Zonotrichia leucophrys—White-crowned sparrow

TYRANNIDAE—TYRANT FLYCATCHERS

Myiarchus cinerascens—Ash-throated flycatcher

Sayornis nigricans—Black phoebe

Sayornis saya—Say's phoebe

Tyrannus vociferans—Cassin's kingbird

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

Selasphorus sasin—Allen's hummingbird

ODONTOPHORIDAE—NEW WORLD QUAIL

Callipepla californica—California quail

SYLVIIDAE—SYLVIID WARBLERS

Polioptila caerulea—Blue-gray gnatcatcher

Polioptila californica—California gnatcatcher

TYTONIDAE—BARN OWLS

Tyto alba—Barn owl

Appendix A (Continued)

STRIGIDAE—TYPICAL OWLS

Bubo virginianus—Great horned owl

COLUMBIDAE—PIGEONS AND DOVES

Zenaida macroura—Mourning dove

* *Columba livia*—Rock pigeon (rock dove)

PTILOGONATIDAE—SILKY-FLYCATCHERS

Phainopepla nitens—Phainopepla

STURNIDAE—STARLINGS

* *Sturnus vulgaris*—European starling

HIRUNDINIDAE—SWALLOWS

Hirundo rustica—Barn swallow

Petrochelidon pyrrhonota—Cliff swallow

APODIDAE—SWIFTS

Aeronautes saxatalis—White-throated swift

TURDIDAE—THRUSHES

Sialia mexicana—Western bluebird

Turdus migratorius—American robin

PARULIDAE—WOOD-WARBLERS

Geothlypis trichas—Common yellowthroat

Setophaga coronata—Yellow-rumped warbler

Setophaga petechia—Yellow warbler

Setophaga townsendi—Townsend's warbler

TROGLODYTIDAE—WRENS

Catherpes mexicanus—Canyon wren

Salpinctes obsoletus—Rock wren

Thryomanes bewickii—Bewick's wren

Troglodytes aedon—House wren

ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES

Accipiter cooperii—Cooper's hawk

Buteo jamaicensis—Red-tailed hawk

Buteo lineatus—Red-shouldered hawk

AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS

Psaltiriparus minimus—Bushtit

ANATIDAE—DUCKS, GEESE, AND SWANS

Anas platyrhynchos—Mallard

ARDEIDAE—HERONS, BITTERNS, AND ALLIES

Ardea alba—Great egret

Ardea herodias—Great blue heron

Egretta thula—Snowy egret

Appendix A (Continued)

CARDINALIDAE—CARDINALS AND ALLIES

Passerina caerulea—Blue grosbeak

Pheucticus melanocephalus—Black-headed grosbeak

CATHARTIDAE—CARDINALS AND ALLIES

Cathartes aura—Turkey vulture

CHARADRIIDAE—LAPWINGS AND PLOVERS

Charadrius vociferus—Killdeer

CORVIDAE—CROWS AND JAYS

Apelocoma californica—Western scrub-jay

Corvus brachyrhynchos—American crow

Corvus corax—Common raven

CUCULIDAE—CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus—Greater roadrunner

FALCONIDAE—CARACARAS AND FALCONS

Falco sparverius—American kestrel

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Carpodacus mexicanus—House finch

Spinus psaltria—Lesser goldfinch

Spinus tristis—American goldfinch

MIMIDAE—MOCKINGBIRDS AND THRASHERS

Mimus polyglottos—Northern mockingbird

Toxostoma redivivum—California thrasher

PARIDAE—CHICKADEES AND TITMICE

Baeolophus inornatus—Oak titmouse

PICIDAE—WOODPECKERS AND ALLIES

Melanerpes formicivorus—Acorn woodpecker

Picoides nuttallii—Nuttall's woodpecker

Colaptes auratus—Northern flicker

TIMALIIDAE—BABBLERS

Chamaea fasciata—Wrentit

MAMMAL

HETEROMYIDAE—POCKET MICE AND KANGAROO RATS

Dipodomys agilis—Agile kangaroo rat

CANIDAE—WOLVES AND FOXES

Canis latrans—Coyote

Urocyon cinereoargenteus—Gray fox

Appendix A (Continued)

FELIDAE—CATS

Lynx rufus—Bobcat

MUSTELIDAE—WEASELS, SKUNKS, AND OTTERS

Mustela frenata—Long-tailed weasel

LEPORIDAE—HARES AND RABBITS

Sylvilagus bachmani—Brush rabbit

GEOMYIDAE—POCKET GOPHERS

Thomomys bottae—Botta's pocket gopher

PROCYONIDAE—RACCOONS AND RELATIVES

Procyon lotor—Raccoon

MURIDAE—RATS AND MICE

Neotoma lepida—Desert woodrat

MEPHITIDAE—SKUNKS

Mephitis mephitis—Striped skunk

SCIURIDAE—SQUIRRELS

Spermophilus (Otospermophilus) beecheyi—California ground squirrel

REPTILE

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis—Western fence lizard

Uta stansburiana—Common side-blotched lizard

ANGUIDAE—ALLIGATOR LIZARDS

Elgaria multicarinata—Southern alligator lizard

COLUBRIDAE—COLUBRID SNAKES

Lampropeltis californiae—California kingsnake

Pituophis catenifer—Gophersnake

TEIIDAE—WHIPTAIL LIZARDS

Aspidoscelis tigris stejnegeri—Coastal whiptail

* Signifies introduced (non-native) species.

APPENDIX E

Draft Habitat Loss Permit Including 4(d) Findings



County of San Diego

MARK WARDLAW
DIRECTOR

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
www.sdcountry.ca.gov/pds

PLEASE NOTE THAT A FORMAL APPLICATION FOR A HABITAT LOSS PERMIT HAS NOT BEEN FILED AT THIS TIME. THE FOLLOWING IS A DRAFT FORM OF DECISION FOR A HABITAT LOSS PERMIT SHOWING THE FORMAT AND POSSIBLE CONDITIONS FOR A FUTURE HABITAT LOSS PERMIT. BECAUSE A FORMAL APPLICATION HAS NOT BEEN FILED, CERTAIN DATES, FINDINGS AND OTHER INFORMATION IS ABSENT FROM THE DRAFT FORM OF DECISION, THIS INFORMATION WILL BE INCLUDED IN THE FINAL FORM OF DECISION.

DATE (To Be Determined)

Newland Sierra LLC
Contact: Rita Brandin
9820 Towne Centre Drive, Suite 100
San Diego, California 92121

DRAFT Habitat Loss Permit

APPLICATION NUMBER: HLP XX-XXX

ASSOCIATED PERMIT(S): PDS2015-GPA-15-001, PDS2015-SP-15-001, PDS2015-REZ15-001, PDS2015-TM-5597, PDS2015-ER-15-08-001

NAME OF APPLICANT: Newland Sierra LLC

DESCRIPTION/LOCATION OF LOSS:

This document presents findings required for the issuance of a Habitat Loss Permit under the Endangered Species Act Section 4(d) rule for the California gnatcatcher (*Polioptila californica*). The action being addressed within these findings is the removal of coastal sage scrub associated with the Newland Sierra project within the County of San Diego. The project will result in the permanent direct impact to 54.5 acres of coastal sage scrub (CSS; all subtypes) onsite and one location of California gnatcatcher onsite. An additional 2.2 acres of CSS will be permanently impacted as a result of offsite improvements, for a total of 56.7 acres of CSS direct permanent impact.

The project is located on 1,985 acres north of the City of Escondido in the unincorporated area of San Diego County. It is in the North County Metropolitan Subarea, generally bound on the east by I-15, on the south by Deer Springs Road, on the west by Twin Oaks Valley Road, and by agriculture and estate development to the north. Thomas Brothers Coordinates: Page1088, Grid J/3.

Of the 1,985.6-acre Newland Sierra project site, the proposed project includes 1,209.1 acres of on-site open space and 776.5 acres of development and fuel management zones. The proposed project also includes off-site improvements and preservation of a 212-acre offsite mitigation parcel. The proposed development would include 7 neighborhoods with a total of 2,135 residential units. A community-wide linear park and trail network is proposed to connect the neighborhood parks and both community and open space trails. This network includes approximately 17 total linear miles of trails. The linear greenbelts may contain drainage conveyance creeks or swales to provide water quality treatment. Park amenities, open space for active recreation, neighborhood-scale parks and pocket parks, are proposed. Development of the seven planning areas would avoid the most sensitive biological, cultural, and topographical resources.

The proposed biological open space for the proposed project includes three large, interconnected, biological open space blocks within the project Site as well as a large off-site biological open space parcel. The proposed on-site open space design consists of two large continuous blocks of key biological resources situated within the northern half and along the eastern boundary of the project Site, and a large third block of open space in the center of the proposed development that would connect the abovementioned blocks of open space to open space located east and south of the project Site. These connected blocks of habitat create an on-site preserve of approximately 1,209.1 acres, which has been designated as a proposed hardline area in the draft North County Plan of the County of San Diego Multiple Species Conservation Program. Additionally, the project would preserve and manage a 212-acre off-site mitigation parcel, which has been identified as a conservation priority and is designated as a pre-approved mitigation area (PAMA) in the draft North County Plan.

Approximately 24% of the on-site biological open space is classified as Very High or High habitat value as indicated by the draft North County Plan Habitat Evaluation Map (2008), and another 63% of the on-site biological open space is classified as Moderate habitat value. The remainder of the on-site biological open space is classified as Low habitat value or developed land. Nearly the entire off-site mitigation parcel is classified as Very High habitat value by the draft North County Plan Habitat Evaluation Map.

The majority of the proposed open space design would be located within the northern half of the project site. The northern half of the site has the greatest potential to support wildlife due to the east-west connection with the San Marcos Mountains. In addition, the northern half of the project site is positioned to take maximum advantage of interconnected blocks of habitat. The northern portion of the proposed open space design provides a diverse representation of the natural and environmental conditions that occur within the larger project area. Open space would also be designated along the eastern boundary of the project site adjacent to I-15, which serves as important habitat for California gnatcatcher and many other wildlife species, as well as internal to the project site, which would enhance connectivity to the south. Draft North County Plan PAMA-designated lands are located to the west and north of the proposed on-site biological open space, which signifies that the lands adjacent to the proposed biological open space also support biological conservation value.

The proposed open space design includes a diverse array of environmental features including ridgetops, hill tops, and rocky outcrops. Although the majority of this area consists of dense chaparral, this area also incorporates a diverse representation of the vegetation communities that occur on site and in the vicinity including, riparian forest and scrub, coastal sage scrub, non-native grassland, and oak woodland. The two largest riparian areas located within the project Site would be included in the open space: the South Fork of Gopher Canyon and the South Fork of Moosa Canyon. The South Fork of Gopher Canyon, which is located along Twin Oaks Valley Road, holds water part of the year. The topography in this area of the open space is highly diverse and includes elevations from approximately 700 feet AMSL to 1,750 feet AMSL.

Overall, the entire open space area contains a diversity of environmental characteristics including representative populations of special-status plant and animal species observed on site; existing dirt trails and canyon bottoms currently used by wildlife for movement across the site; and the north-south-trending tributary to Gopher Canyon along Twin Oaks Valley Road, which provides linkage opportunities to the San Marcos Mountains.

The proposed project will result in both temporary and permanent impacts to coastal sage scrub. On-site impacts include 2.7 acres of temporary impacts and 54.5 acres of permanent impacts. Off-site impacts total 1.6 acre of temporary impacts and 2.2 acre permanent impacts. Coastal scrub impacts total 4.3 acres of temporary impacts and 56.7 acres of permanent impacts. Part of the northern portion of the project site is within federally designated critical habitat for the California gnatcatcher (2000); however, none of the CSS that would be impacted by the proposed project is within designated critical habitat.

Focused surveys for California gnatcatcher on the project site have resulted in the detection of two individuals.

Biological resources on the project site were evaluated in a Biological Resources Technical Report prepared by Dudek (2017). Native vegetation communities within the project site include coast live oak woodland, Diegan coastal sage scrub (including disturbed), coastal sage scrub *Baccharis* dominated (including disturbed), coastal sage scrub-chaparral transition, flat-topped buckwheat scrub (disturbed), granitic southern mixed chaparral (including disturbed), mafic southern mixed chaparral, scrub oak chaparral, freshwater marsh, mulefat scrub, southern coast live oak riparian forest, southern willow scrub, and southern willow scrub/tamarisk scrub. Three non-native vegetation communities, eucalyptus woodland, non-native woodland and non-native grassland, occurs within the project area. Four other land cover types occur within the project area: intensive agriculture, orchards and vineyards, urban/developed, and disturbed habitat.

Ten wildlife species and four plant species on the draft North County Plan Covered Species list occur or have a likelihood of using the project site, including western spadefoot (*Spea hammondi*), Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*), red-diamondback rattlesnake (*Crotalus ruber*), Blainville's horned lizard (*Phrynosoma blainvillei*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) Bell's sage sparrow (*Artemisiospiza [Amphispiza] belli belli*), northern harrier (*Circus cyaneus hudsonius*), California gnatcatcher, pallid bat (*Antrozous pallidus*), and mountain lion (*Felis concolor*), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), sticky dudleya (*Dudleya viscida*), felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*) and Engelmann oak (*Quercus engelmannii*).

The relevant proposed mitigation measures for biological resources are provided below under Conditions of Approval.

The NCCP Flowchart indicates the CSS habitat is “Intermediate Value for Long-Term Conservation” (see NCCP Flowchart section below for additional information). Mitigation ratios are listed in Table 1. With the above-mentioned mitigation, all impacts associated with the development would be mitigated to a level below significance. The proposed project is in conformance with all standards and guidelines outlined in the NCCP Process Guidelines.

Table 4-1
Summary of Impacts, Mitigation, and Open Space for
Vegetation Communities and Jurisdictional Areas (Acres)

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts ¹	Total Off-Site Impacts ²	Mitigation Ratio	Mitigation Required	On-Site Open Space ³	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
<i>Coastal Scrub</i>								
Diegan coastal sage scrub (including disturbed)*	68.2	45.6	0.5	2:1	92.2	22.6	106.4	36.8
Coastal sage scrub – Baccharis dominated (including disturbed)	2.0	1.5	—	2:1	3.0	0.5	—	(2.5)
Flat-topped buckwheat – disturbed*	1.7	0	—	2:1	0	1.7	—	1.7
Coastal sage – chaparral transition*	7.8	7.4	1.7	2:1	18.2	0.4	—	(17.8)
<i>Subtotal</i>	<i>79.7</i>	<i>54.5</i>	<i>2.2</i>	<i>N/A</i>	<i>113</i>	<i>25.2</i>	<i>106.4</i>	<i>18.2</i>
<i>Chaparral</i>								
Chamise chaparral ^{4*}	—	—	—	—	—	—	19.7	19.7
Granitic southern mixed chaparral (including disturbed)*	1,700.7	626.9	6.3	0.5:1	316.6	1,073.8	—	757.2
Mafic southern mixed chaparral*	58.8	0.8	—	3:1	2.4	58.0	—	55.6
Scrub oak chaparral*	44.3	39.2	—	0.5:1	19.6	5.1	—	(14.5)
<i>Subtotal</i>	<i>1,803.8</i>	<i>666.9</i>	<i>6.3</i>	<i>N/A</i>	<i>338.3</i>	<i>1,136.9</i>	<i>19.7</i>	<i>818.0</i>
<i>Woodland</i>								
Coast live oak woodland*	9.1	6.5	2.8	3:1	27.9	2.6	—	(25.3)
Engelmann Oak Woodland - Open ^{4*}	—	—	—	N/A	—	—	29.0	29.0
<i>Subtotal</i>	<i>9.1</i>	<i>6.5</i>	<i>2.8</i>	<i>N/A</i>	<i>26.1</i>	<i>2.6</i>	<i>29.0</i>	<i>3.7</i>
<i>Riparian</i>								
Freshwater marsh*	0.1	—	—	3:1	—	0.1	—	0.1
Southern coast live oak riparian forest*	5.2	1.9	0.8	3:1	8.1	3.3	—	(4.8)
Mulefat scrub*	0.2	0.1	0.03	3:1	0.4	0.1	—	(0.3)
Southern sycamore-alder riparian woodland ^{4*}	—	—	—	—	—	—	7.9	7.9
Southern willow scrub*	2.5	0.1	0.5	3:1	1.8	2.4	—	0.6
Southern willow scrub/tamarisk scrub*	0.3	—	—	3:1	—	0.3	—	0.3
Arundo-dominated riparian	—	—	0.1	3:1	0.3	—	—	(0.3)

Table 4-1
Summary of Impacts, Mitigation, and Open Space for
Vegetation Communities and Jurisdictional Areas (Acres)

Habitat Types/Vegetation Communities	On-Site Existing Acreage	Total On-Site Impacts ¹	Total Off-Site Impacts ²	Mitigation Ratio	Mitigation Required	On-Site Open Space ³	Off-Site Mitigation Area	Mitigation Excess/ (Deficit)
<i>Subtotal</i>	8.3	2.1	1.4	N/A	10.3	6.2	7.9	3.5
<i>Grassland</i>								
Valley needlegrass grassland ^{4*}	—	—	—	—	—	—	8.5	8.5
Non-native grassland*	16.1	15.3	2.6	0.5:1	9.0	0.8	33.8	25.7
<i>Subtotal</i>	16.1	15.3	2.6	N/A	9.0	0.8	42.3	34.2
<i>Non-native Communities and Land Covers</i>								
Agriculture	—	—	2.0	None	—	—	—	(2.0)
Eucalyptus woodland	0.5	—	2.0	None	—	0.5	3.2	1.7
Intensive agriculture	<0.0	<0.0	1.4	None	—	—	—	(1.4)
Extensive agriculture	—	—	4.5	None	—	—	—	(4.5)
Orchard and vineyards	2.0	1.0	1.9	None	—	1.0	—	(1.9)
Urban/developed	9.2	9.2	40.8	None	—	—	0.1	(49.9)
Disturbed habitat	57.0	21.0	5.1	None	—	36.0	3.3	13.2
Non-native woodland	—	—	0.2	None	—	—	—	(0.2)
<i>Subtotal</i>	68.7	31.2	57.9	—	0	37.5	6.6	(35.5)
Total¹	1,985.6	776.6	71.7	N/A	497.3	1,209.1	211.8	923.6
<i>Other</i>								
RPO wetland buffer ⁵	30.2	8.7	3.9	N/A	N/A	N/A	—	N/A
Oak Root Zone ⁵	32.9	11.2	8.4	3:1	58.8	21.7	—	-18.9
Non-wetland waters (ephemeral and intermittent) ⁵	5.33	1.41	0.16	1:1	1.59	3.92	—	N/A

¹ Totals may not add due to rounding.

² This includes impacts for Deer Springs Road Option B and all other off-site impacts.

³ The open space acreage includes the on-site temporary impacts since they will be restored and conserved in permanent open space.

⁴ These communities occur in the off-site Ramona mitigation site and are described in Appendix J.

⁵ These features are overlays to the vegetation community layer and are not counted toward the total existing acreage.

* Considered special-status by the County (2010b).

3:1 for riparian areas includes a 1:1 creation and 2:1 enhancement requirement.

DECISION:

The Director of Planning & Development Services has approved your application for a HABITAT LOSS PERMIT. This Habitat Loss Permit approval does not become final until both the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) concur with the Director's approval, by either of the following:

1. Concurrence implied by allowing a 30-day period, initiated by their receipt of this decision, to lapse without presenting written notification to the County that the decision is inconsistent with the Southern California Coastal Sage Scrub (CSS) Natural Community Conservation Planning (NCCP) Process Guidelines (CDFW, November 1993) or any approved subregional mitigation guidelines; or
2. Granting concurrence through written notification to the County prior to the conclusion of the 30-day period, initiated by their receipt of this decision, that the project is consistent

with the Southern California CSS NCCP Process Guidelines or any approved subregional mitigation guidelines.

Pending the issuance of an associated Grading Permit, Clearing Permit or Improvement Plan from the County of San Diego, this Habitat Loss Permit allows for the loss of the above-described coastal sage scrub habitat (see attached Habitat Loss Exhibit) and incidental take of the California gnatcatcher for a period of one calendar year commencing the day concurrence is given by both the USFWS and CDFW. If the loss of habitat, as authorized by this Habitat Loss Permit, has not occurred within this one-year period, this Habitat Loss Permit and the authorization for the loss of coastal sage scrub habitat expires.

This Habitat Loss Permit cannot be relied upon for the clearing, grading or removal of any vegetation until a valid Grading Permit, Clearing Permit or Improvement Plan has been issued from the County of San Diego authorizing such vegetation removal. Furthermore, use and reliance upon this Habitat Loss Permit cannot occur until all of the requirements as specified within the “Conditions of Approval” section of this permit have been satisfied.

CONDITIONS OF APPROVAL:

The following conditions are being placed on the Implementing Tentative Map (PDS2015-TM-5597). Future discretionary permits will be required for the proposed project. The conditions applicable to those actions are outlined in the MMRP found in the Environmental Impact Report (EIR) and referenced in the Specific Plan. For the final Habitat Loss Permit, the list of conditions will be modified to require satisfaction of all conditions prior to use and reliance on the HLP.

APPROVAL OF MAP: The conditions shall be complied with before a Final Map is approved by the Board of Supervisors and filed with the County Recorder of San Diego County (and, where specifically, indicated, shall also be complied with prior to approval of any plans, and issuance of any grading or other permits as specified):

Prior to approval of grading permits or improvement plans for applicable units or phases, and prior to approval of the Final Map for applicable units or phases of grading, the applicant shall incorporate the following mitigation measures as described in the Biological Resources Report for the Newland Sierra Project (Dudek 2017):

M-BIO-1 CONSTRUCTION MONITORING: To prevent inadvertent disturbance to areas outside the limits of grading, all grading shall be monitored by a biologist. A “Project Biologist” approved by the County of San Diego (County) shall be contracted to perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities.

The following shall be completed:

1. The Project Biologist shall perform the monitoring duties before, during, and after construction pursuant to the most current version of the *County of San Diego Report Format and Content Requirements, Biological Resources*. The contract provided to the County shall include an agreement that this will be completed, and a Memorandum of Understanding (MOU) between the

biological consulting company and the County shall be executed. The contract shall include a cost estimate for the monitoring work and reporting. In addition to performing monitoring duties pursuant to the most current version of the *County of San Diego Report Format and Content Requirements, Biological Resources*, the Project Biologist shall perform the following duties:

- a. Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities with other mitigation requirements (e.g., seasonal surveys for nesting birds).
- b. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading. Perform weekly inspection of fencing and erosion control measures (daily during rain events) near proposed preservation areas and report deficiencies immediately to the Department of Public Works (DPW) Construction Inspector.
- c. Discuss procedures/training for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
- d. Review and/or designate the construction area in the field with the contractor in accordance with the final grading plan prior to clearing, grubbing, or grading.
- e. Conduct a field review of the staking to be set by the surveyor, designating the limits of all construction activity prior to clearing, grubbing, or grading.
- f. Supervise and monitor vegetation clearing, grubbing, and grading to ensure against direct and indirect impacts to biological resources that are intended to be protected and preserved.
- g. Flush special-status and other species (i.e., avian and other mobile species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities.
- h. Verify that the construction site is implementing the following storm water pollution prevention plan best management practices: dust-control fencing, removal of construction debris and a clean work area, covered trash receptacles that are animal-proof and weather-proof, prohibition of pets on the construction site, and a speed limit of 15 miles per hour during the daylight and 10 miles per hour during dark hours.
- i. Periodically monitor incoming landscape products for compliance with the prohibition on non-native invasive species and the requirement for landscaping composed of native species that do not require high irrigation rates.

- j. Periodically monitor the construction site in accordance with the project's fugitive dust control plan in compliance with San Diego County Air Pollution Control District's regulations to reduce particulate matter less than 10 microns in diameter (PM₁₀) and fine particulate matter less than 2.5 microns in diameter (PM_{2.5}) emissions during construction (refer to the Air Quality Technical Report). Periodically monitor the construction site to see that dust is minimized according to the fugitive dust control plan and that manufactured slopes are revegetated as soon as possible.
- k. Periodically monitor the construction site to see that artificial security light fixtures are directed away from open space and are shielded.
- l. Oversee the construction site so that cover and/or escape routes for wildlife from excavated areas are provided on a daily basis. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and prior to sealing the exposed area) by a qualified biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.
- m. Stop or divert all work when deficiencies require mediation and notify DPW Construction Inspector and the County Construction Inspector within 24 hours; produce periodic (monthly during grading) and final reports and submit to the Wildlife Agencies and the PDS (final report will release bond);
- n. Confer with the Wildlife Agencies and the County Construction Inspector within 24 hours any time protected habitat or gnatcatchers or other special-status species are being affected by construction.
- o. Keep daily monitoring notes for the duration of grading for submittal in a final report to substantiate the biological supervision of the grading activities and the protection of the biological resources.

The cost estimate of the monitoring (provided in the contract) shall be added to the grading bonds that will be posted with the DPW, or bond separately with the PDS. The bond for monitoring shall be released upon the acceptance of the monitoring report for each Final Map.

Documentation: The applicant shall submit the monitoring contract, cost estimate, and MOU to the PDS for review and approval. The applicant shall provide verification that the cost of the monitoring has been added to the grading bond.

Timing: Monitoring shall be performed throughout the duration of grading; if this project includes more than one Final Map, each shall have separate monitoring contracts and documentation.

Monitoring: The PDS shall review the contract, MOU, and cost estimate or separate bonds for compliance with this condition. The cost estimate shall be forwarded to the project manager for inclusion in the grading bond cost estimate and grading bonds. The DPW shall add the cost of the monitoring to the grading bond costs.

M-BIO-2 CONSTRUCTION FENCING: To prevent inadvertent disturbance to sensitive vegetation and species, temporary construction fencing shall be installed. The temporary fencing shall be placed to confine project activities to the areas approved for construction activities and to protect from inadvertent disturbance all open space easements and preserve areas that do not allow grading, brushing, or clearing. Temporary fencing shall also be required in all locations of the project where proposed grading or clearing is within 100 feet of open space or preserve boundaries. The placement of such fencing shall be approved by the Department of Planning & Development Services (PDS), Permit Compliance Section. Upon approval, the fencing shall remain in place until the conclusion of grading activities, after which the fencing shall be removed.

Documentation: The applicant shall provide evidence that the fencing has been installed and have a California licensed surveyor certify that the fencing is located on the boundary of the open space easement(s). The applicant shall submit the certification letter to PDS for approval.

Timing: Prior to the preconstruction conference for each Final Map area, and prior to any clearing, grubbing, trenching, grading, or land disturbances, the fencing shall be installed, and shall remain for the duration of grading and clearing. This may be done in association with grading and improvement plans for each Final Map.

Monitoring: The County of San Diego Construction Inspector shall attend either the preconstruction conference and approve the installation of the temporary fencing, or review the certification and pictures provided by the applicant.

M-BIO-3 MONITORING REPORT: To ensure that the biological monitoring occurred during the grading phase of the project, a final biological monitoring report shall be prepared. The report shall substantiate the supervision of the grading activities and state that grading and construction activities did not impact any additional areas or any other sensitive biological resources. The report shall conform to the County of San Diego *Report Format and Content Requirements, Biological Resources*, and include the following items:

1. Photos of the temporary fencing that was installed during the trenching, grading, and clearing activities.
2. Monitoring logs showing the date and time that the monitor was on site.

3. Photos of the site after the grading and clearing activities.
4. Lists of species observed with special-status species mapped.

Documentation: The Project Biologist shall prepare the final report and submit it to the Department of Planning & Development Services (PDS) for review and approval.

Timing: Upon approval of each Final Map, and prior to approval of the associated grading and improvement plans, the monitoring contract and bonding shall be submitted and complete. Upon completion of grading activities for each Final Map, and prior to rough grading final inspection (Grading Ordinance Section 87.421.a.2), the final report shall be completed and accepted by the PDS.

Monitoring: The PDS shall review the final report for compliance with this condition and the report format guidelines. Upon approval of the report, the PDS shall inform the Department of Public Works (DPW) that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then PDS shall inform DPW to release the bond back to the applicant.

M-BIO-4 INVASIVE SPECIES PROHIBITION: The Department of Planning & Development Services (PDS) Landscape Architect shall require that all final landscape plans comply with the following: (1) no invasive plant species as included on the most recent version of the California Invasive Plant Council's California Invasive Plant Inventory for the project region shall be included, and (2) the plant palette shall be composed of native species that do not require high irrigation rates. The Project Biologist shall periodically check landscape products for compliance with this requirement.

Monitoring: The PDS shall approve the final landscape plans; M-BIO-1 includes periodic monitoring of landscaping products brought to the project Site.

M-BIO-5 NESTING BIRD MANAGEMENT, MONITORING, AND REPORTING PLAN: To avoid impacts to nesting migratory birds and raptors and other nesting birds, which are a sensitive biological resource pursuant to CEQA, the MBTA and Fish and Game Code, breeding season avoidance shall be implemented on all plans.

DESCRIPTION OF REQUIREMENT: There shall be no brushing, clearing and/or grading allowed during the breeding season of migratory birds or raptors (between January 15 and August 31) or coastal California gnatcatcher (between February 15–August 15). The Director of PDS [PDS, PCC] may waive this condition, through written concurrence from the USFWS and the CDFW (i.e., Wildlife Agencies), provided that no nesting or breeding birds are present within 300 feet of the brushing, clearing or grading (500 feet for raptors) based on a pre-construction survey conducted by a County-approved biological consultant within seven days prior to the proposed start of clearing/grading. Prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction, compliance with this condition is mandatory unless the requirement is waived by the County upon receipt of concurrence from the Wildlife Agencies. If construction work must occur during the avian breeding season (February 1 through August 31, and as early as January 1 for some raptors), the applicant shall prepare a Nesting Bird Management, Monitoring, and Reporting Plan (NBMMRP) to address avoidance of impacts to nesting birds. This plan shall be designed in coordination with the Wildlife Agencies. To avoid impacts to nesting birds the applicant shall:

1. Prepare an NBMMRP that shall include the following: nest survey protocols describing the nest survey methodologies; a management plan describing the methods to be used to avoid nesting birds and their nests, eggs, and chicks; a monitoring and reporting plan detailing the information to be collected for incorporation into a regular Nest Monitoring Log with sufficient details to monitor the applicant's compliance with California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513; guidance for the monitoring biologists on reducing stress and harm to the nesting birds as a result of monitoring activities, including instructions on frequency of monitoring visits and distance to keep from the nest; the schedule for the submittal (usually weekly) of the Nest Monitoring Log; standard buffer widths deemed adequate to avoid or minimize significant project-related edge effects (disturbance) on nesting birds and their nests, eggs, and chicks; a detailed explanation of how the buffer widths were determined; and measures the applicant will implement to preclude birds from using project-related structures (e.g., construction equipment, facilities, or materials) for nesting.
2. Conduct preconstruction nesting bird surveys within 72 hours of construction-related activities and implement appropriate avoidance measures for identified nesting birds.
3. If feasible, conduct surveys beyond the project Site to determine presence of nesting birds that the project activities may affect—300 feet for passerine birds and 500 feet for raptors and coastal California gnatcatchers. The survey protocols shall include a detailed description of methodologies used by CDFW-approved avian biologists to search for nests and describe avian behaviors that indicate active nests. The protocols shall include the size of the site being surveyed, method of search, and behavior that indicates active nests.

4. Include each nest identified on the project Site in the Nest Monitoring Logs. The Nest Monitoring Logs shall be updated daily and submitted to CDFW weekly. Since the purpose of the Nest Monitoring Logs is to allow CDFW to track compliance, the logs shall include information necessary to allow comparison between nests protected by standard buffer widths recommended for the project (300 or 500 feet) and nests with buffer widths that were reduced by encroachment of project-related activities. The Nest Monitoring Logs shall provide a summary of each nest identified, including the species, status of the nest, buffer information, and fledge or failure data. The Nest Monitoring Logs shall allow for tracking the success and failure of the buffers, and shall provide data on the adequacy of the buffers for certain species.
5. Rely on its avian biologists to coordinate with CDFW and USFWS to determine the appropriate standard buffer widths for nests within the project corridor/footprint to employ based on the sensitivity levels of specific species or guilds of avian species. The determination of the standard buffer widths shall be Site- and species-/guild-specific and data-driven, and not based on generalized assumptions regarding all nesting birds. Determination of the buffer widths shall consider the following factors:
 - a. Nesting chronologies
 - b. Geographic location
 - c. Existing ambient conditions (human activity within line of sight—cars, bikes, pedestrians, dogs, noise)
 - d. Type and extent of disturbance (e.g., noise levels and quality—punctuated, continual, ground vibrations; blasting-related vibrations proximate to tern colonies are known to make the ground-nesting birds flush the nests)
 - e. Visibility of disturbance
 - f. Duration and timing of disturbance
 - g. Influence of other environmental factors
 - h. Species' site-specific level of habituation to the disturbance
 - i. Construction-related noise levels in coastal California gnatcatcher occupied habitat within 500 feet of construction activity would not exceed 60 dBA Leq or pre-construction ambient noise levels, whichever is greater. Project construction within 500 feet of occupied habitat would occur outside of the breeding season if possible. If necessary, construction activities during the breeding season would be managed to limit noise levels in occupied habitat within 500 feet of the project or noise attenuation measures, such as temporary sound walls, would be implemented to reduce noise levels below 60 dBA Leq or below existing ambient noise levels, whichever is greater.

6. Apply the standard buffer widths to avoid the potential for project-related nest abandonment and failure of fledging, and minimize any disturbance to nesting behavior. If project activities cause or contribute to a bird being flushed from a nest, the buffer must be widened.
7. Avoidance and buffering of nests in the process of being built on construction equipment or developed structures shall not be necessary. Additionally, although direct impacts to nests with eggs or chicks shall not be allowed, no buffer requirements shall apply.

Documentation: The applicant shall submit the NBMMRP for review and approval by the County of San Diego (County) and the Wildlife Agencies.

Timing: The NBMMRP shall be submitted and approved prior to approval of the first Final Map. No grading shall occur until concurrence is received from the County and the Wildlife Agencies. The Nest Monitoring Logs shall be submitted to the County and the Wildlife Agencies prior to the preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances, and throughout the duration of the grading and construction. Compliance with this condition is mandatory unless the requirement is waived by the County upon receipt of concurrence from the Wildlife Agencies.

Monitoring: The County Construction Inspector shall not allow any grading during the specified dates, unless a concurrence from the Wildlife Agencies is received and reviewed by the Department of Planning & Development Services.

M-BIO-6 REVEGETATION PLAN: To compensate for temporary impacts to special-status vegetation and wildlife habitat impacts, a final Revegetation Plan shall be submitted and approved for temporary impacts from grading to areas within the preserve and outside of the LBZ easement and FMZ. The revegetation plan shall be in compliance with the conceptual restoration plan (Appendix I of the Biological Resources Technical Report (Appendix H)), and provide replacement of comparable native vegetation. The final revegetation plan shall include, at a minimum, the implementation strategy; appropriate seed/source materials; appropriate planting method; an irrigation plan; quantitative and qualitative success criteria; a maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The revegetation plan shall conform to the most current version of the County of San Diego (County) *Report Format and Content Requirements for Revegetation Plans*. To ensure project completion and success of the revegetation plan, a surety shall be provided and an agreement shall be executed with the County and consist of a letter of credit, bond, or cash for 100 percent of the estimated costs associated with implementation of the revegetation plan and a 10 percent cash deposit of the cost of all improvements (no less than \$3,000; no more than \$30,000). The surety shall be released upon completion of the revegetation plan, provided the installed vegetation is in a healthy condition and meets the plan's success criteria.

Documentation: The applicant shall prepare the revegetation plan and submit it for review with the applicable review fees and deposits.

Timing: Prior to the approval of the first associated map and prior to the approval of the first associated plan or issuance of the first associated permit, the revegetation plan shall be approved by the Department of Planning & Development Services (PDS).

Monitoring: The PDS Landscape Architect shall review the revegetation plan for conformance with this condition and the County's *Report Format and Content Requirements for Revegetation Plans*. Upon approval of the revegetation plan, a Director's Decision of approval shall be issued to the applicant, with the request for compliance with a Secured Agreement for implementation of the revegetation plan. Upon receipt of the compliance letter, the PDS Landscape Architect shall sign the Agreement for the Director of PDS and ensure that the cash deposit is collected. Upon acceptance of the Agreement, securities, and cash deposit, the PDS Landscape Architect shall provide a confirmation letter acknowledging acceptance of the securities.

M-BIO-7 LIGHTING PLAN: All artificial outdoor light fixtures shall be installed so they are directed away from open space and are shielded in accordance with the project's lighting plan standards as outlined in the Specific Plan for the project. Light fixtures shall be installed in conformance with the County of San Diego's (County) Light Pollution Code, Building Code, Electrical Code, and lighting requirements specified in Section 6324 (Lighting Permitted in Required Yards) and Section 6326 (Lighting Not in Required Yards) of the Zoning Ordinance, along with any other related state and federal regulations such as California Title 24.

Documentation: The applicant shall submit building plans to the County for review in compliance of the above regulations.

Timing: Prior to the approval of all building permits.

Monitoring: The County building inspector shall review structures for compliance with this condition. During construction, the Project Biologist shall review lighting for compliance with this measure as part of the construction monitoring requirement.

M-BIO-8A PRESERVE: The applicant shall preserve in permanent open space approximately 1,420.9 acres of native habitats, generally consistent with the assemblage of vegetation communities impacted by the project in a proposed on-site and off-site open space preserve area (see Table 2.4-27) (see Appendix K to the BTR for the off-site mitigation site description). This shall include preservation of 1,420.9 acres of native habitats to mitigate for project impacts to 760.6 acres of special-status vegetation communities (both upland and riparian), thereby preserving compensatory habitat that provides equal or greater benefits to plant and wildlife species. Proposed on-site open space preserve has already been evaluated and may be used to satisfy this requirement through M-BIO-8B through M-BIO-8E.

Documentation: An RMP shall be prepared per M-BIO-8D and an application for the RMP shall be submitted to the PDS.

Timing: Prior to issuance of a grading permit, the mitigation shall occur.

Monitoring: The PDS shall accept an application for an RMP, and PDS and DPR shall review the RMP submittal for compliance with this condition and the RMP Guidelines.

M-BIO-8B BIOLOGICAL OPEN SPACE EASEMENT. The County of San Diego (County) shall be granted a biological open space easement, as shown on the approved Tentative Map for the on-site open space and a separate open space easement exhibit for the off-site biological open space. These easements shall be for the protection of biological resources and all of the following shall be prohibited on any portion of the land subject to said easement: grading; excavating; placing soil, sand, rock, gravel, or other material; clearing vegetation; constructing, erecting, or placing any building or structure; vehicular activities; dumping trash; or using for any purpose other than as open space. Granting this open space shall authorize the County and its agents to periodically access the land to perform management and monitoring activities for species and habitat conservation. The only exception(s) to this prohibition are the following:

1. Selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. Although clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the applicable fire code of the fire authority having jurisdiction and the Memorandum of Understanding dated February 26, 1997, between the Wildlife Agencies and the fire districts and any subsequent amendments thereto.
2. Activities conducted pursuant to a revegetation or habitat management plan approved by the Director of the Department of Planning & Development Services, Department of Parks and Recreation, and Department of Public Works
3. Vegetation removal or application of chemicals for vector-control purposes where expressly required by written order of the County of San Diego Department of Environmental Health.
4. Uses, activities, and placement of structures expressly permitted and shown on the plot plan.
5. Construction, use, and maintenance of multi-use, non-motorized trails per the specific plan (Figure 1-3, Parks and Trails Plan).

Documentation: The applicant shall show the on-site open space easement on the Final Map and open space easement exhibit with the appropriate granting language on the title sheet concurrent with Final Map review, then submit them for preparation and recordation with the [DGS, RP] and pay all applicable fees associated with preparation of the documents. For the off-site open space an easement will be dedicated to the County through a separate document.

Timing: Prior to the approval of each Final Map, and on the associated map and prior to the approval of any associated plan and issuance of any associated permit, the on-site and off-site biological open space easements shall be recorded.

Monitoring: For recordation on the map, the [PDS, LDR] shall route the Final Map to [PDS, PCC] for approval prior to map recordation. The [PDS, PCC] shall preapprove the language and estimated location of the easements prior to recordation. The [PDS LDR] shall satisfy the condition after map recordation.

M-BIO-8C LIMITED BUILDING ZONE EASEMENT: A Limited Building Zone Easement shall be granted to prohibit the building of structures that would require vegetation clearing within the protected biological open space for fuel management purposes. The easement must extend at least 100 feet from the Biological Open Space boundary.

DESCRIPTION OF REQUIREMENT: Grant to the County of San Diego a LBZ Easement as shown on the Tentative Map. The purpose of this easement is to limit the need to clear or modify vegetation for fire protection purposes within the adjacent biological open space easement and prohibit the construction or placement of any structure that would require vegetation clearing within the protected biological open space for fuel management purposes. The only exceptions to this prohibition are Structures that do not require fuel modification/vegetation management.

Documentation: The applicant shall show the easement on the Final Map with the appropriate granting language on the title sheet concurrent with Final Map review, then submit them for preparation and recordation with the [DGS, RP] and pay all applicable fees associated with preparation of the documents.

Timing: Prior to the approval of each Final Map, and on the associated map and prior to the approval of any associated plan and issuance of any associated permit, the Limited Building Zone easements shall be recorded.

Monitoring: For recordation on the map, the [PDS, LDR] shall route the Final Map to [PDS, PCC] for approval prior to map recordation. The [PDS, PCC] shall preapprove the language and estimated location of the easements prior to recordation. The [PDS LDR] shall satisfy the condition after map recordation.

M-BIO-8D RESOURCE MANAGEMENT PLAN: To provide for the long-term management of the proposed biological open space preserve, a Resource Management Plan (RMP) shall be prepared and implemented. Conceptual RMPs are provided as Appendix L (on-site open space) and Appendix M (off-site open space) to the Biological Resources Technical Report.

DESCRIPTION OF REQUIREMENT: Submit to and receive approval from the Director of the Department of Planning & Development Services (PDS), an RMP consistent with the project's RPP (August 2016), on file as Environmental Review Number PDS2015-ER-15-08-001. The final RMP cannot be approved until the following has been completed to the satisfaction of the Director of PDS,

and, in cases where the Department of Parks and Recreation has agreed to be the owner/manager, to the satisfaction of the Director of the Department of Parks and Recreation:

1. The RMP shall be prepared and approved pursuant to the most current version of the County of San Diego (County) Biological Report Format and Content Requirements.
2. The habitat land to be managed shall be completely purchased.
3. The biological open space easements shall be dedicated to ensure that the land is protected in perpetuity.
4. A resource manager shall be selected, and evidence provided by the applicant as to the acceptance of this responsibility by the proposed resource manager.
5. The RMP funding costs, including a Property Assessment Record or other equally adequate forecast. The funding mechanism (endowment or other equally adequate mechanism) to fund annual costs for the RMP and the holder of the security shall be identified and approved by the County.
6. A contract between the applicant and County shall be executed for implementation of the RMP.
7. Annual reports shall include an accounting of all required tasks and details of tasks addressed during the reporting period, and an accounting of all expenditures and demonstration that the funding source remains adequate.

Documentation: The applicant shall prepare the RMP and submit it to the PDS and pay all applicable review fees.

Timing: Prior to approval of the first Final Map, submit the RMP for review and approval.

Monitoring: The PDS shall review the RMP for compliance with the content guidelines, the conceptual RMP, and this condition.

M-BIO-8E BIOLOGICAL OPEN SPACE FENCING AND SIGNAGE: To protect the proposed open space easement from unauthorized entry or disturbance, permanent post and rail fencing, or similar permeable fence, shall be installed along the boundaries of the biological open space. Open space signage shall be placed approximately every 200 feet along the fencing (see Figure 2.4-11, Proposed Biological Open Space/Conceptual Signage and Fencing).

DESCRIPTION OF REQUIREMENT: Open space fencing or walls shall be placed adjacent to residential uses and roads as shown on figure 2.4-11. Open space signage shall be installed as shown on Figure 2.4-11, Proposed Biological Open Space/Conceptual Signage and Fencing, and shall be corrosion resistant,

a minimum of 6 inches by 9 inches, on posts not less than 3 feet in height from the ground surface, and must state the following:

**Sensitive Environmental Resources
Area Restricted by Easement**

Entry without express written permission from the County of San Diego is prohibited. To report a violation or for more information about easement restrictions and exceptions, contact the County of San Diego, Planning & Development Services (Reference: PDS2015-ER-15-08-001)

Documentation: The applicant shall install the fencing or walls as indicated on Figure 2.4-11, Proposed Biological Open Space/Conceptual Signage and Fencing Plan, and include them on the building plans. The applicant shall install the signage as indicated on the Proposed Biological Open Space/Conceptual Signage and Fencing Plan, and have them photographed and verified by a California Registered Engineer or licensed surveyor.

Timing: Prior to occupancy, the fencing or walls and signs shall be in place.

Monitoring: The Department of Planning & Development Services shall verify compliance of the fencing or walls through review of the building permits and this condition. Evidence of the signage shall be photos and a statement from a California Registered Engineer or licensed surveyor that the biological open space signs have been installed in accordance with the Open Space Fencing and Signage Plan.

M-BIO-9

HORKELIA RELOCATION PLAN: For any direct loss of Ramona horkelia (*Horkelia truncata*), the applicant shall prepare and implement a relocation plan prior to the issuance of grading permits. The relocation plan shall provide for replacement of individual plants to be removed at a minimum 1:1 ratio within suitable receptor sites(s) where no future construction-related disturbance will occur. The relocation plan shall specify, at minimum, the following: (1) the location of the receptors site(s) in protected open space areas within the project Site; (2) appropriate methods for replacement (e.g., harvesting seeds, salvaging and transplantation of impacted plants, and/or nursery propagation); (3) receptor site preparation methods; (4) schedule and action plan for maintaining and monitoring the receptor site(s); (5) list of performance criteria and standards for successful mitigation; (6) measures to protect the receptor site(s) (e.g., trespass and erosion control, weeding); and (7) cost of implementing the relocation plan.

Documentation: The applicant shall prepare a final Horkelia Mitigation Plan that complies with the Conceptual Restoration Plan and submit it for review with the applicable review fees and deposits (this is considered a revegetation plan submittal).

Timing: Prior to the approval of the first associated map and prior to the approval of the first associated plan or issuance of the first associated permit, the Horkelia Mitigation Plan shall be approved.

Monitoring: The Department of Planning & Development Services shall review the Horkelia Mitigation Plan for conformance with this condition and the

applicable elements of the most current version of the County of San Diego *Report Format and Content Requirements for Revegetation Plans*. Upon approval of the Horkelia Mitigation Plan, security for success of the Horkelia Mitigation Plan shall be collected and the applicant shall provide a confirmation letter acknowledging acceptance of securities.

M-BIO-10 CONTROL OF INVASIVE SPECIES: Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods applied with the authorization of the County of San Diego agriculture commissioner. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a pest control advisor and implemented by a licensed applicator. Where manual and/or mechanical methods are used, disposal of the plant debris shall follow the regulations set by the County of San Diego agriculture commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with the pest control advisor, County of San Diego agriculture commissioner, and California Invasive Plant Council with the goal of controlling populations before they start producing seeds.

M-BIO-11 FIRE PROTECTION PLAN: To minimize the potential exposure of the project Site to fire hazards, all features of the Fire Protection Plan for the Newland Sierra Project shall be implemented in conjunction with development of the project.

M-BIO-12 FEDERAL AND STATE AGENCY PERMITS: To comply with the state and federal regulations for impacts to U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdictional resources, the following agency permits are required, or verification that they are not required shall be obtained. The following permit and agreement shall be obtained, or evidence from the respective resource agency, satisfactory to the director of the Department of Planning & Development Services (PDS) that such an agreement or permit is not required, shall be provided:

- a. A Clean Water Act, Section 401/404 permit issued by the California RWQCB and ACOE for all project-related disturbances of waters of the United States and/or associated wetlands.
- b. A Section 1602 Streambed Alteration Agreement issued by CDFW for all project-related disturbances of any streambed and/or associated riparian habitat.

Documentation: The applicant shall consult each agency to determine if a permit or agreement is required. Upon completion of the agency review of this project, the applicant shall provide a copy of the permit(s)/requirement(s)/agreement(s).

Timing: Prior to approval of any grading and or improvement plans and issuance of any grading or construction permits.

Monitoring: PDS shall review the permits/agreements for compliance with this condition. Copies of these permits shall be included on the grading plans.

ENVIRONMENTAL FINDINGS:

A. CEQA Findings

TO BE PROVIDED

B. FINDINGS MADE IN SUPPORT OF THE ISSUANCE OF THE HABITAT LOSS PERMIT:

The following findings are made based upon all of the documents contained in the record for this project, and pursuant to Section 86.104 of County of San Diego Ordinance No. 8365 (N.S.) and Section 4.2.g of the CSS NCCP Process Guidelines (CDFW, November 1993):

Finding 1.a: The habitat loss does not exceed the five percent guideline.

The Newland Sierra project will permanently impact 56.7 acres of CSS. Approved CSS losses, as of the date of June 8, 2017 including this approval for the entire unincorporated County outside the MSCP, are presented in the following table:

Unincorporated Area Coastal Sage Scrub Cumulative Losses

Total loss allowed under five percent guideline:	2953.30 acres
Cumulative loss of Coastal sage scrub to date:	1293.45 acres
Net loss due to this project:	56.70 acres
Total cumulative loss:	1350.15 acres
Remaining loss under five percent guideline:	1603.15 acres

The loss of CSS resulting from the Newland Sierra project would not result in the County exceeding the five percent guideline.

Finding 1.b: The habitat loss will not preclude connectivity between areas of high habitat values.

Based on the 2017 Biological Technical Report, the Newland Sierra project site is characterized by approximately 95% native vegetation and 5% non-native communities and other land cover. A majority of the site (nearly 91%; 1,803.8 acres) is characterized by chaparral communities. Approximately 4% (79.7 acres) of the site is characterized by coastal scrub communities. The remainder of the site supports oak woodland (0.5%; 9.1 acres) and riparian communities (0.4%; 8.3 acres).

The 79.7 acres of coastal scrub communities on the site are comprised of the following types: 68.2 acres of Diegan coastal sage scrub, 2 acres of coastal sage scrub – Baccharis dominated, 1.7 acres of flat-topped buckwheat, and 7.8 acres of coastal sage – chaparral transition. Based on the 2009 draft North County Plan, there is approximately 29,888 acres of coastal sage scrub in the draft North County Plan Area, including 23,463 acres of coastal sage scrub in the PAMA. Therefore, the Newland Sierra project site contains 0.27% of the total CSS in the Plan Area and 0.34% of the total CSS in the PAMA.

The 79.7 acres of CSS on the project site occurs in five general patch locations: three patch locations in the northern portion of the site, one in the central portion of the site, and one patch location in the southeastern portion of the site. The CSS patches in the northern portion of the site are small, comprising 7.18 acres, 4.76 acres, and 2.90 acres. The central CSS patch is the largest, with a combined acreage of all CSS types of 48.73 acres. The southeastern CSS patch totals 16.13 acres.

The draft North County Plan California Gnatcatcher Habitat Evaluation Model shows a majority of the Sierra Newland project site as “None” with several small patches of “Low” value for California gnatcatcher. In terms of the draft North County Plan composite Habitat Evaluation Model, the majority of the project site (58%) is considered moderate value. The remainder of the site is classified as High or Very High (31%) or Low, Agricultural, or Developed (11%). The High and Very High values from the draft North County Plan composite Habitat Evaluation Model on the project site are not a result of habitat value for California gnatcatcher and do not correspond to the areas of mapped CSS on the site.

The conservation strategy for the draft North County Plan is based on a reserve design that includes existing preserves, PAMAs, and biological open space within proposed hardline areas.. The project Site is designated as a proposed hardline area within the approximately 7,640-acre San Marcos–Merriam Mountains Core Area of the North County Plan PAMA. This Core Area comprises approximately 5 percent of the overall North County Plan PAMA.

In the reserve design of the draft North County Plan, the San Marcos–Merriam Mountains Core Area is connected to other portions of the reserve design through the adjacent Escondido-Temecula Linkage located along the I-15 both north and south of the site, and through the Moosa Canyon Linkage and Lower San Luis Rey River Linkage that are both located north of the project Site. In the vicinity of the Newland Sierra project site, the largest and highest proportion of Very High and High habitat value areas occurs in the western portion of the San Marcos – Merriam Mountains Core Area, in the predominantly open space areas west of Twin Oaks Valley Road and west of the Vista Valley Country Club south and north of Gopher Canyon Road. Farther to the north, Very High and High habitat value areas are concentrated along Moosa Canyon (along Camino del Rey) and the Lower San Luis Rey River (along SR-76). Offsite along the I-15 corridor, smaller scattered areas of Very High and High habitat value occur that is often referred to as the CSS “ladder” or “stepping stone” corridor. East of the I-15 corridor, patches of Very High and High habitat value occur on the open space slope east of Lawrence Welk Resort Village.

The loss of 56.7 acres of coastal sage scrub resulting from the proposed Newland Sierra project will not preclude connectivity between areas of high habitat values for the following reasons:

- The proposed biological open space maintains connectivity to the adjacent San Marcos – Merriam Mountains Core Area and adjacent PAMA linkages. The proposed Newland Sierra development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity to the adjacent PAMA and retain the functionality of the reserve design for the draft North

County Plan. By situating a majority of the development area in the southwestern corner of the project site, the proposed biological open space is connected to the draft North County Plan PAMA in three key locations:

- North – Establishing a large, contiguous biological open space (approximately 870.2 acres) in the northern portion of the site (referred to as Block 1) retains the connectivity to the adjacent PAMA Core Area. This portion of the project site is located in the most interior part of the Core Area and conserving it would retain the integrity of the draft North County Plan reserve design. The proposed Block 1 biological open space also builds off of and buffers existing protected lands north of the project site. Additionally, the Block 1 open space area conserves key biological resources including a section of Gopher Canyon Creek and associated riparian resources, patches of coastal sage scrub, Mafic southern mixed chaparral, and draft North County Plan Covered Plant Species (i.e., summer holly and Engelmann oak).
- East – Establishing a north-south biological open space area along nearly the entire eastern portion of the project site (referred to as Block 2; approximately 153.9 acres) would maintain the landscape connectivity by establishing dedicated conserved lands within the north-south CSS “stepping stone” corridor for identified as important for California gnatcatcher regional movement. Additionally, the Block 2 biological open space would establish permanently protected habitat for approximately 1.5 miles along the western side of I-15 valley, which establishes good sight lines for moving and dispersing avian species.
- South – Establishing open space along the southern portion of the property (referred to as Block 3; approximately 185.0 acres) maintains the integrity of the draft North County Plan reserve design by dedicating open space adjacent to and connected with the Escondido-Temecula Linkage area located south of the project site.
- The areas of Very High and High habitat value on the project site that would be impacted by the proposed project are isolated from other areas of contiguous Very High or High value habitat areas by existing land uses (e.g., existing development areas and the I-15 corridor). Therefore, the proposed Newland Sierra project would not increase or contribute to the isolation of high value areas.
- Approximately 47% (291 acres) of the Very High and High habitat value areas on the project site would be conserved in proposed biological open space. Therefore, the proposed project would retain areas of high habitat value within an interconnected biological open space system developed consistent with the reserve design objectives of the draft North County Plan.
- The Newland Sierra project also proposes to conserve additional CSS offsite within the draft North County Plan PAMA Core Area on an off-site mitigation parcel in Ramona. Nearly the entire off-site mitigation parcel is classified as Very High habitat value by the NCMSCP Habitat Evaluation Map. Contribution of offsite CSS mitigation (106.4 acres) in addition to the onsite biological open space would further offset the effects of the loss of CSS from the proposed project.

Therefore, the permanent loss of 56.7 acres of CSS would not preclude connectivity between areas of high habitat value.

Finding 1.c: The habitat loss will not preclude or prevent the preparation of the subregional NCCP.

The proposed project has been incorporated into the overall conservation strategy of the County's draft North County Plan, and the development areas and biological open space areas of the proposed project are identified as proposed hardline areas in the draft North County Plan. The Newland Sierra Project would not preclude or prevent the preparation of the subregional NCCP because the project has been planned in accordance with the planning principles of the draft North County Plan as expressed by the Preliminary Conservation Objectives outlined in the Planning Agreement for North County Plan (County of San Diego 2008 and 2014). Additionally, the Planning Agreement identifies preserve design principles in the process for evaluating "Interim Projects" and the Newland Sierra project has also been developed to be consistent with these principles. Finally, the draft North County Plan identifies conservation goals for the adjacent PAMA planning units, and the Newland Sierra project has been designed to be consistent with these goals.

NCMSCP Preliminary Conservation Objectives

As described below, the habitat loss from the Newland Sierra Project would not preclude or prevent the draft North County Plan from achieving the preliminary conservation objectives from the 2008 and 2014 draft North County Plan Planning Agreement.

- *Objective: Provide for the protection of species, natural communities, and ecosystems on a landscape level.*
 - The Newland Sierra Project, with mitigation, would provide for protection and conservation of special-status species and natural communities consistent with the conservation strategy of the draft North County Plan. Through the preservation and long-term management of 1,209.1 acres of on-site biological open space within a proposed hardline area of the draft North County Plan and the preservation and long-term management of 211.8 acres of off-site biological open space within the draft North County Plan PAMA Core Area, multiple Covered Species and natural communities would be protected in an interconnected system of biological open space with connections to off-site PAMA areas, which would allow for protection of species, natural communities, and ecosystems at a landscape level.
- *Objective: Preserve the diversity of plant and animal communities throughout the Planning Area.*
 - The Newland Sierra project would conserve and provide long-term habitat management for 1,422.0 acres of on- and off-site biological open space designed to capture the range of plant and animal diversity, which would contribute to the preserved biodiversity in the draft North County Plan. All of the native vegetation communities and habitat types that occur on the project site are represented within the proposed on- and off-site biological open space. In addition to the

California gnatcatcher movement corridors and coastal sage scrub conserved by the project, the biological open space would preserve unique communities like Mafic southern mixed chaparral and diverse riparian communities along a segment of Gopher Canyon Creek, which would contribute to the diversity of plant and animal communities preserved in the draft North County Plan. The proposed biological open space also captures an array of landscape features and microhabitats, like rock outcrops and varying landforms (ridgelines, valleys, and slopes), across a range of topographic gradients and differing aspects, which would contribute to the plant and animal communities preserved in the draft North County Plan Planning Area.

- *Objective: Protect threatened, endangered, or other special status plant and animal species, and minimize and mitigate the take or loss of proposed Covered Species.*
 - The Newland Sierra project, with mitigation, would provide for protection and conservation of special-status plant and animal species, thereby contributing to the conservation of the planned draft North County Plan consistent with the draft North County Plan conservation strategy. Specifically, the proposed project provides conservation of populations and/or suitable habitat, and provides additional mitigation as necessary for the following draft North County Plan Covered Species: summer holly, sticky dudleya, felt-leaved monardella, Engelmann oak, western spadefoot, orange-throated whiptail, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion.
- *Objective: Identify and designate biologically sensitive habitat areas.*
 - Consistent with federal, state, and County standards, biological studies have been conducted on the Newland Sierra project site between 2000 and 2017, which contributes to the biological database and knowledge for nearly 2,000 acres in the draft North County Plan Planning Area. Field surveys, mapping, and documentation has been conducted for vegetation communities, rare plants, jurisdictional waters and wetlands, nesting raptors, reptiles, wildlife crossing and culverts, and focused surveys for burrowing owl (*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Polioptila californica californica*), and Harbison's dun skipper (*Euphyes vestris harbisoni*).
- *Objective: Preserve habitat and contribute to the recovery of Covered Species.*
 - The Newland Sierra project, with mitigation, would provide for protection and conservation of special-status plant and animal species, thereby contributing to the recovery of the draft North County Plan Covered Species consistent with the draft North County Plan conservation strategy. Specifically, the proposed project provides conservation of populations and/or suitable habitat for the following draft North County Plan Covered Species: summer holly, sticky dudleya, felt-leaved monardella, Engelmann oak, orange-throated whiptail, western spadefoot, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California

gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion.

- *Objective: Reduce the need to list additional species.*
 - The long-term conservation of large areas of open space resulting from the proposed Newland Sierra project would contribute to building the draft North County Plan reserve system and build upon and buffer existing adjacent preserve areas within the adjacent PAMA. By implementing the proposed project consistent with the draft North County Plan conservation strategy, the Newland Sierra project would contribute to reducing the need to list draft North County Plan Covered Species that are currently not listed.
- *Objective: Set forth species-specific goals and objectives.*
 - For the Covered Species, the draft draft North County Plan describes the general species goals as: Conserve the ecosystem functions and values, appropriate natural communities, and opportunities for genetic exchange needed for the Covered Species to persist in the Plan Area. As described above under separate objectives, the proposed project provides conservation of populations and/or suitable habitat, and provides additional mitigation as necessary for the Covered Species to contribute towards meeting the species-specific goals of the draft North County Plan.
- *Objective: Set forth specific habitat-based goals and objectives expressed in terms of amount, quality, and connectivity of habitat.*
 - The Newland Sierra Project, with mitigation, would provide for protection and conservation of Covered Species Habitat and natural communities consistent with the conservation strategy of the draft North County Plan, thereby contributing to and not precluding the ability of the County to meet the goals and objectives of the draft North County Plan. Through the preservation and long-term management of 1,422.0 acres of on-and off-site biological open space within the draft North County Plan reserve design, multiple Covered Species and natural communities would be protected in an interconnected system of biological open space consistent with the goals and objectives of the draft North County Plan.

Interim Project Preserve Design Principles

In addition to the preliminary conservation objectives, the Planning Agreement identifies an interim project review process, including a set of preserve design principles that interim projects would be evaluated against during the period when the draft North County Plan is in preparation. As described below, the habitat loss resulting from the Newland Sierra Project would not preclude or prevent the County from preparing the draft North County Plan because the proposed project has been incorporated as a proposed hardline area and it has been developed consistent with the interim project preserve design guidelines.

- *Principle: On-site open space should provide a long-term biological benefit.*

- The biological open space proposed for protection on the Site is located within a proposed hardline area of the draft North County Plan, which means that the proposed project's development areas and biological open space areas have been predetermined and hardlined for the purposes of preparing draft North County Plan. By identifying the proposed on-site biological open space as a proposed hardline area, the County of San Diego has determined that the proposed biological open space would provide long-term biological benefit consistent with the draft North County Plan. The proposed 1,209.1 acres of on-site biological open space occur in an interconnected system of 3 blocks, consisting of a 870.2-acre northern block, a 153.9-acre eastern block, and a 185-acre southern block. Each of these blocks is connected to adjacent draft North County Plan PAMA Core Areas and linkages. Therefore, the proposed large, interconnected on-site biological open space would provide long-term biological benefit.
- *Principle: On-site open space must protect habitat of equal or greater value as that being impacted. No isolated pockets of open space should be used for mitigation credit.*
 - As described for the principle above, the biological open space proposed for protection on the Site is located within a proposed hardline area of the draft North County Plan, indicating that it has long-term biological value and benefit in terms of reserve design for the draft North County Plan. The proposed Newland Sierra development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity of the adjacent PAMA and retain the functionality of the reserve design for the draft North County Plan. By situating a majority of the development area in the southwestern corner of the project site, the proposed biological open space is connected to the adjacent PAMA in three key locations:
 - North – Establishing a large, contiguous biological open space (approximately 870.2 acres) in the northern portion of the site (referred to as Block 1) retains the connectivity to the remainder of the draft North County Plan Core Area. This portion of the project site is located in the most interior part of the Core Area and conserving it would retain the integrity of the draft North County Plan reserve design. The proposed Block 1 biological open space also builds off of and buffers existing protected lands north of the project site. Additionally, the Block 1 open space area conserves key biological resources including a section of Gopher Canyon Creek and associated riparian resources, patches of coastal sage scrub, Mafic southern mixed chaparral, and NCMSCP Covered Plant Species (i.e., summer holly and Engelmann oak).
 - East – Establishing a north-south biological open space area along nearly the entire eastern portion of the project site (referred to as Block 2; approximately 153.9 acres) would maintain the landscape connectivity by establishing dedicated conserved lands within the north-south CSS “stepping stone” corridor for identified as important for California gnatcatcher regional movement. Additionally, the Block 2 biological open space would establish

permanently protected habitat for approximately 1.5 miles along the western side of I-15 valley, which establishes good sight lines for moving and dispersing avian species.

- South – Establishing open space along the southern portion of the property (referred to as Block 3; approximately 185.06 acres) maintains the integrity of the draft North County Plan reserve design by dedicating open space adjacent to and connected with the Escondido-Temecula Linkage area located south of the project site.

Therefore, the proposed on-site biological open space would protect habitat of equal or greater value as that being impacted and no isolated pockets of open space are proposed by the project.

- *Principle: Separate lots should be used whenever possible for on-site open space to help protect the biological value of the preserved areas.*
 - The proposed Newland Sierra on-site biological open space would be protected within individual lots, and this biological open space would be managed for its biological value for the long-term.
- *Principle: On-site open space shall contribute to regional conservation efforts.*
 - As described in previous principles, the proposed on-site and off-site biological open space would establish long-term protection for 1,420.9 acres of habitat for Covered Species and natural communities within the draft North County Plan proposed hardline area and offsite PAMA area, consistent with the conservation strategy for the draft North County Plan. Therefore, the proposed project would contribute to the regional conservation efforts on the County and the Wildlife Agencies under the MSCP draft North County Plan.
- *Principle: Open space design, to the extent known, should not reduce the biological diversity found on the site.*
 - The proposed Newland Sierra biological open space was designed to capture the range of plant and animal diversity found on site in a system of interconnected open space blocks. All of the native vegetation communities and habitat types that occur on the project site are represented within the proposed on-site biological open space. In addition to the California gnatcatcher movement corridors and coastal sage scrub that would be conserved by the project, the on-site biological open space would preserve unique communities like Mafic southern mixed chaparral and diverse riparian communities along a segment of Gopher Canyon Creek, which would contribute to the diversity of plant and animal communities preserved in the draft North County Plan. The proposed on-site biological open space also captures an array of landscape features and microhabitats, like rock outcrops and varying landforms (ridgelines, valleys, and slopes), across a range of topographic gradients and differing aspects, which would contribute to the diversity of plant and animal communities preserved onsite. Therefore, the design of the proposed Newland Sierra biological open

space, to the extent known using the best available information, would not reduce the biological diversity found on the site.

- *Principle: Open space design shall maintain habitat connectivity between areas of high quality habitat.*
 - As described in detail above under Finding 1.b, the proposed on-site biological open space is interconnected within the project site and also maintains connectivity to the remainder of the San Marcos – Merriam Mountains Core Area and adjacent PAMA linkages. The proposed Newland Sierra development area and associated roadways and fuel modification zones have been strategically designed to maintain connectivity of the PAMA and retain the functionality of the reserve design of the draft North County Plan, as reflected by the designation of a proposed hardline area for the Site. By situating a majority of the development area in the southwestern corner of the project site, the proposed biological open space is connected to the areas of high quality habitat offsite within the draft North County Plan PAMA in three key locations: North, East, and South. The northern connection is provided by the 870.2-acre Block 1 open space area, which connects to adjacent PAMA Core Area and existing reserves to the north and west of the project site. The eastern connection is provided by the 153.9-acre Block 2 open space area, which maintains the connection to the Escondido-Temecula Linkage PAMA and facilitates California gnatcatcher and other avian movement both north-south along the I-15 stepping stone corridor and east-west across the I-15 valley.
- *Principle: The most sensitive resources shall be protected to maximize long-term viability.*
 - The Newland Sierra site is a large property characterized by predominantly (95%) native vegetation communities that support important biological resources, some of which are considered sensitive. A majority of the site (91%), however, is characterized by chaparral communities that are fairly common in the region. Of the chaparral communities, southern mixed chaparral on mafic soils is considered more rare/sensitive, and the proposed project would include nearly all (99%) of this vegetation type in on-site biological open space. All of the other vegetation groups found on the site are also represented in the biological open space, including coastal scrub, oak woodlands, and riparian. With respect to plant species considered sensitive, biological surveys of the project site identified 6 special-status species, two of which are draft North County Plan Covered Species (summer holly and Engelmann oak). Additionally, the site is considered to have the potential to support 2 other draft North County Plan Covered Species (sticky dudleya and felt-leaved monardella) but these species were not detected on the site. The site supports a relatively large population of summer holly (1,356 individuals), of which the Newland Sierra project would protect 86% (1,160 individuals). The site supports a relatively small population of Engelmann oaks, and the Newland Sierra project would protect 36% (10 individuals). With respect to wildlife species considered sensitive, the Newland Sierra site supports or has the potential to support 16 special-status wildlife species (California species of special concern/County Group 1 species). The site

supports or has the potential to support 10 draft North County Plan Covered Species: western spadefoot orange-throated whiptail, Blainville's horned lizard, red-diamond rattlesnake, northern harrier, California gnatcatcher, southern California rufous-crowned sparrow, Bell's sage sparrow, pallid bat, and mountain lion; however, the site is not considered to support major or critical populations of these species. Habitat for all of these wildlife species would be protected within the proposed on- and off-site biological open space.

From a landscape perspective, the most important function of the proposed on-site biological open space would be to protect open space in this key geographic location in the region in order to maintain the connectivity of the regional draft North County Plan reserve design and to facilitate the continued movement of California gnatcatcher and other avian species. As described above for other principles, the on-site biological open space system blocks have been designed to protect these landscape functions for long-term viability.

- *Principle: Edge effects and habitat fragmentation shall be minimized by maximizing the surface area to perimeter ratio, preserving large blocks of contiguous open space. Edge effects shall be further minimized by establishing buffers, providing fencing and/or permanent signs, and limiting trails and/or lighting.*
 - The proposed Newland Sierra on-site biological open space is a large, interconnected system comprised of 3 open space blocks. These 3 on-site open space blocks are connected internally within the site and externally to offsite PAMA and offsite existing reserves. Both the size and configuration of the proposed on-site biological open space minimize edge effects and habitat fragmentation. In terms of open space patch size, the proposed Newland Sierra on-site biological open space system includes Block 1 (870.2 acres), Block 2 (153.9 acres), and Block 3 (185.0 acres). In addition, the offsite mitigation parcel is approximately 213 acres. These are considered large open space patches when compared to existing reserves in the San Marcos – Merriam Mountains Core Area of the draft North County Plan PAMA. Based on a review of the Conserved Lands dataset maintained by SANDAG (2015), there are approximately 532 acres total of existing reserve within this Core Area in approximately 23 discrete open space patches. The largest existing reserve patch in this Core Area is currently 148 acres and the average open space size across these 23 patches is 24 acres. The three proposed on-site biological open space blocks also have very high Area-to-Perimeter ratios (expressed in units of square feet-to-feet): Block 1 (886), Block 2 (386), and (384). By way of comparison, only one of the existing open space patches in the San Marcos – Merriam Mountains Core Area has a comparable Area-to-Perimeter ratio (an 89-acre square patch with a ratio of 413). The average Area-to-Perimeter ratio of the existing open space patches in the Core Area is 132. By designing the on- and off-site biological open space in large blocks with high Area-to-Perimeter ratios, the Newland Sierra project minimizes edge effects and habitat fragmentation. Additionally, the design features and mitigation measures of the Newland Sierra project include limited building zones that buffer the on-site biological open space from adjacent development, directional lighting and other lighting specifications, and open space fencing and signage, all of which would minimize edge effects and habitat fragmentation.

San Marcos – Merriam Mountain Core Area Conservation Goals

The County is in the process of developing the draft North County Plan. The draft North County Plan includes conservation goals for each PAMA planning unit. The following describes the consistency of the proposed project with the draft conservation goals for the San Marcos–Merriam Mountains Core Area, which is the PAMA designated by the draft North County Plan adjacent to the Site (County of San Diego 2014).

- *To the maximum extent practicable, conserve oak woodlands, coastal sage scrub (particularly in Twin Oaks) to maintain populations and connectivity of coastal California gnatcatcher and other coastal sage scrub-dependent species, and chaparral on mafic or gabbro soils that support sensitive plant species, such as chaparral beargrass and Parry's tetradlea, San Diego thornmint (particularly in San Marcos Mountains), or California adolphia. Refer to natural community and species goals and objectives in the Conservation Analysis (Volume II).*
 - To the maximum extent practicable and in consideration of all the competing goals and principles that relate to this project site, the proposed on-site biological open space of the proposed hardline area for the Site has been developed consistent within this conservation goal. Considering that this site is predominantly characterized by chaparral habitats, chaparral communities and plant and animal species are the primary species supported by the site. Mafic chaparral communities are 99% conserved in the on-site biological open space. The chaparral related plant species listed in this draft goal (i.e., chaparral beargrass, Parry's tetradlea, San Diego thornmint, and California adolphia) do not occur on the site. At the regional scale, the importance of the site is in its location and geographic position relative to the draft North County Plan PAMA. By designing the site with 3 on-site interconnected biological open space block covering over 1,209 acres, the proposed project would maintain populations and connectivity of California gnatcatcher and other avian species, particularly by maintaining the north-south I-15 "stepping-stone" corridor and the east-west movement corridor across the I-15 valley. Biological open space Block 2 will conserve coastal sage scrub found to be occupied by California gnatcatcher. Oak woodlands with buffers would also be conserved within the large interconnected open space system. Volume II of the draft North County Plan has not been made available; therefore, an evaluation of consistency with the natural community and species goals and objectives from the draft North County Plan Conservation Analysis was not possible.
- *Ensure that a core community of coastal California gnatcatcher and other coastal sage scrub-dependent species remains in the coastal sage scrub block in Twin Oaks. Refer to species goals and objectives in the Conservation Analysis (Volume II).*
 - The proposed project is not located in the Twin Oaks area of the San Marcos – Merriam Mountains Core Area; therefore, this draft conservation goal is not applicable. The proposed project would conserve California gnatcatcher habitat onsite and maintain generational movement of California gnatcatcher north and south, and east and west, across the site.

- *Conserve the north–south connectivity of coastal California gnatcatcher habitat along Interstate 15 between the Riverside County line and the City of Escondido. Maintain the east-west connectivity of natural habitats on either side of I-15 for dispersal of coastal sage scrub community birds.*
 - As above for previous draft conservation goals and in the principles above, the proposed on-site biological open space design would conserve the north–south connectivity of coastal California gnatcatcher habitat along I-15. In addition, a potential east–west connection in the northwestern portion of the open space will be conserved over the long-term in the proposed biological open space.
- *Promote conservation of riparian and upland habitats of Gopher Canyon Creek for water quality and sensitive species, such as southwestern pond turtle and least Bell’s vireo.*
 - The proposed on-site biological open space design includes the preservation of a portion of the South Fork of Gopher Canyon which is a tributary to Gopher Canyon Creek and the San Luis Rey River. Inclusion of the headwaters to Gopher Canyon Creek into the proposed on-site biological open space design will assist in the maintenance of water quality and the conservation of riparian habitat. In addition, upland habitat surrounding this tributary will be included in the open space design. The proposed project site was not found to support southwestern pond turtle or least Bell’s vireo, but the proposed project would protect upstream reaches of Gopher Canyon Creek that supports riparian habitat and resources.
- *Ensure the San Diego thornmint population in the Palisades open space preserve is maintained and enhanced, if practicable. Refer to species goals and objectives in the Conservation Analysis (Volume II).*
 - This draft conservation goal is not applicable to the Newland Sierra project site and this species does not occur on the site.

Overall, the proposed on-site biological open space design will be consistent with applicable planning guidelines for the San Marcos Hills – Merriam Mountains Core Area.

For the above reasons, the finding that the habitat loss will not preclude or prevent the preparation of the subregional NCCP can be made for the project.

Finding 1.d: The habitat loss has been minimized and mitigated to the maximum extent practicable in accordance with Section 4.3 of the NCCP Process Guidelines.

According to Section 4.3 of the NCCP Process Guidelines,

“Any impacts to the coastal sage scrub habitat and the target species must be mitigated to insignificant levels as required by the California Environmental Quality Act (CEQA) by using one or more of the following options:

- Acquisition of habitat
- Dedication of land
- Management agreements
- Restoration
- Payment of fees
- Transfer of development rights
- Other mitigation measures approved in writing by CDFG and USFWS.”

The proposed project has minimized the effects on coastal sage scrub and California gnatcatcher by designing a 1,209-acre on-site biological open space system comprised of 3 large, interconnected open space blocks that minimize edge effects and habitat fragmentation through very high Area-to-Perimeter ratios (see discussion above under Finding 1.c). Furthermore, the habitat loss impact would be mitigated to the maximum extent practicable through the on-site dedication of 1,209.1 acres of biological open space (including 25.2 acres of coastal sage scrub types) and through the offsite dedication of a 211.8-acre mitigation parcel containing 106.4 acres of coastal sage scrub. These actions, in addition to the proposed project design features, avoidance measures, and long-term resource management plan, would avoid, minimize, and mitigate the effects of the habitat loss to below a level of significance under CEQA, as described in the 2017 Newland Sierra Biological Technical Report

For the above reasons, the finding that the habitat loss has been minimized and mitigated to the maximum extent practicable can be made for the project.

Finding 2 The habitat loss will not appreciably reduce the likelihood of survival and recovery of listed species in the wild.

Protocol surveys for the California gnatcatcher were performed in 2013 which concluded there are two individual California gnatcatcher residents on site. To mitigate for the loss of coastal sage scrub habitat due to the project, the proposed project will preserve 25.2 acres of CSS in on-site biological open space and will preserve 106.4 acres of CSS in off-site biological open space. The project would also be required to provide on-site and off-site mitigation for all other habitat impacts in accordance with the mitigation ratios set forth in the County Guidelines for Determining Significance for Biological Resources. The on-site and off-site biological open space preserves are located in draft North County Plan a proposed hardline area and a PAMA Core Area and will provide for long-term viability of CSS that connects to high value districts and potential to support listed species. Other areas adjacent to the project site, within the I-15 right of way and historically occupied by California gnatcatchers, would be buffered from any project effects and would continue to support the species. Additionally, as a precaution, no clearing or grading of scrub habitats will be permitted during the breeding/nesting season of the California gnatcatcher, unless pre-construction breeding surveys are done that show gnatcatchers would not be directly or indirectly affected.

Based on the 2009 draft North County Plan, there is approximately 29,888 acres of coastal sage scrub in the draft North County Plan Area and another 5,179 acres of coastal sage scrub/chaparral. The loss of 56.7 of coastal sage scrub resulting from the proposed project represents a very small proportion (0.16%) of the California

gnatcatcher habitat in the draft North County Plan. Therefore, the proposed project with mitigation would not be considered to appreciably reduce the likelihood of the survival and recovery of listed species.

Finding 3: The habitat loss is incidental to otherwise lawful activities.

The project will require grading and improvement plans for preparation of the site for development. The issuance of a Habitat Loss Permit by the County of San Diego with the concurrence of the CDFW and USFWS, and approval of a Grading Permit, Clearing Permit, or Improvement Plan by the County of San Diego is required prior to the clearing of any CSS on the project site. Construction and/or land use modification will not commence until all appropriate permits have been issued. The project has been found to be in conformance with Section 86.104, Procedures and Standards of the San Diego County Code. As such, the anticipated loss will be incidental to “otherwise lawful activities”.

NCCP FLOWCHART

The following NCCP flowchart is used in the evaluation process to determine the potential habitat value for interim protection of onsite coastal sage scrub, based on the Southern California Coastal Sage Scrub NCCP Conservation Guidelines (CDFG 1993).

1. Natural land: Is natural vegetation present? **Yes.**

Rationale: As defined by CDFG 1993, “Natural land is land with a significant cover of natural vegetation. Natural vegetation in this context includes all native California natural communities and includes forestlands, shrublands, native and non-native grasslands, non-irrigated land, grazed land, and vacant or disturbed natural land. Natural land excludes lands subject to intensive agriculture and urban uses. Disturbed land or land recently cleared may still be restorable and should be included in the evaluation.” According to this definition, natural vegetation is present on the Newland Sierra project site.

2. CSS: Is CSS present? **Yes.**

Rationale: As defined by CDFG 1993, “CSS includes landscape areas supporting primary or secondary cover of characteristic CSS plant species dominants as defined by the Scientific Review Panel”. According to this definition, CSS is present on the Newland Sierra project site.

3. Large size: Is the CSS the most dense CSS in the subregion? **No.**

Rationale: As described by CDFG 1993, “the largest CSS patches in the subregion should be considered possible core areas for future reserves”. The larger patches of CSS are those that, “when the entire subregion is evaluated, those patches of CSS habitat with the highest percent CSS cover in the neighborhood, cumulatively representing 50% or more of all CSS within a subregion...Neighborhoods should have a radius of ½ to 1 mile.” When evaluating the vegetation cover within 1 mile of the CSS patches proposed to be impacted by the Newland Sierra project, very little of the surrounding neighborhood is comprised of CSS (a majority of the surrounding areas are

chaparral vegetation or other types). Therefore, the CSS on the Newland Sierra site is not the most dense in the subregion.

4. Proximity: Is the land close to High Value District? **No.**

Rationale: According to CDFG 1993, "CSS patches close to a core can be identified by measuring direct, straightline distance." Close proximity "should be on the order of one-quarter to one-half mile." There are no dense patches of CSS considered High Value Districts within $\frac{1}{4}$ to $\frac{1}{2}$ mile of the CSS patches proposed to be impacted by the Newland Sierra project site.

5. Landscape linkages: Is the land located in a corridor between Higher Value Habitats? **Yes.**

Rationale: The Newland Sierra project site is a proposed hardline area of the draft North County Plan and is located adjacent to the San Marcos - Merriam Mountains Core Area of the draft North County Plan PAMA. The portion of the property located along Interstate-15 is also situated adjacent to Escondido – Temecula linkage, which is considered to be an important movement corridor for avian species including California gnatcatcher. Therefore, the Newland Sierra project site is considered to be located in a landscape linkage area.

6. Species presence: Does the land support high density of target species? **No.**

Rationale: As described by CDFG 1993, "the SRP considers habitat that supports a portion of a local population with five or more pairs of gnatcatchers or cactus wrens to be significant. For other species of plants or animals...the SRP considers habitat that supports a portion of a local population representing more than 20% of the known population of the subregion to be significant". As demonstrated below, the Newland Sierra project would not impact lands with high density of target species (referred to as Covered Species in the draft North County Plan) when considering the local population in the draft North County Plan subregion (based on County habitat models¹).

- Summer-holly
 - Modeled habitat in draft North County Plan PAMA: 4,181 acres
 - Status onsite: Estimate 1,356 individuals onsite; 196 individuals proposed to be impacted by the project, remainder would be in on-site biological open space.
- Sticky dudleya
 - Modeled habitat in draft North County Plan PAMA: 1,938 acres
 - Status onsite: Moderate potential to occur but not observed. Suitable habitat to be included in the on-site biological open space.
- Felt-leaved monardella
 - Modeled habitat in draft North County Plan PAMA: 20,349 acres

¹ Status is the NCMSCP based on GIS analysis of species distribution models for the Covered Species within the NCMSCP PAMA, using data provided to Dudek by the County in 2015.

- Status onsite: Moderate potential to occur but not observed. Suitable habitat to be included in the on-site biological open space.
- Engelmann oak
 - Modeled habitat in in draft North County Plan PAMA: 9,347 acres
 - Status onsite: Estimate 28 individuals onsite; 18 individuals proposed to be impacted by the project; remainder would be in on-site biological open space.
- Western spadefoot
 - Modeled habitat in in draft North County Plan PAMA: 72,390 acres
 - Status onsite: Breeding habitat within vegetation communities would be in on-site biological open space.
- Belding's orange-throated whiptail
 - Modeled habitat in in draft North County Plan PAMA: 56,409 acres
 - Status onsite: Occurs; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- Blainville's horned lizard,
 - Modeled habitat in in draft North County Plan PAMA: 92,499 acres
 - Status onsite: Occurs; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- Red-diamond rattlesnake
 - Modeled habitat in in draft North County Plan PAMA: 90,802 acres
 - Status onsite: Occurs; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- Northern harrier
 - Modeled habitat in in draft North County Plan PAMA: 31,329 acres
 - Status onsite: Status onsite: Potential to occur; 76.1 acres of suitable foraging habitat occurs on site; 36.5 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- California gnatcatcher
 - Modeled habitat in in draft North County Plan PAMA: 11,724 acres
 - Status onsite: Occurs; 79.7 acres of suitable habitat onsite; 56.7 acres proposed to be impacted by the project on-site and off-site; remainder would be in on-site biological open space. The project would impact no more than 1 pair of California gnatcatcher; however, the pair is expected to remain onsite following project implementation.
- Southern California rufous-crowned sparrow
 - Modeled habitat in in draft North County Plan PAMA: 26,516 acres

- Status onsite: Moderate potential to occur but not observed. Suitable habitat to be included in on-site biological open space.
- Bell's sage sparrow
 - Modeled habitat in in draft North County Plan PAMA: 39,883 acres
 - Status onsite: Occurs; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- Pallid bat
 - Modeled habitat in in draft North County Plan PAMA: 70,563 acres
 - Status onsite: May occur; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.
- Mountain lion
 - Modeled habitat in in draft North County Plan PAMA: 118,276 acres
 - Status onsite: May occur; 1,965.7 acres of suitable habitat onsite; 764.2 acres proposed to be impacted by the project; remainder would be in on-site biological open space.

7. Does the land support significant populations of highly endemic species or rare subhabitat types? **No.**

Rationale: None of the in draft North County Plan proposed Covered Species that occur on the Newland Sierra project site are identified as Narrow Endemics by the in draft North County Plan. No rare subhabitat types occur on the Newland Sierra project site.

According to the NCCP flowchart for evaluating potential habitat value for ranking lands for interim protection (CDFG 1993), the CSS habitat proposed to be impacted on the Newland Sierra project site is of Intermediate Potential Value for long-term conservation, due to "Yes" determination for Flowchart question #5.

MITIGATION MONITORING AND REPORTING PROGRAM:

The following shall be the Mitigation Monitoring or Reporting Program for this Habitat Loss Permit:

Public Resources Code Section 21081.6 requires the County to adopt a mitigation reporting or monitoring program for any project that is approved on the basis of a mitigated Negative Declaration or an Environmental Impact Report for which findings are required under Section 21081(a)(1). The program must be adopted for the changes to a project which the County has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment. The program must be designed to ensure compliance during project implementation.

The mitigation monitoring program is comprised of all the environmental mitigation measures adopted for the project. The full requirements of the program (such as what is being monitored, method and frequency, who is responsible, and required time frames) are found

within the individual project conditions. These conditions are referenced below by category under the mechanism which will be used to ensure compliance during project implementation.

- Subsequent Project Permits

Compliance with the following conditions is assured because specified subsequent permits or approvals required for this project will not be approved until the conditions have been satisfied: **MM-BIO-1, MM-BIO-5, MM-BIO-6, MM-BIO-7, MM-BIO-8A, MM-BIO-8B, MM-BIO-8C, MM-BIO-8D, and MM-BIO-12**

- Ongoing Mitigation

Compliance with the following conditions is assured because County staff will monitor the on-going requirements and, if necessary, pursue the remedies specified in the project permit, the security agreement, or the mitigation monitoring agreement: **MM-BIO-2 and MM-BIO-8E**

NOTICE: The issuance of this permit by the County of San Diego does not authorize the applicant for said permit to violate any federal, state, or county laws, ordinances, regulations, or policies, including but not limited to, the federal Endangered Species Act and any amendments thereto.

NOTIFICATION TO APPLICANT: The County of San Diego hereby notifies the applicant that State law (A.B. 3158) effective January 1, 1991, requires certain projects to pay fees for purposes of funding the California Department of Fish and Wildlife. Because your project has an effect on native biological resources, State law requires the payment of a \$3,070.00 fee to the California Department of Fish and Wildlife for their review of the Environmental Impact Report (Fish and Wildlife Code §711.4) and a \$50 administrative fee to the County (\$3,120.00 total). If you made this payment at the time of public review of the environmental document pursuant to Administrative Code Section 362, Article XX, effective August 27, 1992, you have met this obligation. If the fee has not been paid, to comply with State law, the applicant should remit to the County Department of Planning and Land Use, within two (2) working days of the effective date of this approval (the “effective date” being the end of the appeal period, if applicable). **The payment must be by certified check or cashier’s check payable to the “County of San Diego” and can be submitted to the cashier at the PDS office or directly to the County Clerk.** The fees (excluding the administrative fee) may be waived for projects that are found by the Department of Planning and Land Use and the California Department of Fish and Wildlife to have no effect on fish and wildlife resources. Failure to remit the required fee in full within the time specified above will result in County notification to the State that a fee was required but not paid, and could result in State imposed penalties and recovery under the provisions of the Revenue and Taxation Code. In addition, Section 21089(b) of the Public Resources Code, and Section 711.4(c) of the Fish and Game Code, provided that no project shall be operative, vested, or final until the required filing fee is paid.

LIGHTING ORDINANCE COMPLIANCE: To comply with the County Lighting Ordinance 59.101 et seq. and Zoning Ordinance Sections 6322, 6324, and 6326, the onsite lighting shall comply with the approved plot plan(s), specific permit conditions and approved building plans associated with this permit. Light fixtures shall be installed in conformance with the County Light Pollution Code, the Building Code, the Electrical Code, and lighting requirements specified in Section 6324 (Lighting Permitted in Required Yards) and Section 6326 (Lighting

not in Required Yards) of the Zoning Ordinance of the County of San Diego, along with any other related state and federal regulations such as California Title 24. The property owner and permittee shall conform to the approved plot plan(s), specific permit conditions, and approved building plans associated with this permit as they pertain to lighting. No additional lighting is permitted. If the permittee or property owner chooses to change the site design in any way, they must obtain approval from the County for a Minor Deviation or a Modification pursuant to the County of San Diego Zoning Ordinance.

NOISE ORDINANCE COMPLIANCE: To comply with the County Noise Ordinance 36.401 et seq. and the Noise Standards pursuant to the General Plan Noise Element (Table N-1 & N-2), the property and all of its uses shall comply with the approved plot plan(s), specific permit conditions and approved building plans associated with this permit. No loudspeakers, sound amplification systems, and project related noise sources shall produce noise levels in violation of the County Noise Ordinance. The property owner and permittee shall conform to the approved plot plan(s), specific permit conditions, and approved building plans associated with this permit as they pertain to noise generating devices or activities. If the permittee or property owner chooses to change the site design in any way, they must obtain approval from the County for a Minor Deviation or a Modification pursuant to the County of San Diego Zoning Ordinance.

STORMWATER ORDINANCE COMPLIANCE: To Comply with all applicable stormwater regulations the activities proposed under this application are subject to enforcement under permits from the San Diego Regional Water Quality Control Board (RWQCB) and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance No. 10096 and all other applicable ordinances and standards for the life of this permit. The project site shall be in compliance with all applicable stormwater regulations referenced above and all other applicable ordinances and standards. This includes compliance with the approved Stormwater Management Plan, stormwater pollution prevention plan, all requirements for Low Impact Development (LID), hydromodification, materials and wastes control, erosion control, and sediment control on the project site. Projects that involve areas 1 acre or greater require that the property owner keep additional and updated information onsite concerning stormwater runoff. The property owner and permittee shall comply with the requirements of the stormwater regulations referenced above.

LOW IMPACT DEVELOPMENT NOTICE: On May 8, 2013, the San Diego Regional Water Quality Control Board (SDRWQCB) issued a new Municipal Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) (R9-2013-0001). The permit was amended on February 15, 2015 (R9-2015-0001) and November 18, 2015 (R9-2015-0100). *Project design shall be in compliance with the new Municipal Permit regulations.*

The County has provided a LID Handbook as a source for LID information and is to be utilized by County staff and outside consultants for implementing LID in our region. The Low Impact Development (LID) Best Management Practices (BMP) Requirements of the Municipal Permit can be found at the following:

http://www.waterboards.ca.gov/rwqcb9/water_issues/programs/stormwater/docs/2015-1118_AmendedOrder_R9-2013-0001_COMPLETE.pdf

<http://www.sandiegocounty.gov/dplu/docs/LID-Handbook.pdf>

NOTICE: This subject property is known to contain CSS vegetation communities. Such vegetation communities are habitat for the coastal California gnatcatcher. The Federal government listed the gnatcatcher as a threatened species under the Federal Endangered Species Act of 1973 (16 U.S.C. Section 1531 et seq.). THE LISTING MAY RESULT IN AN APPLICANT'S INABILITY TO PROCEED WITH HIS/HER PROJECT WITHOUT A PERMIT FROM THE FEDERAL GOVERNMENT IF THE SPECIES OR ITS HABITAT ARE PRESENT ON THE PROJECT SITE. It is advisable to contact the USFWS to determine the applicability of the prohibitions under the Act to each applicant's property.

NOTICE: The subject property contains wetlands, a lake, a stream, and/or waters of the U.S. which may be subject to regulation by State and/or federal agencies, including, but not limited to, the Regional Water Quality Control Board, U.S. Army Corps of Engineers and the CDFW. It is the applicant's responsibility to consult with each agency to determine if a permit, agreement or other approval is required and to obtain all necessary permits, agreements or approvals before commencing any activity which could impact the wetlands, lake, stream, and/or waters of the U.S. on the subject property. The agency contact information is provided below.

U.S. Army Corps of Engineers: 6010 Hidden Valley Rd, Suite 105, Carlsbad, CA 92011-4219; (858) 674-5386; <http://www.usace.army.mil/>

Regional Water Quality Control Board: 2375 Northside Drive, Suite 100, San Diego, CA 92108-2700; (619) 516-1990; <http://www.waterboards.ca.gov/sandiego/>

California Department of Fish and Wildlife: 3883 Ruffin Rd., San Diego, CA 92123; (858) 467-4201; <http://www.dfg.ca.gov/>

NOTICE: The subject property contains habitat which may be used for nesting by migratory birds. Any grading, brush removal or clearing conducted during the migratory bird breeding season, February 1 – August 31, and as early as January 1 for some raptors, has a potential to impact nesting or breeding birds in violation of the Migratory Bird Treaty Act. The applicant may submit evidence that nesting or breeding migratory birds will not be affected by the grading, brush removal or clearing to these agencies: CDFW, 3883 Ruffin Rd., San Diego, CA 92123, (858) 467-4201, <http://www.dfg.ca.gov/>; and USFWS, 2177 Salk Ave., Suite 250, Carlsbad, CA, (760) 431-9440, <http://www.fws.gov/>.

NOTICE: THE ISSUANCE OF THIS PERMIT BY THE COUNTY OF SAN DIEGO DOES NOT AUTHORIZE THE APPLICANT FOR SAID PERMIT TO VIOLATE ANY FEDERAL, STATE, OR COUNTY LAWS, ORDINANCES, REGULATIONS, OR POLICIES INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT AND ANY AMENDMENTS THERETO.

DEFENSE OF LAWSUITS AND INDEMNITY: The applicant shall: (1) defend, indemnify and hold harmless the County, its agents, officers and employees from any claim, action or proceeding against the County, its agents, officers and employees to attack, set aside, void or annul this approval or any of the proceedings, acts or determinations taken, done or made prior to this approval; and (2) reimburse the County, its agents, officers or employees for any court costs and attorney's fees which the County, its agents, officers or employees may be required by a court to pay as a result of such approval. At its sole discretion, the County may participate at its own expense in the defense of any such action, but such participation shall

not relieve the applicant of any obligation imposed by this condition. The County shall notify the applicant promptly of any claim or action and cooperate fully in the defense.

JUDICIAL REVIEW TIME LIMITATIONS: The time within which judicial review of this decision must be sought is governed by Code of Civil Procedure Section 1094.6, which has been made applicable in the County of San Diego by San Diego County Code Section 11.120. Any petition or other paper seeking judicial review must be filed in the appropriate court not later than the 90th day following the date on which this decision becomes final; however, if within 10 days after the decision becomes final a request for the record of the proceedings is filed and the required deposit in an amount sufficient to cover the estimated cost of preparation of such record is timely deposited, the time within which such petition may be filed in court is extended to not later than the 30th day following the date on which the record is either personally delivered or mailed to the party, or the party's attorney of record. A written request for the preparation of the record of the proceedings shall be filed with the Director, Planning & Development Services, 5510 Overland Avenue, Suite 110, San Diego, California 92123.

The foregoing decision was approved by the Director of Planning & Development Services on TO BE DETERMINED. A copy of this decision, and the documentation supporting the decision, is on file in the Planning & Development Services office at 5510 Overland Avenue, Suite 110, San Diego, California.

PLANNING & DEVELOPMENT SERVICES
MARK WARDLAW, DIRECTOR

BY:

LISA GORDON, DEPUTY DIRECTOR
Project Planning Division

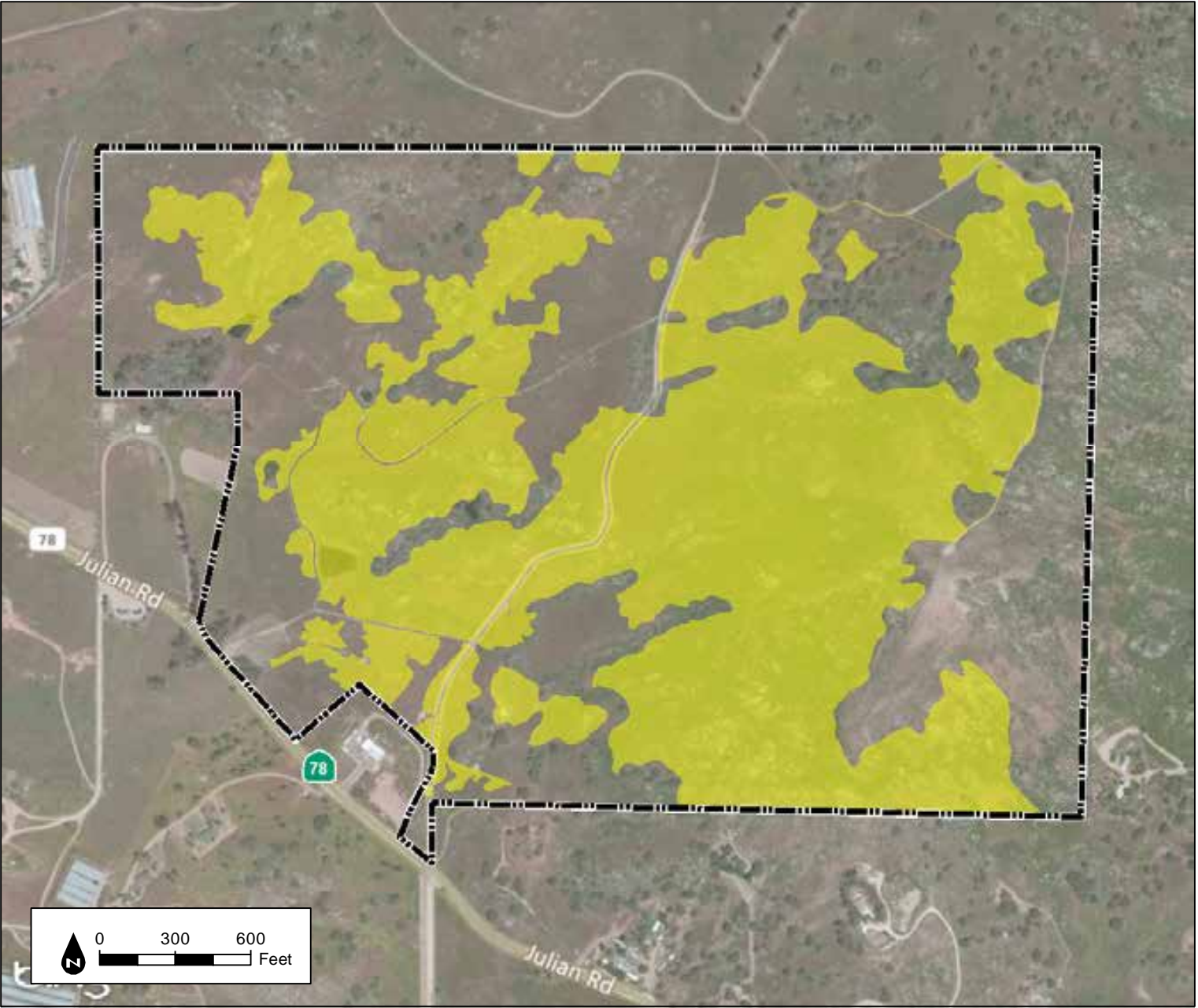
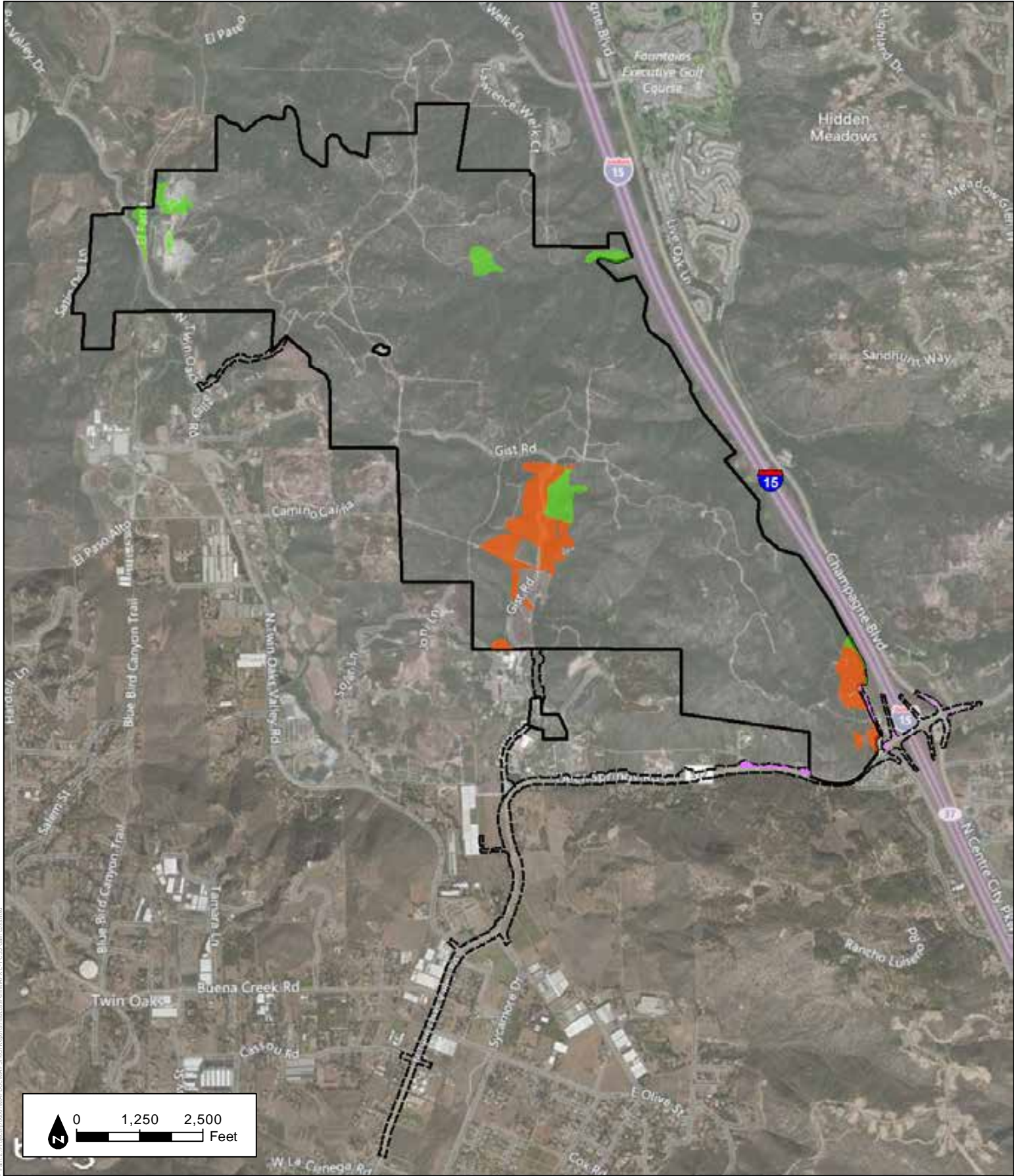
Attachments

Exhibit Entitled "Sage Scrub Habitat Lost and Gained from the Newland Sierra Project"

cc: To be provided at issuance of Habitat Loss Permit

email cc:

Ashley Smith, Project Manager, Project Planning, Planning & Development Services
Mark Slovick, Planning Manager, Project Planning, Planning & Development Services



- CSS Habitat Gained (131.45 Ac.)**

On-site Coastal Sage Scrub Gain (25.09 Ac.)
 Ramona Off-site Coastal Sage Scrub Gain (106.36 Ac.)

CSS Habitat Lost (56.73 Ac.)

On-site Coastal Sage Scrub Loss (54.50 Ac.)
 Off-site Coastal Sage Scrub Loss (2.23 Ac.)

Project Site
 Off-site Roadway Impacts
 Ramona Off-Site Mitigation Site
- SOURCE: BING MAPS AERIAL

Draft Habitat Loss Permit for the Newland Sierra Project

APPENDIX E-1

Coastal Sage Scrub Habitat Lost and Gained from the Newland Sierra Project

APPENDIX F

*Plant Species with Low Potential or Not Expected
to Occur*

APPENDIX F

Plant Species with Low Potential or Not Expected to Occur On Site

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Abronia maritima</i>	Red sand- verbena	None/ None	4.2	List D	Coastal dunes/ perennial herb/ February– November/ 10–330 feet	No	Not expected to occur.	No coastal dune habitat on site. Not detected during 2013 focused plant surveys.
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand- verbena	None/ None	1B.1	List A	Chaparral, coastal scrub, desert dunes; sandy/ annual herb/ January– September/ 260–5,300 feet	No	Low potential to occur.	Suitable habitat and soil are present, but nearest CNDDB record is over 10 miles from the site (CDFW 2014) and the species is not known from western portion of the County, south of State Route 76 (SR-76). Most of the specie's range is in Riverside and eastern San Diego County. Not detected during 2013 focused plant surveys.
<i>Acanthomintha</i> <i>ilicifolia</i>	San Diego thorn-mint	FT/ SE	1B.1	List A	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/ annual herb/ April– June/ 30–3,150 feet	No	Low potential to occur.	Species is known to occur in openings on gentle slopes ranging from 0 to 25 degrees and is restricted to gabbro and calcareous clay soils which include Las Posas series (USFWS 2009). Species is recorded within San Marcos quad (CNPS 2014); however, suitable clay soils (Las Posas) on site are limited to the preserve area west of Twin Oaks Valley Road. Species was not observed during previous surveys and suitable open habitat was thoroughly surveyed during the 2013 focused survey and species was not detected; therefore, this species has a low potential to occur onsite. The nearest occurrence is approximately 1.5 miles northeast of the Project Site, west

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
								of South Fork of Gopher Canyon and is located on Las Posas soils within an open area in Mafic chaparral and grassland (CDFW 2015).
<i>Acmispon</i> [= <i>Lotus</i>] <i>haydonii</i>	pygmy lotus	None/ None	1B.3	List A	Pinyon and juniper woodland, Sonoran desert scrub/rocky/ perennial herb/ January–June/ 1,706–3,937 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Acmispon</i> <i>prostratus</i> [= <i>Lotus</i> <i>nuttallianus</i>]	Nuttall's lotus	None/ None	1B.1	List A	Coastal dunes, coastal scrub; sandy/ annual herb/ March–June/ < 35 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
<i>Adolphia</i> <i>californica</i>	California adolphia	None/ None	2B.1	List B	Chaparral, coastal scrub, valley and foothill grassland; clay/ deciduous shrub/ December–May/ 150–2,430 feet	No	Low potential to occur.	Recorded within San Marcos quad (CNPS 2014), but clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road. This conspicuous species was not detected during 2013 focused plant surveys.
<i>Agave shawii</i> var. <i>shawii</i>	Shaw's agave	None/ None	2B.1	List B	Coastal bluff scrub, Coastal scrub/ perennial leaf succulent/ September–May/ 33–394	No	Not expected to occur.	Suitable habitat on site, but would have been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Ambrosia</i> <i>chenopodiifolia</i>	San Diego bur-sage	None/ None	2B.1	List B	Coastal scrub/ perennial shrub/ April–June/ 180–509 feet	No	Low potential to occur.	Suitable habitat on site, but would have likely been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/ None	1B.1	List A	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; often disturbed, sometimes alkaline/ rhizomatous herb/ May – October/ 60–1,360 feet	No	Low potential to occur.	Clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road. This species not observed during previous surveys and was not detected during 2013 focused plant surveys.
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace	None/ None	4.2	List D	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland/ annual herb/ March–June/ 492– 3,937 feet	No	Low potential to occur.	Suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Aphanisma blitoides</i>	Aphanisma	None/None	1B.2	List A	Coastal bluff scrub, Coastal dunes, Coastal scrub/sandy/ annual herb/ March–June/ 3– 1,001 feet	No	Low potential to occur.	Suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita	FE/ None	1B.1	List A	Maritime chaparral; sandy/ evergreen shrub/ December–June/ < 1,200 feet	No	Low potential to occur.	Recorded within San Marcos quad (CNPS 2014), but the more common, inland species (<i>A. g. zacaensis</i>) is the only species previously identified on site. Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Arctostaphylos otayensis</i>	Otay manzanita	None/None	1B.2	List A	Chaparral, cismontane woodland; metavolcanic/shrub/ January–March/ 900– 5,600 feet	No	Low potential to occur.	Suitable habitat on site, but would have likely been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	None/ None	1B.1	List A	Chaparral/ evergreen shrub/ December–March/ 740–1,770 feet	No	Low potential to occur.	A. g. zacaensis is the only manzanita species previously identified on site. Not detected during 2013 focused plant surveys.
<i>Artemisia palmeri</i>	San Diego sagewort	None/ None	4.2	List D	Chaparral, coastal scrub, riparian forest, scrub, and woodland; sandy, mesic/ deciduous shrub/ May–September/ 50– 3,000 feet	No	Low potential to occur.	Suitable vegetation and soils present, but conspicuous shrub species likely would have been identified during previous surveys if present. Not detected during 2013 focused plant surveys.
<i>Astragalus crotalariae</i>	Salton milk-vetch	None/ None	4.3	List D	Sonoran desert scrub/ sandy or gravelly/perennial herb/January–April/200– 820 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus deanei</i>	Dean's milk-vetch	None/ None	1B.1	List A	Chaparral, coastal scrub, riparian forest/perennial herb/February–May/246– 2,200 ft	No	Low potential to occur.	Suitable vegetation present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus douglasii</i> var. <i>perstrictus</i>	Jacumba milk-vetch	None/ None	1B.2	List A	Chaparral, cismontane woodland, valley and foothill grassland; rocky/perennial herb/April– June/2,950–4,500 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Astragalus insularis</i> var. <i>harwoodii</i>	Harwood's milk-vetch	None/ None	2B.2	List B	Desert dunes, Mojavean desert scrub/sandy or gravelly/annual herb/January–May/0–2,300 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus lentiginosus</i> var. <i>borreganus</i>	Borrego milk-vetch	None/ None	4.3	List D	Mojavean desert scrub, Sonoran desert scrub/sandy/annual herb/February–May/100–885 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus magdalenae</i> var. <i>peirsonii</i>	Peirson's milk-vetch	FT/ SE	1B.2	List A	Desert dunes/ perennial herb/ December –April/ 197–738 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus oocarpus</i>	San Diego milk-vetch	None/ None	1B.2	List A	Chaparral(openings), Cismontane woodland/ perennial herb/ May–August/1,001–5,000 feet	No	Low potential to occur.	Some suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's bush milk-vetch	None/ None	1B.1	List A	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/sandy or rocky/ perennial shrub/ December–June/1,198–3,002 feet	No	Low potential to occur.	Suitable chaparral and coastal scrub habitats on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Astragalus tener</i> var. <i>titi</i>	coastal dunes milk- vetch	FE/ SE	1B.1	List A	Coastal bluff scrub(sandy), Coastal dunes, Coastal prairie(mesic)/often vernally mesic areas/ annual herb/ March- May/ 3-164 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Atriplex coulteri</i>	Coulter's saltbush	None/ None	1B.2	List A	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay/ perennial herb/ March-October/ 10- 1,500 feet	No	Low potential to occur.	Some suitable vegetation on site, but clay soils are limited to the preserve area west of Twin Oaks Valley Road. The nearest CNDDB record is over 10 miles south of the site (CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Atriplex pacifica</i>	South Coast saltscale	None/ None	1B.2	List A	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/ March-October/ < 500 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
<i>Atriplex parishii</i>	Parish's brittlescale	None/ None	1B.1	List A	Chenopod scrub, Playas, Vernal pools/alkaline/ annual herb/ June- October/ 82-6,234 feet	No	Not expected to occur.	No suitable habitat on site. Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's saltscale	None/ None	1B.2	List A	Coastal bluff scrub, Coastal scrub/alkaline/ annual herb/ April– October/ 33–656 feet	No	Not expected to occur.	No suitable alkaline soils on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Ayenia compacta</i>	California ayenia	None/ None	2B.3	List B	Mojavean desert scrub, Sonoran desert scrub/rocky/perennial No herb/March–April/ 490–3,600 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Azolla</i> <i>microphylla</i> [= <i>mexicana</i>]	Mexican mosquito fern	None/ None	4.2	List D	Marshes and swamps(ponds, slow water)/ annual/perennial herb/ August/ 98–328 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Berberis</i> <i>higginsiae</i>	Higgins' barberry	None/ None	3.2	List C	Chaparral, Sonoran desert scrub/ rocky, sometimes granitic/ shrub/ March–April/ 2,625–3,500 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Berberis nevinii</i>	Nevin's barberry	FE/ SE	1B.1	List A	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub/sandy or gravelly/ perennial evergreen shrub/ March– June/ 899–2,707 feet	No	Not expected to occur.	Suitable chaparral habitat on site, but would have been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Bergerocactus emoryi</i>	golden-spined cereus	None/ None	2B.2	List B	Closed-cone coniferous forest, Chaparral, Coastal scrub/sandy/perennial stem succulent/ May–June/ 10–1,296 feet	No	Low potential to occur.	Suitable chaparral habitat on site, but would have likely been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Bloomeria clevelandii</i>	San Diego goldenstar	None/ None	1B.1	List A	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/clay/ perennial bulbiferous herb/ April–May/ 164–1,526 feet	No	Low potential to occur.	Although there are suitable vegetation and clay soils on site, the nearest CNDDDB record is over 7 miles south of the site (CDFW 2014) and is the northernmost record for this species. Not detected during 2013 focused plant surveys.
<i>Boechera hirshbergiae</i>	Hirshberg's rockcress	None/ None	1B.2	List A	Pebble plain/ perennial herb/ March–May/ 4,593–4,642 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded within the vicinity. Not detected during 2013 focused plant surveys.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/ SE	1B.1	List A	Chaparral (openings) cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often clay/ bulbiferous herb/ March–June/ 400–2,800 feet	No	Low potential to occur.	Recorded within San Marcos quad (CNPS 2014), but clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road; no vernal pools or seep-related habitats are present and grasslands are limited on site; not observed during previous surveys. Not detected during 2013 focused plant surveys.
<i>Bursera microphylla</i>	Little-leaf elephant tree	None/ None	2B.3	List B	Sonoran desert scrub/ rocky/ deciduous tree/June–July/660–2,300 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Calandrinia breweri</i>	Brewer's calandrinia	None/ None	4.2	List D	Chaparral, Coastal scrub/sandy or loamy, disturbed sites and burns/ annual herb/ March–June/ 33–4,003 feet	No	Low potential to occur.	Some suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>California</i> [<i>Erodium</i>] <i>macrophylla</i>	round-leaved filaree	None/ None	1B.2	List B	Cismontane woodland, Valley and foothill grassland/clay/ annual herb/ March–May/ 49–3,937 feet	No	Low potential to occur.	Limited suitable habitat and clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Calliandra eriophylla</i>	pink fairy-duster	None/ None	2B.3	List B	Sonoran desert scrub(sandy or rocky)/ perennial deciduous shrub/ January–March/ 394–4,921 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Camissoniopsis lewisii</i>	Lewis evening primrose	None/None	3	List C	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay/annual herb/March–May (June)/ <1,000 feet	No	Absent	Some suitable vegetation and soils on site; however, this species would have been observed during rare plant surveys that focused on this specie's suitable habitat. Recorded in the vicinity ² ; not detected during 2007 or 2013 surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Calochortus catalinae</i>	Catalina mariposa lily	None/ None	4.2	List D	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/ perennial bulbiferous herb/ (February) March–June/ 49–2,297 feet	No	Low potential to occur.	Some suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Calochortus dunnii</i>	Dunn's mariposa-lily	None/SR	1B.2	List A	Closed-cone conifer forest, chaparral; gabbroic or metavolcanic/bulbiferous herb/April–June/1,245–6,000 feet	No	Not expected to occur.	No suitable soils on site. Not detected during 2013 focused plant surveys.
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa lily	None/	1B.2	None	Chaparral; coastal scrub, valley and foothill grassland; rocky/ bulbiferous herb/ May–July/ 350–2,800 feet	No	Low potential to occur.	Species would likely have been recorded during previous surveys. Southern portion of the species range is San Clemente, Temecula, and Vail Lake. The common variety (<i>C. weedii</i> var. <i>weedii</i>) was detected on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Carlowrightia arizonica</i>	Arizona carlowrightia	None/ None	2B.2	List B	Sonoran desert scrub(sandy, granitic alluvium)/ perennial deciduous shrub/ March–May/ 935–1,411 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Ceanothus cyaneus</i>	Lakeside ceanothus	None/ None	1B.2	List A	Closed-cone conifer forest, chaparral/ shrub/April–June/770–2,500 feet	No	Not expected to occur.	Would have been observed if present. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Centromadia parryi</i> ssp. <i>australis</i>	Southern tarplant	None/ None	1B.1	List A	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools/ annual herb/ May–November/ < 400 feet	No	Low potential to occur.	Recorded within San Marcos quad (CNPS 2014), but very limited areas of suitable habitat on site; likely would have been observed during previous surveys. Not detected during 2013 focused plant surveys.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	Smooth tarplant	None/ None	1B.1	List A	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/ annual herb/ April–September/ <1,580 feet	No	Low potential to occur.	The nearest CNDDB record is over 10 miles from the site (at intersection of I-15 and SR-78) (CDFW 2014). Suitable vegetation but no suitable soils occur on site. Species likely to have been detected during previous surveys. Not detected during 2013 focused plant surveys.
<i>Chaenactis carphoclinia</i> var. <i>peirsonii</i>	Peirson's pincushion	None/ None	1B.3	List A	Sonoran desert scrub(sandy)/ annual herb/ March–April/ 10–1,640 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	None/ None	1B.1	List A	Coastal bluff scrub, coastal dunes/ annual herb/ January–August/ 10–330 feet	No	Not expected to occur.	No suitable habitat on site. Not detected during 2013 focused plant surveys.
<i>Chaenactis parishii</i>	Parish's chaenactis	None/ None	1B.3	List A	Chaparral(rocky)/ perennial herb/May–July/4,265–8,202 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Chamaebatia australis</i>	Southern mountain misery	None/ None	4.2	List D	Chaparral; gabbroic or metavolcanic/ evergreen shrub/ November–May/ 1,000–2,300 feet	No	Low potential to occur.	This evergreen shrub would have likely been detected during previous surveys. Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> [= <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>]	salt marsh bird's-beak	FE/ SE	1B.2	List A	Coastal dunes, Marshes and swamps(coastal salt)/ annual herb hemiparasitic/ May– October/ 0–98 feet	No	Not expected to occur.	No suitable habitat on site, and the site is outside the known range for this species. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	None/ None	4.2	List D	Chaparral, Coastal scrub, Lower montane coniferous forest/alluvial fan, granitic/ annual herb/ May–August/ 984–6,234 feet	No	Low potential to occur.	Some suitable vegetation communities on site, but no suitable soils on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	FE/ SE	1B.1	List A	Maritime chaparral, closed-cone conifer forest, coastal scrub/ annual herb/ March– May/ < 400 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long-spined spineflower	None/ None	1B.2	List A	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland; often clay/ annual herb/ April–July/ 100–5,000 feet	No	Low potential to occur.	Suitable vegetation is present. <i>C.</i> <i>polygonoides</i> detected on site (PSBS 2007) without variety; locations and number of individuals not mapped. Recorded in the vicinity ² , but not observed during or 2013 surveys and is not likely to occur within dense chaparral.
<i>Cistanthe</i> [= <i>Calandrinia</i>] <i>maritima</i>	seaside cistanthe	None/ None	4.2	List D	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland/ sandy/ annual herb/ (February), March–June (August)/ 16– 984 feet	No	Not expected to occur.	This species is more commonly found along the coast, and there is limited suitable habitat on site for this species. Not detected during 2013 focused plant surveys.

APPENDIX F (Continued)

Plant Species with Low Potential or Not Expected to Occur On Site

Scientific Name	Common Name	Federal/ State Status ¹	CRPR ¹	County ¹	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Verified On Site (Direct/ Indirect Evidence)	Potential to Occur On Site	Status On Site or Potential to Occur
<i>Clinopodium</i> [= <i>Satureja</i>] <i>chandleri</i>	San Miguel savory	None/ None	1B.2	List A	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland/ Rocky, gabbroic or metavolcanic/ perennial shrub/ March–July/ 394– 3,527 feet	No	Low potential to occur.	Some suitable vegetation communities on site, but no suitable soils on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Colubrina</i> <i>californica</i>	Las Animas colubrina	None/ None	2B.3	List B	Mojavean desert scrub, Sonoran desert scrub/ perennial deciduous shrub/ April–June/ 33– 3,281 feet	No	Not expected to occur.	No suitable habitat on site. Not recorded in the vicinity ² (CNPS 2014, CDFW 2014). Not detected during 2013 focused plant surveys.
<i>Convolvulus</i> <i>simulans</i>	Small- flowered morning- glory	None/ None	4.2	List D	Chaparral (openings), coastal scrub, valley and foothill grassland; clay, serpentinite seeps/ annual herb/ March–July/ 100–2,300 feet	No	Low potential to occur.	Suitable vegetation communities on site, but clay soils (Las Posas) on site limited to preserve area west of Twin Oaks Valley Road. This species was recorded in the San Marcos quad (CNPS 2014). Not detected during 2013 focused plant surveys.
<i>Corethrogyne</i> <i>filaginifolia</i> var. <i>incana</i> [= <i>Lessingia</i> <i>filaginifolia</i>]	San Diego sand aster	None/ None	1B.1	List A	Chaparral, coastal bluff scrub, coastal scrub/ perennial herb/ June– September/ 10–380 feet	No	Not expected to occur.	The site is outside of the species' known elevation range. Not detected during 2013 focused plant surveys.