



February 9, 2023

CS Homes, Inc.
2604 B El Camino Real, Ste. 223
Carlsbad, CA 92008
Attn: Cary Snodgrass

Subject: Biological Resources Letter Report for the Huynh Tentative Map and Site Development Permit Project (City PTS #: 649699), San Diego, California

Dear Mr. Snodgrass:

This letter report summarizes the results of the biological investigations for the proposed Huynh Tentative Map and Site Development Permit Project (Project) based on assessments by Tierra Data, Inc. (TDI) in compliance with City of San Diego (City) requirements in satisfaction of their responsibilities as Lead Agency under the California Environmental Quality Act (CEQA).

SUMMARY

The proposed Huynh Tentative Map Site Development Permit Project is the subdivision of a 2.80-acre vacant parcel into two 1.40-acre lots and the construction of two homes and Accessory Dwelling Units (ADUs). The Project site is located at 11275 Beeler Canyon Road, San Diego, California (Assessor's Parcel Number [APN] 320-030-31-00) adjacent to the Rancho Encantada Precise Planning area. The Project site supports Chamise Chaparral and Southern Mixed Chaparral vegetation communities and a jurisdictional drainage in the southwest corner. No sensitive plant or animal species were detected on site and only three sensitive animal species—Southern California rufous-crowned sparrow (*Aimophila canescens ruficeps*), Bell's sage sparrow (*Amphispiza bellii bellii*), and orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)—have a moderate or high potential to occur on site. The site is within the Quino checkerspot butterfly (*Euphydryas editha quino*) survey area but the site has an increasingly low potential to support the species due to the lack of host plant and nectaring species and the closing canopy of the chaparral vegetation. No state- or federal-listed species or City narrow endemic species are expected to occur on site. The site is within the City's Multiple Species Conservation Program (MSCP) Subarea Plan and, because it supports natural habitat, is subject to the City's Environmentally Sensitive Land (ESL) regulations. Multi-Habitat Planning Area (MHPA) occurs immediately to the south of the site.

The proposed Project would impact a total of 0.71 acre of Southern Mixed Chaparral and 0.98 acre of Chamise Chaparral on site and 0.04 acre of Southern Mixed Chaparral (a total of 1.73 acres of Tier IIIa habitat) and 0.01 acre of Developed Land off site within the Beeler Canyon Road Right of Way. These impacts would occur as a result of grading/construction/landscaping activities for the residences, ADUs, and driveways, and application of Brush Management Zone (BMZ) 1. BMZ 2 outside of these areas would occur within an additional 0.37 acre of Southern Mixed Chaparral and 0.01 acre of Chamise Chaparral, but BMZ 2 is considered "impact neutral" and does not require mitigation as long as only thinning and pruning of native vegetation occurs. The proposed Project will comply with the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code by ensuring clearing occurs outside the bird-breeding season (February 1–September 15), or will require that no active bird nests will be impacted if clearing occurs during that period. The proposed Project will comply with the MHPA Land Use Adjacency Guidelines (LUAG) and other policies and regulations of the MSCP.

Impacts from the proposed Project are to 1.73 acres of MSCP Tier IIIa habitats and would be partially mitigated on and off site at a 1:1 ratio. Recordation of a Covenant of Easement (COE) on site over 1.10-acres will provide 0.73 acre of conserved habitat being counted towards mitigation and the remaining 0.37 acre being within BMZ 2. An additional 1.00 acre of mitigation will be through payment into the City's Habitat Acquisition Fund (HAF) to provide full mitigation for impacts (assumes impact and mitigation are outside the MHPA).

To comply with the MBTA and CFG Code, all vegetation clearing for construction and brush management should occur between September 16 and January 31 (i.e., outside of the bird-breeding season). If clearing is not avoidable during the bird-breeding season, pre-clearance surveys for any active nests in the clearing area shall be conducted by a Qualified Biologist prior to the onset of activity. Work may proceed if no bird nests are observed. If an active bird nest is detected within the proposed clearing area, clearing would need to be postponed or suspended until the young have fledged from the active nest.

In addition, project design features and compliance with MHPA LUAG by the applicant will be required and shall be verified by City Development Services Department (DSD), Land Development Review, and/or MSCP staff on Project Construction Documents (CDs) and shall be enforced and monitored by a Qualified Biologist during construction. The City will have limited right of entry to verify the private property owner has maintained the COE to protect the sensitive biological resources in perpetuity.

These mitigation, avoidance, and minimization measures would mitigate direct impacts to sensitive habitat and indirect impacts to sensitive species, avoid potential impacts to the MHPA and migratory birds, and will ensure compliance with CEQA, the MSCP Subarea Plan, MBTA, and CFG Code. With application of these measures, the proposed Project would not have a significant effect on biological resources and would be in compliance with all federal, state, and City regulations.

INTRODUCTION

The report describes the biological resources present on and near the proposed Project site and addresses potential impacts from the proposed Project to those biological resources as required by City Biology Guidelines (2018), the City's Guidelines for Conducting Biology Surveys (2018), as well as the Project's consistency with the City's MSCP Subarea Plan (1997).

LOCATION

The Project is located in the City of San Diego, California (Figure 1), west of Pomerado Road and south of Scripps Poway Parkway, and more specifically, immediately south of Beeler Canyon Road, between where the Stonecroft Terrace and Green Valley Court emergency access roads connect to Beeler Canyon Road. The street address is 11275 Beeler Canyon Road (APN 320-030-31-00), in the RS-1-8 zone north of the Montecito Portion of the Rancho Encantada Precise Planning area. The Project site lies south of the Vulcan Materials Company sand and gravel quarry operation on Beeler Canyon Road, between vacant parcels to the east and west, and north of dedicated Open Space associated with the Stonebridge Estates developments to the south (Figure 1).

PROJECT DESCRIPTION

The Project requires a site development permit because of the presence of steep hillsides and sensitive biological resources within the parcel boundary. The proposed Project will subdivide the 2.80-acre parcel into two 1.40-acre lots to allow construction of a 2,500-square-foot (sq-ft), single-family home with a two-car garage and a 1,200-sq-ft ADU with a one-car garage on Lot 1 and a 2,625-sq-ft single-family home and 1,200-sq-ft ADU with a one-car garage on Lot 2.

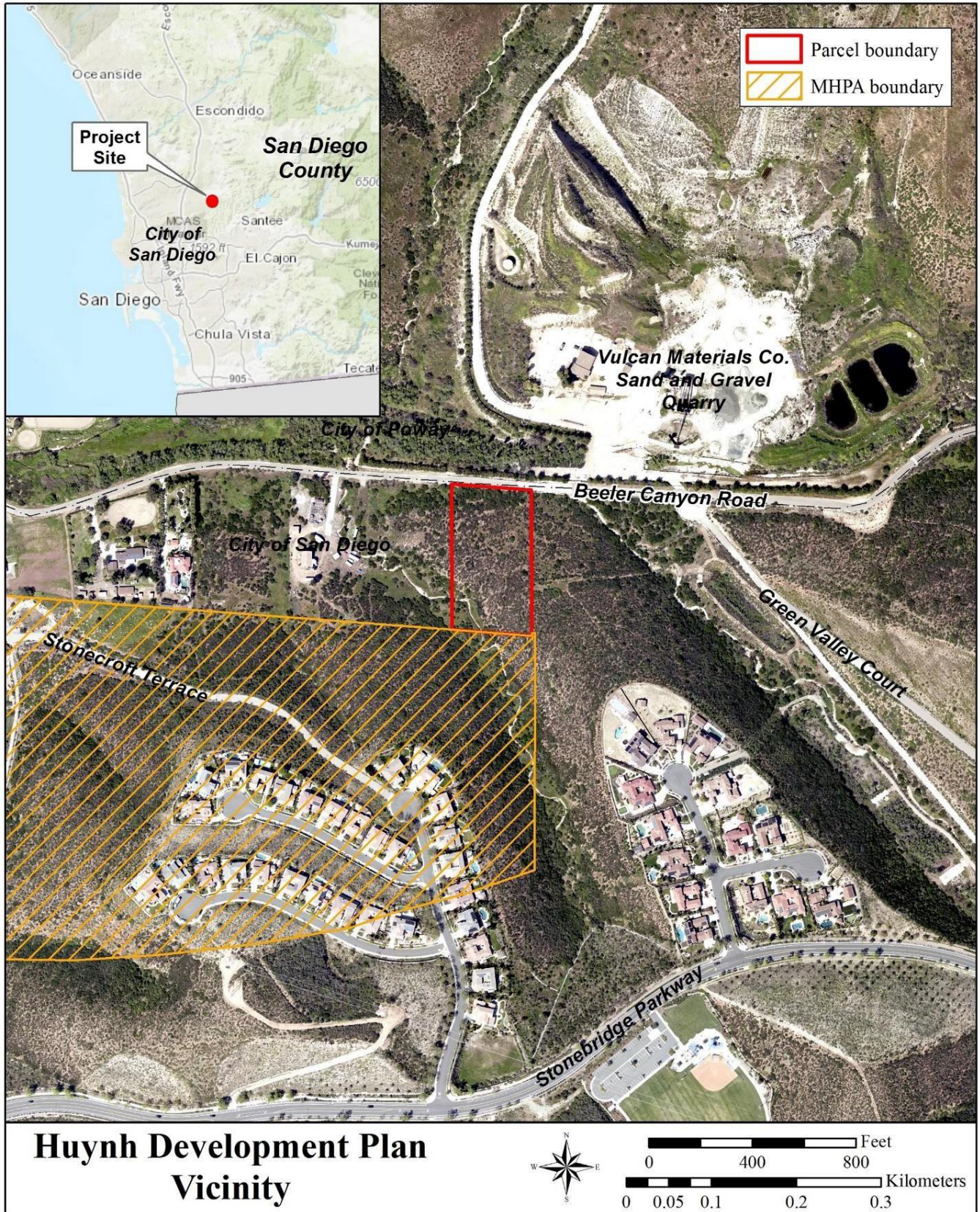


Figure 1. Regional Location and Vicinity

The residences would take access off Beeler Canyon Road via a shared driveway along the interior parcel boundary. The shared driveway runs north to south approximately one-quarter of the way into the parcel and splits to service the two main residences above. The two ADUs take access off the shared driveway between Beeler Canyon Road and where the shared driveway ends. Each house and ADU would require grading with cut and fill slopes to create pads for the new residences. As a result, the house pads will be partially on cut and partially on fill. Approximately 4,000 cubic yards (cu yds) of cut will occur, with 4,000 cu yds of fill, avoiding any import to, or export of, soil from the site.

Water and sewer connections would be to City water and sewer lines in Beeler Canyon Road via the shared driveway. Dry utilities (electricity, telephone, and cable) will also come from Beeler Canyon Road to the proposed residences.

The graded and landscaped portion of the site around the residences adjacent to native habitat are considered part of the Project development and are required to be covered by BMZ 1 regulations. To achieve the required brush management for the proposed residence, brush beyond the graded and landscaped portion of the site up to 100 from the structures would be required to comply with BMZ 2 thinning and pruning requirements. BMZs are of variable widths because fire-resistive construction techniques will be applied to the eastern and western side of the residences and because of application of an increased BMZ 1 and reduced BMZ 2 pursuant to Section 142.0412(f) of the Municipal Code (City 2020a).

BMZ requirements are summarized in the City's Brush Management Guide Bulletin #1 (City 2014) and requirements in Section 142.0412 of the Municipal Code (City 2020a).

BMZ 1

- Generally must be permanently irrigated to maintain succulent growth.
- Shall consist primarily of low-growing plant material, less than 4 feet in height with the exception of trees. Plants shall be low-fuel and fire-resistive.
- All portions of trees, other than the trunk, which extend within 10 feet of a structure or the outlet of any chimney shall be cut back.
- Trees adjacent to or overhanging any building must be free of dead wood.
- Roof and rain gutters of any structure must be free of leaves, needles, or other dead vegetative growth.
- Buildings or conditions legally in existence at the time of the adoption of the Brush Management Regulations as amended in 2005 (including habitable structures, accessory buildings, and other structures such as fences, gazebos, and decks) are allowed to have their use or occupancy continued. However, such use or occupancy must not constitute a distinct danger to life or property. New construction of non-habitable structures such as fences, gazebos, and decks must be non-combustible and/or have a minimum 1-hour fire resistance rating.
- Irrigation from BMZ 1 must not run onto BMZ 2 as it encourages growth of flammable vegetation.

BMZ 2 is the remaining land that extends beyond BMZ 1 and is usually comprised of native and/or naturalized vegetation:

- Can have NO permanent irrigation.
- Must be thinned and pruned on a seasonal basis consistent with Brush Management Regulations and Standards to reduce the fuel-load of vegetation greater than 24 inches in height without harming native plants, soil, or habitats.

All impacts would occur on site except for the connection of the driveway to Beeler Canyon Road, and the connection, via trenching, of water and sewer pipe to the City water and sewer lines in Beeler Canyon Road.

Construction equipment would either be parked on site within proposed impact areas or on Beeler Canyon Road during construction. The homes would be built in one phase and would take approximately one year from approval.

METHODS

Prior to performing the field surveys, a California Natural Diversity Database (CNDDDB) search was conducted to identify sensitive plant and wildlife species historically noted in the vicinity of the Project site (1-mile radius).

TDI Biologists Derek Langsford and Ben Van Allen visited the property on May 20, 2020 and spent approximately 3.5 hours (6:45-10:15 AM) conducting wandering transects throughout the entire property, recording all plant and wildlife observations, creating a map of the existing vegetation communities, and taking photographs. The weather conditions were clear and cool (64 degrees Fahrenheit [°F]) and warming by 10:00 to 70°F.

The survey was performed during the peak of spring with excellent timing for finding many annual plants and migratory and breeding birds. No focused surveys were performed during this site visit. Derek Langsford had previously surveyed the site on October 10, 2014 and on May 29, 2015 for a previously proposed project on this parcel.

TDI Biologist Ben Van Allen visited the site again on January 31, 2023 and spent approximately 75 minutes (10:15-11:30 AM) while conditions were clear and cool (62 to 65 °F). Recent heavy rains created more verdant conditions and the creek was still running. The site had also been accessed for site testing in the last year; however, the vegetation communities had not changed in species composition or distribution, and the plant and animal species noted were previously recorded or not considered sensitive requiring no additional evaluation.

RESULTS

PHYSICAL CHARACTERISTICS

The Project site resides on the lower portions of a descending ridgeline extending from the south to Beeler Canyon Road in a southeast-to-northwest direction. The Project site is mostly a northwest-facing, gentle slope supporting native chaparral vegetation adjacent to thickly vegetated parcels to the east, west, and south, and Beeler Canyon Road immediately to the north (see site photos in Appendix A). In the southwest of the Project site, on the western side of the ridge, an unnamed ephemeral drainage crosses the southwestern corner. This drainage continues off site heading northwest and eventually crosses underneath Beeler Canyon Road and joins Beeler Creek, which runs east-west on the north side of Beeler Canyon Road. On the road's verge a few ruderal species are present. The Project site is free of distinguishing topographic features, such as rocky outcrops and large boulders, although scattered rocks do occur on site.

The soil on the whole of the Project site is comprised of Redding cobbly loam (Conservation Biology Institute 2020). The soils generally occur on 15 to 50% slopes, with the exception of the southwestern portion of the site which is flat (0% slope) around the creek bed. This soil type is well-drained (California Soil Resource Lab 2020).

Historically, the site has undergone profound changes over the last 50 or so years. Based on historic imagery (Historic Aerials 2020), in 1953, Beeler Canyon was largely undeveloped with native habitat on the slopes and Beeler Creek meandering through the valley. By 1964, Beeler Canyon Road had been graded though not surfaced, and the sand and gravel operation was beginning. By 1966, the site plus parcels to the west had been cleared. Some recovery had occurred by 1980 though homes started to appear in the valley to the west. The site and the area immediately to the west were almost fully recovered by 1989. Over the following decade shrubs at the site grew and the habitat continued to fill in. In late 1998 or 1999 however, all but the largest shrubs along the road and a few along the stream were cleared. Beeler Canyon, including the site, burned in the Cedar Fire of October 2003. Stonebridge Estates (aka Sycamore Ranch) was developed to the south on the ridge tops soon after the Cedar Fire but the site and adjacent lands have remained undisturbed since then. The chaparral covering the site gradually

filled in over the two decades and shrubs have notably increased in stature and density since 2014. Open areas supporting native forbs still remain around the site, especially along the stream at its southwest corner. Minimal trash occurs on site, though lengths of black multi-core electrical wire can be found in two areas of the site.

ENVIRONMENTAL SETTING

The proposed Project site is near the bottom of Beeler Canyon bordered on three sides by undeveloped parcels supporting chaparral vegetation and to the north by Beeler Canyon Road and the City of Poway. Most of the parcels on the south side of the road to the east of the site are in a mostly natural state and apparently support chaparral communities on east-facing slopes and sage scrub communities on west-facing slopes. Beyond the adjacent vacant parcel to the west are single- family homes on large lots.

To the immediate south, abutting the proposed Project parcel are Open Space parcels, within the MHPA, associated with the Stonebridge Estates projects on the ridge tops above (Figure 1).

To the north of Beeler Canyon Road is a tall oleander (*Nerium oleander*) hedge screening the sand and gravel quarry operations which takes access off Beeler Canyon Road approximately 470 feet to the east. Beeler Creek flows through the sand and quarry facility along the bottom of the valley.

From the site, one can see residential development on the hills to the west and south, industrial/commercial development on the ridge to the north in the City of Poway along Scripps Poway Parkway, and largely vacant land to the east.

REGIONAL AND REGULATORY CONTEXT

This section describes the regulatory requirements for the Project, and also the Project's regional resource planning status. The Project is subject to CEQA, for which the City will be the Lead Agency, and applicable state and federal regulations. The Project site is located within the City of San Diego, which is covered by the City's MSCP Subarea Plan and is adjacent to the MHPA and subject to the policies and guidance of the MSCP.

FEDERAL AND STATE REGULATIONS

Regulations that apply or potentially apply to future development of the Project site include the federal and California Endangered Species Acts (ESA and CESA, respectively), MBTA, CFG Code, federal Clean Water Act (CWA), and CEQA. Impacts to the jurisdictional drainage feature would require a U.S. Army Corps of Engineers (USACE) CWA Section 404 Permit, a Regional Water Quality Control Board (RWQCB) CWA Section 401 Certification, and CFG Code Section 1602 Streambed Alteration.

The MBTA prohibits taking any migratory bird, part, nest, or eggs and is implemented using Section 10.12 of the U.S. Fish and Wildlife Service's (USFWS) MBTA regulations which defines "take" as to: pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities. A take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, active nests, eggs, or parts thereof.

Pursuant to Section 3503, 3503.5, 3505, and 3513 of the CFG Code, it is unlawful to take, possess, or needlessly destroy the active nest or eggs of any bird. The CFG Code defines "take" as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Compliance with MTBA and CDFG code is anticipated.

CITY OF SAN DIEGO MSCP GUIDELINES

In July 1997, the USFWS, California Department of Fish and Game (now California Department of Fish and Wildlife [CDFW] as of January 1, 2013), and the City adopted the Implementing Agreement for the MSCP (City 1997). This program allows the incidental take of threatened and endangered species, as well as regionally sensitive species that are otherwise adequately conserved. The program designates regional preserves intended to be mostly void of development activities while allowing development of other areas subject to program requirements.

The City's MSCP Subarea Plan was prepared to meet the requirements of the California Natural Communities Conservation Planning Act of 1992 and to be consistent with the federal ESA and state CESA. This Subarea Plan describes how the City's portion of the MSCP Preserve (MHPA) will be implemented.

MHPA Preserve

The MSCP (City 1997) identifies an MHPA that is intended to link all core biological areas into a regional wildlife preserve. The nearest MHPA is on the southern boundary of the site and extends over the Open Space area for Stonebridge Estates to the south.

MHPA Land Use Adjacency Guidelines

The City's Subarea Plan includes recommendations so that development activities adjacent or in close proximity to the MHPA will be subject to special conditions so that minimal impacts to the preserve area can be assured. Potential impact issues requiring avoidance, minimization, or mitigation include drainage, lighting, noise, barriers, invasive species, and brush management. With MHPA adjacent to the site, these guidelines would apply to this proposed Project.

General Management Directives

The City applies MSCP general management directives to all areas of the areas under its Subarea Plan (Section 1.5.2), as appropriate (City 1997).

Specific Management Directives

The proposed Project is in the Northern Area of the MSCP within the Rancho Peñasquitos and Beeler Canyon Area, is not included in the MHPA, and development may occur as permitted in accordance with zoning regulations. No Specific Management Directives apply to this parcel or area per the City's MSCP Subarea Plan (1997).

Special Conditions for Covered Species

Special conditions apply to covered species that would be impacted by a project or have a moderate or high potential to occur on site. These conditions apply to plant species classified as "narrow endemic" and other sensitive animal and plant species specifically identified in the MSCP Subarea Plan's Appendix A.

City of San Diego Development Regulations

The City regulates development of sensitive biological resources through the Land Development Code and MSCP. Mitigation and minimization and avoidance measures requirements for sensitive resources discussed in this document follow requirements of the City's Biology Guidelines (City 2018) as outlined in the City's ESL regulations (City 2020b), which have the purpose to "protect, preserve and, where damaged restore, the ESLs of San Diego and the viability of the species supported by those lands." ESLs are defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. The parcel contains sensitive habitat and steep slopes covered by the City's ESL regulations.

BIOLOGICAL RESOURCES

The following sections describe the vegetation communities, plants and animals observed on site, discuss sensitive species with potential to occur on site, and assess the potential for any wildlife corridors to be present.

Plant and animal species are considered sensitive if they have been listed as such by federal or state resource agencies. The CDFW publishes comprehensive lists for sensitive plants and animals through the CNDDDB and at their website (CDFW 2020). The CDFW also publishes the CNDDDB RareFind, a computerized inventory of information on the location and condition of California's rare, threatened, endangered, and sensitive plants, animals, and natural communities.

VEGETATION COMMUNITIES

The property is dominated by native chaparral vegetation dominated by scrub oak (*Quercus berberidifolia*) adjacent to Beeler Canyon Road and chamise (*Adenostoma fasciculatum*) and other chaparral species beyond (Table 1, Figure 2). In the flat valley bottom that supports a drainage, which crosses the southwest corner of the site, the chaparral is disturbed, probably by flooding after significant rain events.

Southern Mixed Chaparral (37120)

Southern Mixed Chaparral is an MSCP Tier IIIa community composed of tall (often between 10 and 20 feet), broad-leaved sclerophyllous shrubs that often form nearly impenetrable stands on mesic, rocky, north-facing slopes. It generally has a poorly developed understory, but instead may contain a large component of dead plant matter. It is common within San Diego County and provides important habitat for wide-ranging species such as mule deer (*Odocoileus hemionus fuliginata*), mountain lion (*Felis concolor*), and golden eagle (*Aquila chrysaetos*).

Southern Mixed Chaparral occupies 1.80 acres of the Project site and is mostly recovered from the Cedar Fire which burned through Beeler Canyon in 2003. The vegetation has almost reached 100 percent vegetative cover after near average rainfall totals in the past few years (San Diego County Water Authority 2020). Few openings occur for forb species to grow. Southern mixed chaparral varies in species composition throughout the site. While chamise is predominant in the habitat on the site, other chaparral species co-occur including Ramona lilac (*Ceanothus tomentosus*), laurel sumac (*Malosma laurina*), San Diego mountain mahogany (*Cercocarpus minutiflorus*), interior scrub oak (*Quercus berberidifolia*), toyon (*Heteromeles arbutifolia*), and Mojave yucca (*Yucca schidigera*). Few understory plants were present and even fewer identifiable but included rush rose (*Crocanthemum scoparium*), deerweed (*Acmispon glaber*), and scattered purple needle grass (*Stipa pulchra*).

In the flat, seemingly disturbed Southern Mixed Chaparral community along the creek, holly-leaved cherry (*Prunus ilicifolia* ssp. *ilicifolia*) was prevalent as were non-native grasses including wild oats (*Avena* sp.). Aerial imagery suggests this area is maintained in this state by water seasonally flowing outside the creek banks and modifying the landscape. A few California sand aster (*Corethrogyne filaginifolia* ssp. *filaginifolia*) plants had yet to bloom near the drainage but several exotic species were present (hairy rockrose [*Cistus incanus*], bur clover [*Medicago polymorpha*], scarlet pimpernel [*Lysimachia arvensis*], and Dyer's rocket [*Reseda luteola*]) reflecting the disturbed nature of the area.

In the northern portion of the Project site, near the road, interior scrub oak, San Diego mountain mahogany, Ramona lilac, and holly-leaved cherry were prevalent. In addition, several broom baccharis (*Baccharis sarathroides*) grew adjacent to the road. Chilicothe (*Marah macrocarpa*) was seen climbing over the canopies of some of the shrubs. This area, with a prevalence of interior scrub oak, but containing other Southern Mixed Chaparral species would not be characterized as Tier I Scrub Oak Chaparral that is typically dominated by the rare and sensitive Nuttall's scrub oak (*Quercus dumosa*).

Chamise Chaparral (37200)

Chamise Chaparral, like Southern Mixed Chaparral is an MSCP Tier IIIa community composed of tall (often between 3 and 20 feet), broad-leaved sclerophyllous shrubs but overwhelmingly dominated by chamise. Associated species contribute little to cover. Adapted to repeated fires by stump sprouting, mature stands are densely interwoven with very little herbaceous understory or litter. It is typically found on shallower, drier soils on xeric slopes and ridges, with adjacent more mesic sites supporting mixed chaparrals.

Chamise Chaparral occupies the central portion and covers 0.99 acre of the Project site. The vegetation has not reached 100 percent vegetative cover but is starting to close canopy in many areas, reducing openings for annual forbs and species that like vegetation edges like California rufous-crowned sparrow and orange-throated whiptail. While chamise is the predominant shrub species within this community, gaps in the vegetation supported assorted annual species including California sand aster, purple clarkia (*Clarkia purpurea* ssp. *quadrivulnera*), and canchalagua (*Zeltnera exaltata*), and six weeks rattail grass (*Festuca myuros*).

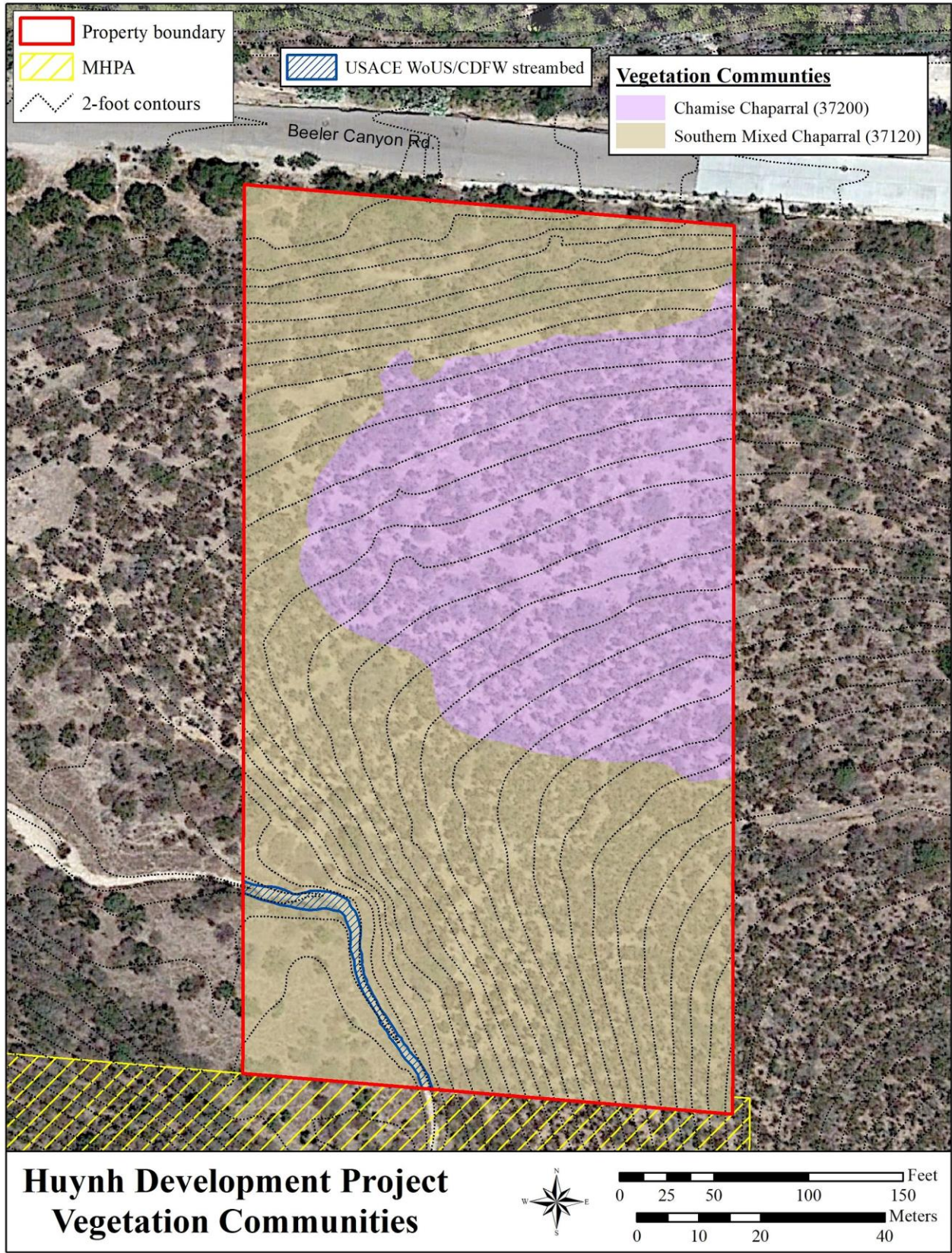


Figure 2. Vegetation and Sensitive Resources Observed on Site

Developed (12000)

Developed land, an MSCP Tier IV land cover, is where permanent structures and/or pavement has been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Developed land consists of Beeler Canyon Road immediately off site to the north.

Table 1 summarizes the acreages of habitat types within the Project site.

Table 1. Acreage of Habitat Type within the Project Parcel

Vegetation Community Type (Holland Code)	Tier	On Site (acres)
Southern Mixed Chaparral (37120)	IIIa	1.80
Chamise Chaparral (37200)	IIIa	0.99
TOTAL		2.79¹

¹ Total may not add up due to rounding.

PLANTS

A list of the plant species observed on site in 2014/15 and 2020 is presented in Appendix B.

Sensitive Plants

Sensitive species that have been detected within one mile of the Project include Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), San Diego barrel cactus (*Ferocactus viridescens*), and San Diego goldenstar (*Bloomeria clevelandii*). The CNDDDB identifies a swath of San Diego goldenstar along the floor of Beeler Canyon (CDFW 2020); however, the precise location of the observation was not originally specified. The species is found mostly in grasslands and at shrubland edges, and much less likely in chaparral. The species would have been detected on site in 2014, 2015, and 2020 if present and conditions have not changed since.

The site is mostly natural with minimal recent disturbance or trash present and has not changed much since 2015. Relatively few non-native plants were observed. Del Mar manzanita and San Diego barrel cactus would have been observed if present. No sensitive plants were detected during the Fall 2014, Spring 2015, or Spring 2020 surveys and conditions have not changed since.

Sensitive plants with potential to occur are assessed in Appendix C. A table of City MSCP narrow endemics with their potential to occur on site is provided in Appendix D.

ANIMALS

Thirty-six wildlife species were observed during the site visits conducted on October 10, 2014 and May 29, 2015, and May 20, 2020. Minimal activity was detected in 2014 because of the time of year, the relative cool temperatures at the time of the visit, the habitat present, and the drought-stressed condition of the vegetation. The May 2015 visit was also at the end of a low-rainfall spring which reduced animal activity on site. Conditions in May 2020 were much better for wildlife after higher than normal rainfall during the season and late, heavy rains in early April. A list of animals observed or detected on site in 2014/15 and 2020 is provided in Appendix E.

Birds detected in and around the site in 2020 included common birds such as Anna’s hummingbird (*Calypte anna*), California and spotted towhee (*Pipilo crissalis* and *P. maculatus*), northern mockingbird (*Mimus polyglottos*), and western scrub jay (*Aphelocoma californica*). Less common species included western tanager (*Piranga ludoviciana*), blue-gray gnatcatcher (*Polioptila caerulea*), and red-winged blackbird (*Agelaius phoeniceus*). Bird activity was much greater in the riparian habitat along Beeler Creek off site to the north. No raptors have potential to nest on site

because of the lack of suitable nesting locations. There was evidence of small mammal use (active burrows) in multiple places with Lepidoridae (rabbit and hare family) scat over much of the site. Mule deer scat was also detected on site in 2014 but not 2020. No mammals were observed during the site visits. Coyotes (*Canis latrans*) could be heard in the distance along Beeler Creek in 2014 and are very likely still in the area.

Sensitive Animals

While no CNDDDB records exist for sensitive animals on site, others have been detected within 1 mile including coastal California gnatcatcher (*Polioptila californica*) and coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), and Southern California rufous-crowned sparrow was detected on site in 2005 per City records; however, none of these species were observed on site in Fall 2014, Spring 2015, or Spring 2020 surveys and conditions have not changed since. Of these three species only the Southern California rufous-crowned sparrow has any potential to occur on site and with closing canopies, the habitat on site has become less suitable over time. No raptors are expected to roost or nest on site but may forage over the site and along the more open drainage area. One other sensitive bird species, Bell's sage sparrow (a CDFW watch list and USFWS Bird of Conservation Concern) has a moderate or high potential to occur on site but was not detected and is not an MSCP-covered species. The Southern California rufous-crowned sparrow and orange-throated whiptail are the only MSCP-covered species that have a moderate or high potential to occur on site. A list of animal species with potential to occur is provided in Appendix F.

Quino Checkerspot Butterfly

The site is within the Recommended Quino Survey Area for the federally-listed as endangered Quino checkerspot butterfly per the 2014 USFWS protocol (USFWS 2014) and has some habitat characteristics that are associated with known Quino checkerspot butterfly occurrences such as openings in scrub and chaparral. But as described above, the site has undergone profound changes over the last 50 or so years that have devalued the site for the species. By 1968, the site plus parcels to the west, had been cleared (Historic Aerials 2020). After almost full recovery by 1989, all but the larger shrubs on site were cleared again between 1996 and 2002 (Google Earth 2020). Beeler Canyon then burned in the Cedar Fire of October 2003. Stonebridge Estates (i.e., Sycamore Estates and Rancho Encantada) was developed soon after the Cedar Fire on the ridges to the south. Quino checkerspot surveys in 2001 of that area were negative, even though conditions were considered ideal for the species: open ridges, dot-seed plantain patches, and nectaring resources after a winter of moderate rainfall (8.57 inches). At that time, the result suggested this part of the county did not support the species. The Project site is far from any Designated Critical Habitat for the species occurring in southern San Diego and southern Riverside counties. So, while the site currently meets the criteria for surveys in terms of vegetation, its location at the bottom of a slope near a valley floor, adjacency to a paved road, with development on ridge tops both directly to the north and south, past clearing, and the nearest potentially usable ridge tops being 2 miles to the east, the probability of the species occurring on site is low.

The closest sightings within the last 20 years have been on an undeveloped ridge to the east of Sycamore Estates (2.1 miles away during surveys for the Sunrise Powerlink), on Fanita Ranch north of Santee (almost 4 miles away), in Mission Trails Regional Park (6 miles away), and north and south of San Vicente Reservoir (over 6 miles away) (<http://quinocheckerspotbutterfly.blogspot.com> 2013). Detections documented to the west in the 1920s and 1960s, prior to the species' listing, are in areas that are developed and from which the butterfly is most likely extirpated. Although plant taxa indicative of Quino checkerspot butterfly habitat have not been identified, the butterfly has been associated with vegetation communities that support its two most frequently used host plants, dot-seed plantain (*Plantago erecta*), and owl's clover (*Castilleja exserta*; Longcore *et al.* 2003). Commonly occurring with these plant species are peppergrass (*Lepidium nitidum*), tidy tips (*Layia platyglossa*), goldfields (*Lasthenia californica*), blue dicks (*Dichlostemma capitatum*), fringed linanthus (*Linanthus dianthiflorus*), as well as *Allium*, *Bloomeria*, *Cryptantha*, *Plagiobothrys*, and *Amsinckia* species, several of which are used as nectar sources. These species, if present, would have been detectable during the Spring 2015 and 2020 surveys, but were not observed. Without host plant or significant nectaring resources, it is extremely unlikely the Quino checkerspot butterfly uses the site.

JURISDICTIONAL AREAS

An ephemeral drainage with a cobble streambed that is approximately 4 feet wide occurs in the southwestern portion of the site (Figure 2). This drainage is jurisdictional to the USACE, CDFW, and RWQCB, but with no development proposed in that portion of the site and all drainage from the proposed Project directed to the north, no impacts to jurisdictional areas are expected. The drainage would also not be a City wetland because of the lack of wetland vegetation. As a result, the drainage was not formally delineated for this Project.

WILDLIFE CORRIDORS AND LINKAGES

Wildlife movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetative cover provide corridors for wildlife movement. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations.

The site is located in a rural area within a patch of native habitat that is part of a larger area of habitat in Beeler Canyon connected to lands to the east, west, and south, and is recognized in the MSCP as a southern extension of the Central Poway/San Vicente Reservoir/North Poway Biological Core Area (City 1998). It connects lands that make up the majority of the Biological Core Area to the east with Peñasquitos Canyon to the west.

Beeler Creek acts as a thoroughfare in the canyon and ultimately west to Peñasquitos Canyon for birds and animals that require cover from predators. Beeler Canyon peters out in the east into undeveloped land in the County of San Diego's Gooden Ranch Sycamore Canyon Preserve and the majority of the Core Area. To the north, the industrial and commercial development along Scripps Poway Parkway in the City of Poway acts as a barrier to wildlife movement north. While the Stonebridge Estates projects act as a barrier to the south, gaps in the development allow for animal movement with only Stonebridge Parkway as a barrier. Only the creek bed in the southwest corner of the site is a likely local movement area for wildlife, although the creek passes through a residential lot to the east before crossing under Beeler Canyon Road and joining Beeler Creek. The majority of the site does not have features that lend itself to acting as a wildlife corridor. It does provide habitat for resident wildlife and local movement for wildlife species but is not within a designated regional wildlife movement corridor and a large swath of vacant land exists in East Miramar and East Elliot connecting the Biological Core Area in the east with the canyons of the urban San Diego area to the west and south.

MSCP COMPLIANCE

All proposed projects within the City are required to comply with the City's MSCP Subarea Plan and the MHPA LUAG. This section describes how compliance with the requirements of the MSCP reduces impacts to covered species and indirect impacts to sensitive habitats.

MHPA LAND USE ADJACENCY GUIDELINES

The MHPA occurs at the very southern boundary of the Project site, over 200 feet south of the nearest structure, and 107 feet from the nearest area of BMZ 2, but the City's MHPA LUAG still need to be addressed because of the proximity of the Project Site to the existing MHPA to ensure compliance. In addition, a proposed COE, covering both mitigating Open Space and BMZ 2 will occur adjacent to the MHPA.

Per Section 1.4.3 of the City's MSCP Subarea Plan, drainage, toxic substances, lighting, noise, barriers, invasive species, brush management, and grading are topics of concern addressed by the City's MHPA LUAG (2013a). While the proposed Project is not within the MHPA, the following describes how Project compliance with the MHPA LUAG would avoid impacts to the MHPA. Edge effects will be minimized by dedication of BMZ 2 as part

of the COE which will act as a buffer from the developed area of the parcel, because the proposed COE is upslope of the proposed development, and the Project will comply with the MHPA LUAG as described below.

These project features and compliance measures will be applied to the Project as conditions of approval.

Drainage

Guideline:

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once per year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out of sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

Compliance:

All drainage from the proposed development areas of the site has been designed to pass through storm water treatment features (Figure 3) and is either stored on site in bioretention basins or flows towards Beeler Canyon Road away from the MHPA and Open Space. The Project by design will comply with this provision.

Toxic Substances

Guideline:

Land uses, such as recreation and agriculture, that use chemicals or generate by-products, such as manure, that are potentially toxic or impactful to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

Compliance:

The proposed Project site and its storm drainage system drains water and any potential toxic substances into on-site storm treatment areas and stores storm water on site in bioretention basins adjacent to Beeler Canyon Road (Figure 3) and away from the MHPA and Open Space. During construction, all maintenance of any construction equipment (e.g., refueling, oil changing, hydraulic maintenance) will be conducted within designated Best Management Practices -fortified areas in the grading area or off site in a manner that will not allow the release of toxins, chemicals, petroleum into the Open Space or MHPA. The CDs shall contain a note stating: *All construction related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/Owner's Representative or Resident Engineer to ensure there is no impact to the MHPA.*

Lighting

Guideline:

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

Compliance:

The MHPA will be partially shielded from the proposed development area of the site because of the cut slopes. Any lighting will be for the area immediately around the home, in the landscaping, and not directed towards the Open Space or MHPA. With the homes at least 200 feet from the MHPA and not directed at the Open Space or MHPA, lighting will not impact the MHPA. Lighting will comply with City Outdoor Lighting regulations per Municipal Code Section 142.0740 (City 2014).

Noise**Guideline:**

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Compliance:

Three sensitive species have moderate or high potential to use the Open Space or adjacent MHPA. The proposed Project would not generate noise that would interfere with wildlife usage in the MHPA. Grading of four pads and *construction* of the homes will involve machinery but such work on this limited area would be temporary and would not meet thresholds for noise for species in the MHPA. The nearest grading is approximately 150 feet from the MHPA which provides buffering for any construction noise which would not be above standard thresholds for sensitive species at the edge of the MHPA.

Barriers**Guideline:**

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

Compliance:

The Project is a Subdivision of a Parcel into two lots for development of two private homes and two ADUs. No public access will be granted to the Open Space or MHPA through the property resulting in animal predation by non-residents' domestic pets. A three-wire fence will also be installed at the boundary of BMZ 1 and BMZ 2 to inhibit movement of domestic pets into BMZ 2 and the mitigating Open Space. Open Space signage/markers will occur along the boundary of the BMZ 2 with the mitigating Open Space as a reminder that no pets should be allowed to enter the mitigating Open Space and that brush management does not incur in the mitigating habitat (Figure 3). The signage will act as a reminder to residents of the protection for the habitat beyond the signs in compliance with the LUAG.

Invasive Species**Guideline:**

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Compliance:

The proposed Project will avoid usage of invasive plant species in landscaping (see City Landscaping Standards Table 1 and www.cnpsd.org/invasives.html for restricted plants) and as a result, will not introduce invasive species into the MHPA.

Brush ManagementGuideline:

New development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the pad and outside of the MHPA. Zone 2 may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Brush management zones will not be greater in size than is currently required by the City's regulations. Initial thinning of woody vegetation shall not exceed 50 percent coverage of the existing vegetation prior to implementation of brush management activities. Additional thinning and pruning shall be done consistent with City standards to obtain minimum vertical and horizontal clearances and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, brush management in the Zone 2 area will be the responsibility of a homeowners association or other private party. For existing and approved projects, the brush management zones, standards and locations, and clearing techniques will not change from those required under existing regulations.

Compliance:

BMZs are required for the Project. The Project will comply the City's Brush Management Guidelines (2014). The City's *prescribed* BMZs are a BMZ 1 of 35 feet and a BMZ 2 of 65 feet as allowed under Section 142.0412 of the Municipal Code (City 2020a). The Project is lower in elevation than the existing MHPA and BMZ 1 is mostly contained within the grading area. BMZ 2 does not encroach into the existing MHPA. The placement of a COE will be required for BMZ 2 and the mitigating Open Space. Further, regular brush management activity in BMZ 2 shall not exceed that which is required by the City Municipal Code. A three-wire fence will delineate the boundary of BMZ 1 and BMZ 2 so that clearing does not occur in BMZ 2. Open Space signage/markers will identify the boundary of BMZ 2 and the mitigating Open Space so that thinning and pruning in BMZ 2 does not occur in the protected habitat (Figure 3).

Grading/Land DevelopmentGuideline:

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

Compliance:

No grading will occur outside of the development footprint, associated landscaping and BMZ 1 that is 150 feet from the MHPA. DSD Planning and/or MSCP staff shall ensure that all grading and manufactured slopes are included within the development footprint.

As demonstrated above, the proposed Project is in compliance with the MHPA LUAG and indirect impacts to the MHPA are not expected to occur.

GENERAL MANAGEMENT DIRECTIVES

The MSCP general management directives apply to all areas of the areas under the City's MSCP Subarea Plan (Section 1.5.2), as appropriate (City 1997). This includes lands within or adjacent to the MHPA.

Mitigation**Directive:**

Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

Compliance:

Mitigation is proposed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines (2018). See below.

Restoration

Not applicable as no restoration is being proposed as part of this Project.

Public Access, Trails, and Recreation

Not applicable as no trails or recreational uses are proposed.

Litter/Trash and Materials Storage

No litter is expected in the Open Space because no trails or recreational uses are planned and it will not be accessible to the public being on private property. The MHPA is off site to the south and no uses are planned. The MHPA is at a higher elevation than the proposed Project and so potential leakage of substances will not drain into the MHPA.

Adjacency Management Issues

Because a COE, granted in favor of the City, the USFWS, and CDFW, will be recorded against the title of the property, the City, will have limited right of entry to verify the private property owners have maintained the COE to protect sensitive resources in perpetuity in accordance with the MSCP Framework Management Plan as modified by the Area Specific Management Directives per Section III.B.3a of the City's Land Development Code Biology Guidelines (City 2018).

This oversight will ensure that intrusions into the Open Space and MHPA will not occur, and that educational information can be sent to residents to heighten environmental awareness, and inform residents of access, appropriate plantings, construction, or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.

Invasive Exotics Control and Removal

Compliance with MHPA LUAG on invasive species will prevent them from being planted and invading the MHPA. Management actions within the COE beyond the MHPA LUAG or within the MHPA are not the responsibility of the property owner.

Flood Control

Not applicable as no riparian habitat and no MHPA occurs on the parcel. The channel that crosses the southwest of the parcel has a limited watershed and has a floodplain that protects the parcel from causing erosion.

MSCP CONDITIONS OF COVERAGE

While no MSCP-covered species were detected on site, two have a moderate or high potential to occur and have MSCP Conditions of Coverage. These are for the orange-throated whiptail and Southern California rufous-crowned sparrow (City 1997, 1998):

- *Orange-throated whiptail* - Area Specific Management Directives addresses edge effects.
- *Southern California rufous-crowned sparrow* – Area Specific Management Directives must include

maintenance of dynamic processes, such as fire, to perpetuate open spaces of coastal sage scrub with herbaceous components.

The BMZ 2 will provide a distance buffer between the residence and the conserved habitat to the south reducing edge effects from the development envelope for orange-throated whiptail. Dynamic processes will be perpetuated because BMZ 2 will be kept thinned, providing openings for annuals for Southern California rufous-crowned sparrows, and the BMZs will protect the residence thus allowing dynamic processes to occur (e.g., fires) in the COE and Open Space lands in the existing MHPA to the south without threat to property. Combined with compliance with the MHPA LUAG and the preservation of Southern Mixed Chaparral habitat on site and off site per prescribed mitigation ratios, impacts would not be significant to these species and the Project would follow the species' MSCP Conditions of Coverage.

IMPACTS

Impacts are either direct or indirect. An impact is direct when the primary effect is removal of existing habitat, often replacing it with development and landscaping. An indirect impact consists of secondary effects of a project (such as noise) that leads to habitat degradation. The magnitude of an indirect impact may be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

The significance of impacts to biological resources present or to those with potential to occur was determined based upon the sensitivity of the resource and the extent of the anticipated impacts.

DIRECT IMPACTS

The proposed Project consists of clearing, grading with excavation and recompacting to create a pad, construction of the homes and ADUs, landscaping, and sewer, water, and dry utility connection to street utilities in Beeler Canyon Road. The proposed Project will also be required to apply BMZs to the land between the dwellings and natural resources to the east, west, and south. Grading and landscaping are considered part of the Project development and are required to be covered by BMZ 1 regulations if between the residence and natural resources. Land between areas covered by BMZ 1 and natural resources require thinning and pruning as part of BMZ 2 which provides additional protection to the proposed structures but is considered impact neutral (City 2018, 2020).

VEGETATION

Per City Biology Guidelines (City 2018):

“... lands containing Tier I, II, IIIa and IIIb [see Table 3 of City’s Biology Guidelines] and all wetlands [see Tables 2a and/or 2b of City’s Biology Guidelines] are considered sensitive and declining habitats. As such, impacts to these resources may be considered significant. Lands designated as Tier IV are not considered to have significant habitat value and impacts would not be considered significant.”

The proposed site improvements, as well as implementation of BMZ 1 and 2 requirements, will occur within the native Tier IIIa habitats that cover the property. Impacts to 0.75 acre of Southern Mixed Chaparral (0.71 acre on site and 0.04 acre off site) and 0.98 acre of Chamise Chaparral i.e. a total of 1.73 acres (Table 2; Figure 3) from grading of the pads and slopes, development of the houses and ADUs, and driveways, and application of BMZ 1 are significant, and require mitigation pursuant to the City’s Land Development Code, MSCP, and CEQA. BMZ 2 activities restricted to thinning and pruning pursuant to City BMZ regulations (0.37 acre) are considered impact neutral and do not require mitigation pursuant to the City Biology Guidelines (City 2018).

Table 2. Project Impacts and Mitigation

Vegetation Community Type (Holland Code)	Tier	On Site (acres)	Impacts (outside MHPA) (acres)				Mitigation (Outside MHPA) (acres)		
			On Site	Off Site	Total	Mitigation Ratio ²	Mitigation Required	On-site Preservation	Off-site Mitigation (HAF)
			Grading for House, Garage, & Driveway, Drainage Improvements, BMZ 1	Driveway Connection, Water & Sewer Lines					
Southern Mixed Chaparral (37120)	IIIa	1.80	0.71	0.04	0.75	1:1	0.75	0.73	0.02
Chamise Chaparral (37200)	IIIa	0.99	0.98	0	0.98	1:1	0.98	0	0.98
Subtotal		2.79	1.69	0.04	1.73		1.73	0.73	1.00
Developed (12000)	IV	0	0	0.01	0.01	N/A	0	0	0
TOTAL¹		2.79	1.69	0.05	1.74		1.73	0.73	1.00

¹ Column and row totals may not add due to rounding error.

² See Table 3

Table 3. Mitigation Ratios for Chaparral Habitats for Tier IIIa per City Biology Guidelines

TIER IIIa (Common Uplands)	Mixed Chaparral Chamise Chaparral	Location of Preservation (MHPA)		
		Location of Impact (MHPA)	Inside	Outside
			Inside	1:1
		Outside	0.5:1	1:1

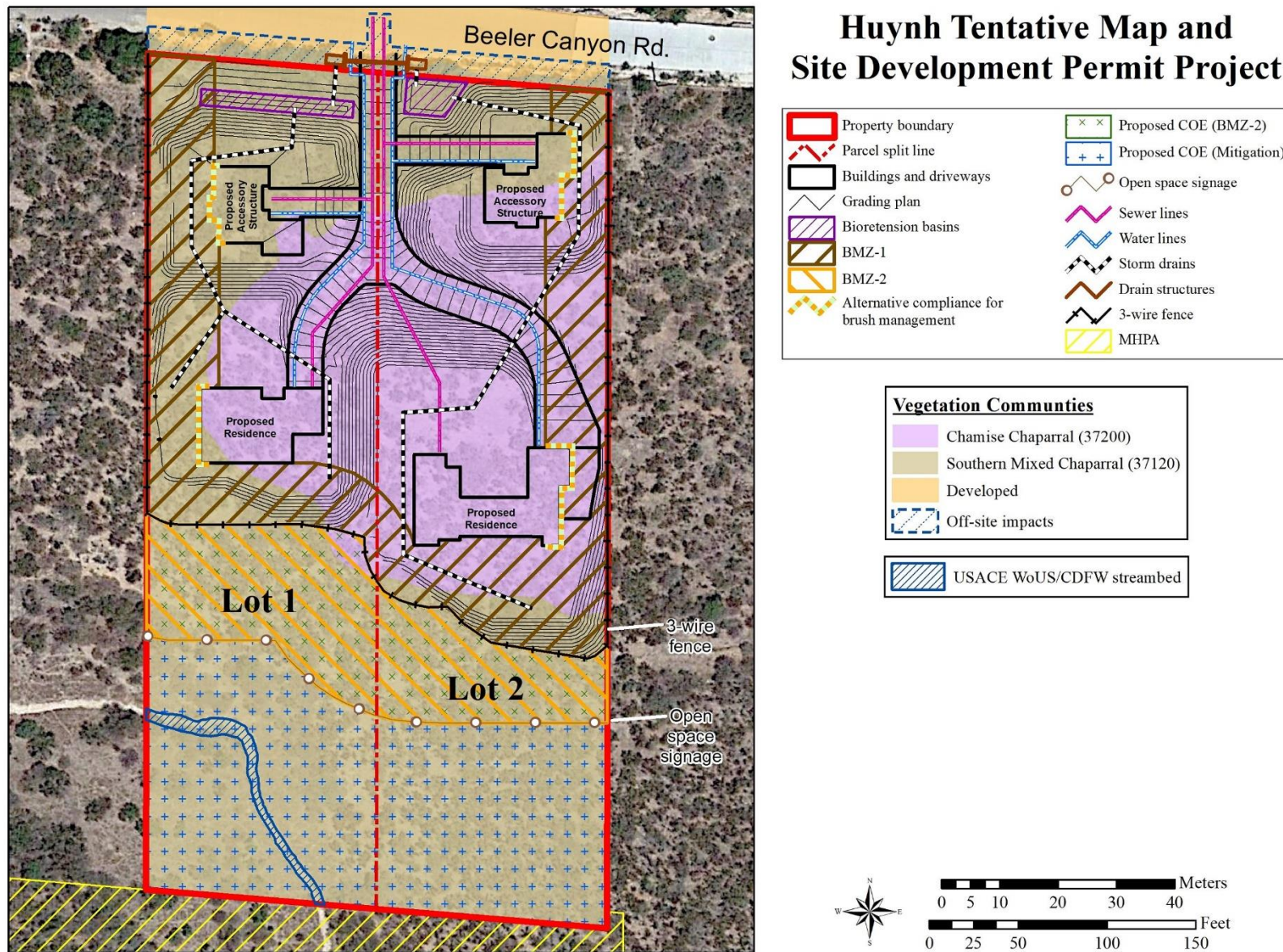


Figure 3. Impacts to Vegetation Communities and Sensitive Resources

SENSITIVE PLANTS AND ANIMALS

Per City Biology Guidelines (City 2018), “Impacts to individual sensitive species, outside of any impacts to habitat, may also be considered significant based upon the rarity and extent of impacts. Impacts to state- or federally-listed species and all narrow endemics [see the City’s Biology Guidelines] should be considered significant. Certain species covered by the MSCP [see Section I of the Biology Guidelines] and other species not covered by the MSCP, may be considered significant on a case-by-case basis taking into consideration all pertinent information regarding distribution, rarity, and the level of habitat conservation afforded by the MSCP.”

Sensitive Plants

As no sensitive plants were detected (Appendix B), and none have a moderate or high potential to occur on site (Appendix C), no direct impacts to sensitive plant species are expected.

Narrow Endemics

No City narrow endemics were detected and none are expected to occur on site (Appendix D). No impacts to narrow endemic species are expected to occur.

Sensitive Animals

No special status animal species were detected on site, i.e. species listed as rare, threatened, or endangered by the USFWS or CDFW (Appendix E) and few are expected to occur on site (Appendix F). Scat of mule deer, an MSCP-covered species, was detected on site in 2014 but the species has no sensitivity status, and impacts would not be significant for this wide-ranging species and there being no associated MSCP Conditions of Coverage. Bell’s sage sparrow, Southern California rufous-crowned sparrow, and the orange-throated whiptail are the only sensitive species that are likely to be directly affected by the Project because they are considered to have a moderate or high potential to occur on site (Appendix F). Bell’s sage sparrow is not an MSCP-covered species but potential effects would be significant. Direct impacts to MSCP-covered orange-throated whiptail and Southern California rufous-crowned sparrow (City 1997, 1998) would be considered significant.

The development area of the proposed Project is downslope of the proposed BMZ 2, on-site mitigating Open Space, and existing MHPA off-site to the south. The BMZ 2, where only thinning and pruning per City Municipal Code and Standards is allowed, is considered impact neutral, and will be conserved as part of the COE.

Nesting Birds

No impact to nesting birds are anticipated.

JURISDICTIONAL AREAS

No development is being proposed in the portion of the site with the jurisdictional drainage. In addition, the drainage is being completely protected within the proposed Open Space. All the runoff from the proposed Project will drain to the north away from the drainage. No activity regulated by these agencies will occur in or near the drainage feature. As a result, no impacts are expected and no mitigation or approvals are required from USACE, CDFW, and RWQCB.

INDIRECT IMPACTS

Indirect impacts can affect vegetation communities or their potential use by sensitive species including raptors and nesting birds. Potential indirect impacts from construction of the Project include decreased water quality, construction noise, night lighting, colonization of non-native plant species, and human and pet intrusion. These potential indirect impacts are MSCP LUAG and General Management Directives (City 1997).

Through compliance with the MHPA LUAG and General Management Directives the Project avoids indirect impacts to biological resources (see MSCP Compliance Section above).

CUMULATIVE IMPACTS

Although impacts to sensitive biological resources may not be significant when considered independently, when multiple impacts such as from several development projects within an area are combined, they may be cumulatively significant. Implementation of the proposed Project would contribute to the incremental loss of native habitats occurring within the City; however, cumulative impacts to biological resources would not be significant because the impacts of the Project occur outside the MHPA, will be fully mitigated per City Biology Guidelines (2018), are in compliance with MHPA LUAG, and are compliance with the City's MSCP Subarea Plan (1997) that was designed to mitigate cumulative impacts from development outside of the MHPA.

MITIGATION

Pursuant to City requirements in its Biology Guidelines (City 2018) and the MSCP Subarea Plan (City 1997) the following Mitigation Program is proposed to reduce significant impacts to below a level of significance and constitutes a portion of the Mitigation Monitoring and Reporting Program for the Project.

Mitigation Element

As wetlands are avoided, no vernal pools occur on site, and no MHPA occurs on site, mitigation for direct impacts to habitat will be for grading, storm water features and BMZ 1 impacts to Southern Mixed and Chamise Chaparral habitats. Mitigation ratios are provided in Tables 2 and 3 (City 2018).

Direct impacts to 1.73 acres of Tier IIIa habitats (0.75 acre of Southern Mixed Chaparral and 0.98 acre of Chamise Chaparral) would be accomplished through on-site preservation and off-site payment into the HAF.

The Project proponents will dedicate a 1.10-acre area of Southern Mixed Chaparral (Figure 3) of which 0.73 acres outside the BMZ 2 acts as on-site conservation mitigation, through recordation of a COE to partially meet the required 1:1 mitigation. The mitigation area is adjacent to extant habitat to the east and west, and to extant habitat preserved within the MHPA to the south, such that it will be part of a large block of habitat that has long-term viability (Figures 1, 2, and 3).

The 0.73 acre of on-site mitigation only partially fulfills the mitigation requirement. To fully mitigate the direct impacts to 1.73 acres of Tier IIIa vegetation communities an additional 1.00 acre of impact requires mitigation.

Options for mitigation were explored. The directly-connected, adjacent parcels to the east and south are large (14.59 and 48.75 acres respectively) and already protected being associated with the past development (Stonebridge Estates) to the south. The parcel immediately to the west is not in the MHPA with development on its west side (Figure 1). Use of adjacent parcels is not possible. Parcels that are of approximate size to satisfy the 1.00-acre requirement are likely either bigger or zoned for development and therefore cost-prohibitive. The Project only needs 1.00 acre to fully mitigate direct impacts to habitat. The City's HAF was created to provide small projects with the ability to mitigate small impacts and is the most feasible and cost-effective way for the applicant to secure the mitigation.

Off-site credit will be obtained through payment into the City's HAF for habitat potentially outside the MHPA (at a 1:1 mitigation ratio) i.e. for 1.00 acre.

Direct impacts to Bell's sage sparrow are potentially significant but are also mitigated by the mitigation for habitat that is occurring on and off site. Direct and indirect impacts to Southern California rufous-crowned

sparrows and orange-throated whiptail are fully mitigated by mitigation for impacts to vegetation communities and application of the measures to comply with the conditions of coverage for the species.

Protection and Notice Element

The Protection Element must provide assurances that areas offered for mitigation will be adequately protected from future development (City 2018). Adequate notice must also be recorded against the title of the mitigation property to memorialize the status of mitigation.

The Protection Element identifies the specific actions to protect any areas offered as mitigation. These actions include dedicating the land in fee title to the City or recording a COE to the City, with the USFWS and the CDFW named as third-party beneficiaries, against the title of the property.

The COE to be recorded against the title of the property will cover the on-site mitigation land and the BMZ 2 area. Within the BMZ 2 the required thinning and pruning per City Municipal Code and Standards will be identified (Figure 3). The COE will legally bind the property owner with respect to future use of the land, identify permissible passive activities, and other conditions, and will run with the land. The COE will grant the City with limited right of entry to the area covered by the COE to verify the private property owner's compliance with brush management requirements, MHPA LUAG, and maintenance of the biological resources in perpetuity (City 2018).

Since the applicant is proposing to also provide mitigation through monetary compensation into the City's HAF, and the City would use those funds to purchase mitigation lands, which it would then own, the City would provide assurance that the purchased mitigation land would be adequately protected from future development.

Management Element

The Mitigation Program must provide assurances that areas offered for mitigation will be adequately managed and monitored in a manner consistent with Section 1.5 Preserve Management of the City's MSCP Subarea Plan (1997). The Mitigation Program should identify how the objectives of the MSCP Preserve Management recommendations result will be met for the area, as well as provide any additional management recommendation resulting from site-specific information (Area Specific Management Directives; City 2018).

If dedicated to the City, management of the MHPA would be conducted by the City of San Diego consistent with Section 1.5, Management Framework Plan of the MSCP Subarea Plan (City of San Diego 1997). If placed under a COE, the property owner would need to either identify a third-party long-term habitat manager that would be responsible for the management of the COE along with a funding mechanism to pay for management of the Open Space in perpetuity; or, agree to perform the required management themselves.

The COE will provide the City with limited right of entry to verify the private property owners' have maintained the COE to protect sensitive resources in perpetuity in accordance with the MSCP Framework Management Plan as modified by the Area Specific Management Directives per Section III.B.3a of the City's Land Development Code Biology Guidelines (City 2018). Per the assessment of potential impacts to sensitive species described above, Area Specific Management Directives must address edge effects for the orange-throated whiptail and for the Southern California rufous-crowned sparrow must include maintenance of dynamic processes, such as fire, to perpetuate open spaces of coastal sage scrub with herbaceous components.

The property owner shall be responsible for ensuring the maintenance of brush management areas (BMZ 1 and 2) and compliance with the MHPA LUAG within those areas, as identified above (City 2018). The City will have limited right of entry to monitor compliance and maintenance of the biological resources within the COE in perpetuity.

CONCLUSION

Direct impacts to 1.73 acres of Tier IIIa habitats (0.75 acre of Southern Mixed Chaparral and 0.98 acre of Chemise Chaparral) would be mitigated at a ratio of 1:1 by dedication of 0.73 acre of Southern Mixed Chaparral on site as permanently protected, mitigating Open Space within a 1.10-acre COE, and payment of the equivalent of 1.00 acre of habitat into the City's HAF. Through implementation of the Project features and the Mitigation Program: recordation of the COE, biological monitoring of construction, compliance with MHPA LUAG requirements, maintenance of the biological resources within COE in perpetuity, and payment for 1.00 acres of mitigation to the HAF, the proposed Project would be in compliance with CEQA, the MSCP Subarea Plan, and the MSCP MHPA LUAG. be reduced to a level below significant. As a result of the project design and mitigation, the proposed Project would have a less than significant effect on biological resources.

If you have any questions, please contact Derek Langsford at derek.langsford@tierradata.com or by phone at (760) 749-2247.



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QUALIFICATIONS AND CERTIFICATION

The following individuals contributed to the fieldwork and/or preparation of this report. See Appendix E for their resumes.

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APPENDICES

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APPENDIX A

Site Photos





Photo 1. Looking into the site from Beeler Canyon Road at the northeast corner in a southerly direction (January 2023).



Photo 2. Looking into the site from Beeler Canyon Road further west than Photo 1 in a southwesterly direction with homes of Stonebridge Estates visible on the ridge tops. Interior scrub oaks visible with a broom baccharis in bloom at the center (2014).



Photo 3. Looking southeast into the Southern Mixed Chaparral of the Project site, looking southeast from the northwest corner of the site (2020).



Photo 4. Looking west-southwest from the approximate location of the proposed residence. Chamise shrubs are narrow and stunted from probable lack of rainfall (2014).



Photo 5. Looking southeast from the central west of the site into thicker Southern Mixed Chaparral above the drainage (2020).



Photo 6. Looking southwest across the valley with the drainage with Stonebridge Estates homes on the ridge tops. The opposite hillside is within the MHPA (2020).



Photo 7a. The ephemeral drainage in the southwest of the site with cobble bed (May 2020).



Photo 7b. The ephemeral drainage at the same location southwest of the site with cobble bed and water present (January 2023).



Photo 8a. Looking north along drainage in area of disturbed Southern Mixed Chaparral (May 2020).



Photo 8b. Same portion of the drainage in area of disturbed Southern Mixed Chaparral with water in creek (January 2023).



Photo 9a. Looking north downslope from near southeast corner of property through Southern Mixed Chaparral (May 2020).



Photo 9b. Looking north in a similar location to 9a downslope from near southeast corner of property through Southern Mixed Chaparral (January 2023). Note willows along Beeler Canyon Creek off site are in their winter leafless phase.



Photo 10. Looking north downslope from near east side of property through Chamise Chaparral (2014).



Photo 11. Openings within Chamise Chaparral in the south-central portion of the site (2020).



Photo 12. Looking northwest from Chamise Chaparral into the Southern Mixed Chaparral in the north central portion of site (2020).

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APPENDIX B
Plant Species Observed On Site

FAMILY/	SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
FERNS AND MOSSES					
Selaginellaceae	<i>Selaginella cinerascens</i>	ashy spikemoss	SMC, CC	X	X
Polypodiaceae	<i>Pentagramma triangularis</i>	goldenback fern	SMC	X	
ANGIOSPERMS – MONOCOTS					
Agavaceae	<i>Chlorogalum parviflorum</i>	smallflower soaproot	CC		X
	<i>Hesperoyucca whipplei</i>	chaparral yucca	SMC		X
	<i>Yucca schidigera</i>	Mojave yucca	SMC	X	X
Iridaceae	<i>Sisyrinchium bellum</i>	blue-eyed grass	SOC		X
Poaceae	<i>Avena</i> sp.*	wild oat	SMC	X	X
	<i>Bromus diandrus</i> *	ripgut grass	SMC	X	X
	<i>Bromus hordeaceus</i> *	soft brome	SMC	X	
	<i>Bromus madritensis</i> *	foxtail chess	SMC	X	X
	<i>Festuca perennis</i> *	Italian rye	SMC		X
	<i>Festuca mysuros</i> *	rattail grass	SMC, CC	X	X
	<i>Gastridium phleoides</i> *	nit grass	SMC		X
	<i>Melica imperfecta</i>	California melic	SMC		X
	<i>Stipa pulchra.</i>	needle grass	SMC	X	
Themidaceae	<i>Dichelostemma capitatum</i>	blue dicks	SMC		X
ANGIOSPERMS – DICOTS					
Anacardiaceae	<i>Malosma laurina</i>	laurel sumac	SMC	X	X
	<i>Toxicodendron diversilobum</i>	western poison oak	SMC	X	X
Apiaceae	<i>Daucus pusillus</i>	wild carrot	SMC, CC	X	X
	<i>Foeniculum vulgare</i>	fennel	SMC	X	X

FAMILY/	SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
Apocynaceae	<i>Nerium oleander</i> *	oleander	SMC		X
Asteraceae	<i>Ambrosia psilostachya</i>	western ragweed	DEV	X	X
	<i>Artemisia californica</i>	California sagebrush	SMC		X
	<i>Artemisia douglasiana</i>	California mugwort	SMC		X
	<i>Baccharis salicifolia</i>	mule fat	SMC		X
	<i>Baccharis sarathroides</i>	broom baccharis	SMC, DEV	X	X
	<i>Carduus pycnocephalus</i> *	Italian thistle	SMC		
	<i>Centaurea melitensis</i> *	star thistle	SMC, CC	X	X
	<i>Corethrogyne filaginifolia</i> ssp. <i>filaginifolia</i>	California sand aster	SMC, CC	X	X
	<i>Crocanthemum scoparium</i>	rush rose	SMC	X	X
	<i>Deinandra fasciculata</i>	fascicled tarweed	SMC, CC	X	X
	<i>Dittrichia graveolens</i> *	stinkwort	DEV	X	
	<i>Erigeron canadensis</i>	horseweed	SMC		X
	<i>Eriophyllum confertiflorum</i>	yellow yarrow	SMC		X
	<i>Helminthotheca echioides</i> *	bristly ox-tongue	SMC	X	
	<i>Lactuca serriola</i> *	prickly lettuce	SMC		X
	<i>Logfia filaginoides</i>	filago	SMC	X	
	<i>Logfia gallica</i> *	narrowleaf cottonrose	SMC, CC	X	X
	<i>Pseudognaphalium californicum</i>	ladies' tobacco	SMC		X
	<i>Psilocaphus brevisissimus</i>	woolly marbles	CC		X
	<i>Sonchus asper</i> *	spiny sowthistle*	SMC		X
<i>Stephanomeria</i> sp.	wreath plant	SMC	X		
<i>Uropappus lindleyi</i>	silver puffs	SMC, CC	X	X	
Boraginaceae	<i>Phacelia</i> sp.	phacelia	SMC	X	
Brassicaceae	<i>Brassica nigra</i> *	black mustard	SMC	X	X

FAMILY/	SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
	<i>Lepidium densiflorus</i>	common pepperweed	SMC	X	
	<i>Sisymbrium orientale</i> *	Indian hedge mustard	SMC	X	
Caprifoliaceae	<i>Lonicera subspicata</i> var. <i>denudata</i>	honeysuckle	SMC	X	X
Caryophyllaceae	<i>Polycarpon tetraphyllum</i> *	four leaved allseed	SMC		X
Chenopodiaceae	<i>Salsola tragus</i> *	Russian thistle	DEV	X	
Cistaceae	<i>Cistus incanus</i> *	hairy rockrose	SMC (drainage)		X
Convolvulaceae	<i>Calystegia macrostegia</i>	morning glory	SMC, CC	X	X
Cucurbitaceae	<i>Marah macrocarpa</i>	chilicothe	SMC		X
Ericaceae	<i>Xylococcus bicolor</i>	mission manzanita	SMC	X	X
Euphorbiaceae	<i>Croton setigerus</i>	dove weed	SMC, CC	X	X
Fabaceae	<i>Acmispon americanus</i>	American bird's foot trefoil	SMC		X
	<i>Acmispon glaber</i>	deerweed	SMC	X	X
	<i>Medicago polymorpha</i> *	bur clover	SMC (drainage)		X
	<i>Melilotus albus</i> *	white sweetclover	SMC		X
Fagaceae	<i>Quercus berberidifolia</i>	scrub oak	SMC	X	X
Gentianaceae	<i>Zeltnera exaltata</i>	canchalagua	SMC		X
Geraniaceae	<i>Erodium</i> sp.*	filaree	SMC	X	X
Lamiaceae	<i>Salvia mellifera</i>	black sage	SMC	X	X
Malvaceae	<i>Malacothamnus fasciculatus</i> var. <i>fasciculatus</i>	bush mallow	SMC	X	
	<i>Sidalcea malviflora</i>	checker bloom	SMC		X
Myrsinaceae	<i>Lysimachia arvensis</i> *	scarlet pimpernel	SMC (drainage)	X	X
Onagraceae	<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	purple clarkia	CC		X
Orobanchaceae	<i>Castilleja affinis</i>	Indian paintbrush	SMC		X
	<i>Cordylanthus rigidus</i>	rigid bird's beak	SMC	X	X

FAMILY/	SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
Phrymaceae	<i>Erythranthe guttata</i>	yellow monkey flower	SMC (drainage)		X
	<i>Mimulus aurantiacus</i>	sticky monkeyflower	SMC	X	
Polemoniaceae	<i>Navarretia hamata</i>	hooked navarretia	CC		X
Polygonaceae	<i>Eriogonum fasciculatum</i>	California buckwheat	SMC	X	X
	<i>Rumex crispus</i> *	curly dock	SMC (drainage)	X	
Ranunculaceae	<i>Clematis pauciflora</i>	virgin's bower	SMC (drainage)	X	X
	<i>Thalictrum fendleri</i>	meadow rue	SMC		X
Resedaceae	<i>Reseda luteola</i> *	Dyer's rocket	SMC (drainage)	X	X
Rhamnaceae	<i>Ceanothus tomentosus</i>	Ramona lilac	SMC	X	X
	<i>Rhamnus crocea</i>	redberry	SMC (drainage)	X	X
Rosaceae	<i>Adenostoma fasciculatum</i>	chamise	SMC, CC	X	X
	<i>Cercocarpus minutiflorus</i>	San Diego mountain mahogany	SMC	X	X
	<i>Heteromeles arbutifolia</i>	toyon	SMC	X	X
	<i>Prunus illicifolia</i> ssp. <i>illicifolia</i>	holly-leaved cherry	SMC	X	X
Rubiaceae	<i>Galium angustifolium</i> .	narrow-leaved bedstraw	SMC	X	X
Rutaceae	<i>Cneridium dumosum</i>	bushrue	SMC	X	
Solanaceae	<i>Solanum americanum</i>	white nightshade	SMC		X
	<i>Solanum xanti</i>	nightshade	SMC (drainage)		X

‡Habitat acronyms: CC = Chamise Chaparral, DEV = Developed, SMC = Southern Mixed Chaparral, Chaparral, (drainage) = found along drainage

*non-native species

APPENDIX C

Listed or Sensitive Plant Species with Potential to Occur

SPECIES	STATUS*	POTENTIAL TO OCCUR
California adolphia (<i>Adolphia californica</i>)	--/-- CRPR List 2.1	None. Occurs in wetter areas of coastal sage scrub or chaparral. Project site likely outside of species' range. Would have been observed if present.
Del Mar manzanita (<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>)	FE/-- CRPR List 1B.1 MSCP	Low. Occurs in moderately tall mixed chaparral. Reported approximately 2 miles to the north in Poway. Majority of observations are more coastal and would have been detected on site if present.
San Diego sagewort (<i>Artemisia palmeri</i>)	--/-- CNPS List 4.2	Low. Generally occurs in riparian habitats but may occur in wetter chaparral areas. Although potentially suitable habitat occurs on site, species should have been detected on site if present in Spring 2015.
San Diego goldenstar (<i>Bloomeria clevelandii</i>)	--/-- CRPR List 1B.1 MSCP	Low. Found in grasslands, openings in coastal sage scrub and chaparral. CNDDDB shows previously detected in Beeler Canyon in valley bottom but lower portion of site supports a dense chaparral. Openings further upslope more suitable but species not detected in Spring 2015.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CRPR List 1B.1	Very low. Generally found in association with vernal pools or grasslands, which are not found on site. Site too far east.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/-- CRPR List 1B.1	Very low. Found in vernal moist grasslands and along vernal pool periphery. No vernal pools or grasslands occur on site.
Orcutt's pincushion (<i>Chaenactis glabruiscula</i> var. <i>orcuttiana</i>)	--/-- CRPR List 1B.1	None. Grows in coastal sage scrub, more commonly coastal bluff scrub. Most sites near coast, though one identified in Fallbrook. No suitable habitat on site.
Peninsular spineflower (<i>Chorizanthe leptotheca</i>)	--/-- CRPR List 4.2	None. Occurs in chaparral openings in eastern San Diego County. Although suitable chaparral occurs on site, the nearest reported populations are east of Highway 67 on Iron Mountain.
Delicate clarkia (<i>Clarkia delicata</i>)	--/-- CRPR List 1B.2	Low. Herbaceous annual found in shaded areas of chaparral and oak woodland in inland San Diego County. Most reported sightings are well east of Project area.
Summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	--/-- CRPR List 1B.2	None. Usually occurs in chaparral on north-facing slopes in foothill and coastal areas. A conspicuous shrub that would have been observed if present.

SPECIES	STATUS*	POTENTIAL TO OCCUR
Many-stemmed dudleya (<i>Dudleya multicaulis</i>)	--/-- CRPR List 1B.2	Very low. Found in openings in coastal sage scrub and grasslands, particularly those with gravelly or cobbly soils. Restricted to coastal areas. Nearest reported location is on Camp Pendleton.
Sticky dudleya (<i>Dudleya viscida</i>)	--/-- CRPR List 1B.2 MSCP	Low. An obvious species found in rock crevices on exposed, north-facing slopes in coastal areas. Site too far inland. Would likely have been detected if present.
San Diego barrel cactus (<i>Ferocactus viridescens</i>)	--/-- CRPR List 2.1 MSCP	None. Typically found in coastal sage scrub habitat in western San Diego County. Would have been detected if present.
Palmer's grappling hook (<i>Harpagonella palmeri</i>)	--/-- CRPR List 4.2	Low. Occurs in open coastal sage scrub or chaparral, as well as on grassy hillsides up to 1500 feet. Tends to be found in association with clay soils, which are not present on site. Has been found on East Miramar to the south. Would have been detected in Spring 2015 if present.
Mesa horkelia (<i>Horkelia cuneata</i> var. <i>puberla</i>)	--/-- CRPR List 1B.1	None. Found in sandy or gravelly soils in coastal sage scrub, or chaparral. Range is from northern San Diego County through San Luis Obispo County.
Ramona horkelia (<i>Horkelia truncata</i>)	--/-- CRPR List 1B.3	Low. Generally found in dense chamise or mixed chaparral in mountain foothills. Nearest locations are east of Hwy 67.
Southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	--/-- CRPR List 4.2	None. Found in marsh habitats, and occasionally along drainages in association with willow riparian communities. Drainage on site is ephemeral. This conspicuous plant would have been detected if present on site.
Robinson's pepper grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	--/-- CRPR List 1B.2	Low. Found in exposed openings in coastal sage scrub and chaparral. Widely distributed outside of deserts in San Diego County. Not detected in Spring 2015
Chaparral nolina (<i>Nolina cismontana</i>)	--/-- CRPR List 1B.2	None. Grows in coastal sage scrub and chaparral in mountain foothills. Nearest reported location is Pamo Valley near Ramona. Conspicuous species that would have been detected if present.
California adder's-tongue (<i>Ophioglossum californicum</i>)	--/-- CRPR List 4.2	Very low. Generally occurs on clay soils along the periphery of vernal pools or seeps within chaparral or sage scrub communities. No vernal pools or obvious seeps on site.
Chaparral rein-orchid (<i>Piperia cooperi</i>)	--/-- CRPR List 4.2	Very low. Generally found in moist, shaded areas within coastal sage scrub or chaparral with shallow clay soils or in streambeds up to approximately 6,000 feet. Site is mostly dry and does not have clay soils.

SPECIES	STATUS*	POTENTIAL TO OCCUR
Narrow-petaled rein-orchid (<i>Piperia leptopetala</i>)	--/-- CRPR List 4.3	Low. Generally found in mixed and Chamise Chaparral as well as oak woodlands, particularly in clay or sandy soils in montane areas. Not reported in Project vicinity. Site is too far west.
Parry's tetracoccus (<i>Tetracoccus dioicus</i>)	--/-- CRPR List 1B.2 MSCP	None. Shrub found in low, dry chaparral, sometimes in coastal sage scrub. Nearest reported sightings are east of San Vicente Reservoir. Would have been detected if present.
<p>Status: City: MSCP = Covered species in the Multiple Species Conservation Plan Federal: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; BCC = Bird of Conservation Concern State: SE = State Endangered; ST = State Threatened; FP = Fully Protected; SR = State Rare; SSC = Species of Special Concern</p>		<p>California Rare Plant Rank (CRPR) List 1A = Plants Presumed Extinct in California List 1B = Plants Rare, Threatened or Endangered in California and Elsewhere List 2 = Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere List 3 = Plants About Which We Need More Information, A Review List List 4 = Plants of Limited Distribution, A Watch List State Rank and CRPR is followed by threat code (e.g., State Rank S2.2 or CRPR 1B.2) .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2 = Fairly endangered in California (20-80% occurrences threatened) .3 = Not very endangered in California (<20% of occurrences threatened)</p>

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APPENDIX D

Potential for Narrow Endemics to Occur

SPECIES	STATUS*	POTENTIAL TO OCCUR
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FT/SE CRPR List 1B.1 MSCP	None. While site has grassy openings in chaparral, species found on friable or broken clay soils, which are not present on site.
Shaw's agave (<i>Agave shawii</i>)	--/-- CRPR List 2.1 MSCP	None. This succulent shrub is found in coastal sage scrub and maritime succulent scrub, often on volcanic soils. Blooming period is September to May. Would have been observed if present.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CRPR List 1B.1 MSCP	Low. Creek beds, seasonally dry drainages, and floodplains are preferred habitat but has also been found in disturbed habitat. Should have been detectable along the creek area if present.
Aphanisma (<i>Aphanisma blitoides</i>)	--/-- CRPR List 1B.2 MSCP	None. Found in sandy, alkaline areas in coastal shrubland and bluffs. Blooming period is April to May. No records of this species in the Project vicinity. Would have been observed if present.
Coastal dunes milk vetch (<i>Astragalus tener</i> var. <i>titi</i>)	FE/SE CRPR List 1B.1 CA Endemic MSCP	None. Habitat for this annual is coastal dunes and sandy places along the coast. Blooming period is March to May. No suitable habitat present on site.
Encinitas baccharis (<i>Baccharis vanessae</i>)	FT/SE CRPR List 1B.1 CA Endemic MSCP	None. Occurs in southern maritime and Southern Mixed Chaparral in northern San Diego County. Site visited during blooming period. Would have been detected if on site.
Otay tarplant (<i>Deinandra conjugens</i>)	FT/SE CRPR List 1B.1 MSCP	None. Occurs from Sweetwater Reservoir area south to the Mexican border. Blooming period is May to June; outside of known range and little suitable habitat on site.
Short-leaved dudleya (<i>Dudleya blochmaniae</i> ssp. <i>brevifolia</i>)	--/SE CRPR List 1B.1 CA Endemic MSCP	Low. Open areas and sandstone bluffs of Chamise Chaparral or Torrey pine forest. Some potentially suitable habitat present.
Variegated dudleya (<i>Dudleya variegata</i>)	--/-- CRPR List 1B.2 MSCP	Low. Found in openings in sage scrub and chaparral, isolated rocky substrates in open grasslands, and a proximity to vernal pools and mima mound topography.
San Diego button-celery (<i>Eryngium aristulatum</i> ssp. <i>parishii</i>)	FE/SE CRPR List 1B.1 MSCP	None. Occurs in vernal pools and marshes. No suitable habitat on site.
Prostrate navarretia (<i>Navarretia fossalis</i>)	FT/-- CRPR List 1B.1 MSCP	None. Occurs in vernal pools and marshes. No suitable habitat on site.
Snake cholla (<i>Opuntia californica</i> var. <i>californica</i>)	--/-- CRPR List 1B.1 MSCP	None. Occurs in chaparral and coastal sage scrub from Point Loma south to Chula Vista and Baja. Site too far north and would have been detected if present.

SPECIES	STATUS*	POTENTIAL TO OCCUR
California orcutt grass (<i>Orcuttia californica</i>)	FE/SE CRPR List 1B.1 MSCP	None. Occurs in vernal pools and marshes. No suitable habitat on site.
San Diego mesa mint (<i>Pogogyne abramsii</i>)	FE/SE CRPR List 1B.1 CA Endemic MSCP	None. Occurs in vernal pools and marshes. No suitable habitat on site.
Otay Mesa mint (<i>Pogogyne nudiuscula</i>)	FE/SE CRPR List 1B.1 MSCP	None. Occurs in vernal pools on Otay Mesa; outside of known range and no suitable habitat on site.

*Refer to Appendix C for a listing and explanation of status and sensitivity codes

APPENDIX E
Animal Species Observed On Site

SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
INVERTEBRATES				
<i>Alydidae</i> sp.	ant/wasp mimicking bug	CC		X
<i>Lestes congener</i>	spotted spreadwing	CC		X
<i>Libellula sarturata</i>	flame skimmer	CC		X
<i>Liometopum occidentale</i>	velvety tree ant	SMC		X
<i>Junonia coenia</i>	buckeye	SMC		X
<i>Pogonomyrmex</i> sp.	black harvester ant	SMC	X	
<i>Schistocerca nitens</i>	gray bird grasshopper	SMC	X	
<i>Vanessa cardui</i>	painted lady	SMC	X	
VERTEBRATES				
Birds				
<i>Agelaius phoeniceus</i>	red-winged blackbird	CC		X
<i>Aphelocoma californica</i>	western scrub jay	SMC	X	X
<i>Calypte anna</i>	Anna's hummingbird	SMC	X	X
<i>Catharus guttatus</i>	hermit thrush	SMC	X	
<i>Chamea fasciata</i>	wrentit	SMC		X
<i>Corvus brachyrhynchos</i>	American crow	SMC	X	
<i>Corvus corax</i>	common raven	SMC		X
<i>Parulidae</i> sp.	unidentified warbler	SMC	X	
<i>Icterus cucullatus</i>	hooded oriole	SMC		X
<i>Melospiza melodia</i>	song sparrow	SMC		X
<i>Mimus polyglottos</i>	northern mockingbird	SMC	X	
<i>Petrochelidon pyrrhonota</i>	cliff swallow	flyover		X

SCIENTIFIC NAME	COMMON NAME	HABITAT(S)‡	2014/15	2020
<i>Pheucticus melanocephalus</i>	black-headed grosbeak	SMC		X
<i>Poliotila caerulea</i>	blue-gray gnatcatcher	CC, SMC		X
<i>Pipilo crissalis</i>	California towhee	SMC	X	X
<i>Pipilo maculatus</i>	spotted towhee	SMC	X	
<i>Piranga ludoviciana</i>	western tanager	SMC		X
<i>Psaltriparus minimus</i>	bushtit	SMC		X
<i>Selasphorus sasin</i>	Allen's hummingbird	SMC, CC		X
<i>Spinus psaltria</i>	Lesser goldfinch	CC		X
<i>Thryomanes bewickii</i>	Bewick's wren	SMC		X
Mammals				
<i>Canis latrans</i>	coyote	SMC	X	
<i>Dipodomys</i> sp.	kangaroo rat	SMC		X
<i>Neotoma</i> sp.	wood rat	SMC	X	X
<i>Odocoileus hemionus fuliginata</i>	mule deer	SMC (scat)	X	
<i>Spermophilus beecheyi</i>	California ground squirrel	SMC	X	X
<i>Sylvilagus</i> sp.	rabbit	SMC	X	X
<i>Thomomys bottae</i>	Botta's pocket gopher	SMC	X	X

Habitat acronyms: SMC=Southern Mixed Chaparral, CC = Chamise Chaparral

APPENDIX F

Listed or Sensitive Animal Species with Potential to Occur

SPECIES	STATUS*	POTENTIAL TO OCCUR
INVERTEBRATES		
Insects		
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/--	Low. Found on ridges and mesa tops in grasslands or openings in shrublands (e.g., fire breaks, near dirt roads) supporting dot- seed plantain host plant. While chaparral is open in portions of the site, site lies towards the bottom of Beeler Canyon with development on ridge tops to the south and riparian to the north. Nearest observation is 2 miles east.
Hermes copper butterfly (<i>Lycaena hermes</i>)	--/--	Very low. Species found in lower foothills of central and south San Diego County. Requires complexes of host plant redberry (<i>Rhamnus crocea</i>) and buckwheat. Only a few redberry detected on site.
VERTEBRATES		
Amphibians		
Arroyo toad (<i>Anaxyrus californicus</i>)	FE/SSC MSCP	None. Breeds in open-canopy riparian areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months. Drainage on site ephemeral. Species not known from Beeler Creek
Large-blotched salamander (<i>Ensatina eschscholzii klauberi</i>)	--/SSC	None. Found in moist locations under logs and bark in conifer forest or riparian woodlands. Suitable habitat does not occur on site.
California red-legged frog (<i>Rana draytonii</i>)	FT/SSC MSCP	None. Appropriate habitat is characterized by dense, shrubby riparian vegetation with deep, slow-moving water. Readily displaced by introduced aquatic predators, including bullfrogs (<i>Rana catesbiana</i>) or crayfish (<i>Procambarus</i> sp.). Believed extirpated from San Diego County (Jennings, pers. comm. 2003).
Reptiles		
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)	--/SSC	Low. Occurs in areas with loose soil, particularly in sand dunes and or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub. Little suitable habitat on site.
Orange-throated whiptail (<i>Aspidoscelis hyperythra beldingi</i>)	--/SSC MSCP	High. Occurs in semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. Habitat on site is suitable.
Southwestern pond turtle (<i>Clemmys marmorata pallida</i>)	--/SSC MSCP	None. Found largely in permanent water, particularly deep ponds with muddy substrates and abundant logs, rocks, or submerged vegetation for cover. Generally require native upland habitat nearby for overwintering. No ponding on site or in vicinity.

SPECIES	STATUS*	POTENTIAL TO OCCUR
San Diego banded gecko (<i>Coleonyx variegatus abbotti</i>)	--/--	Very Low. Found in open scrub habitats and woodlands, often in association with rock outcrops from sea-level to 4,000 feet. No rock outcrops present on site.
Red-diamond rattlesnake (<i>Crotalus exsul</i>)	--/SSC	Low. Occurs in coastal sage scrub and chaparral with abundant rocky outcrops. No noticeable rock outcrops on site.
San Diego ringneck snake (<i>Diadophis punctatus similis</i>)	--/--	Low. Occurs in moist habitats such as oak woodlands and canyon bottoms, but also sometimes encountered in grassland, chaparral, and coastal sage scrub. Little suitable habitat occurs on site.
Coronado Island skink (<i>Eumeces skiltonianus interparietalis</i>)	--/SSC	Low to Moderate. Occurs in grassland, scrublands, and cismontane woodlands with abundant leaf litter. Chaparral near Beeler Canyon Road has leaf litter.
Coastal rosy boa (<i>Lichanura trivirgata roseofusca</i>)	--/--	Very Low. Found in coastal sage scrub and chaparral with abundant rock outcrops for basking and shelter. No rock outcrops are found on site, limiting potential.
Coast horned lizard (<i>Phrynosoma coronatum blainvillei</i>)	--/SSC	None. Inhabits open sage scrub where it preys upon carpenter ants. No coastal sage scrub occurs on site.
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SSC	Low. Found in coastal sage scrub, chaparral, riparian, grasslands, and agricultural fields. Prefers open habitat with friable or sandy soils, burrowing rodents for food, and enough cover to escape being preyed upon. Some suitable habitat found on site, but soil not friable and limited cover in terms of rock outcroppings, litter etc.
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/SSC	Very Low. Found along permanent creeks and streams but also around vernal pools and along intermittent streams. Rarely found in upland scrub habitats relatively far from permanent water. Nearest reported sightings are from Marine Corps Air Station Miramar. Drainage on site is ephemeral and site mostly supports upland scrub.
South Coast garter snake (<i>Thamnophis sirtalis novum</i>)	--/SSC	None. Found in north county watersheds. Prefers riparian areas with willows and mule fat. No suitable habitat occurs on site. This is a dubious taxonomic group based upon color patterns that are not correlated with phylogeny.
Birds		
Sharp-shinned hawk (<i>Accipiter striatus</i>)	--/SSC	Very Low. Breeds in coniferous forests of northern California and the Sierra Nevada. Limited foraging on site.
Southern California rufous-crowned sparrow (<i>Aimophila canescens ruficeps</i>)	--/CSC MSCP	Moderate. Inhabits coastal sage scrub and open chaparral, particularly where nearby to grassland.
Bell's sage sparrow (<i>Amphispiza bellii bellii</i>)	--/SSC	Moderate to High. Occurs in sunny, dry stands of coastal sage scrub or chaparral. Suitable habitat present on site.

SPECIES	STATUS*	POTENTIAL TO OCCUR
Golden eagle (<i>Aquila chrysaetos</i>)	BCC/FP MSCP	Very Low. Forages over grassy, open, shrubby habitats, generally nesting on cliffs and occasionally in trees. Tends to require habitat at a distance from humans. Area too developed for this species.
Great blue heron (<i>Ardea herodias</i>)	--/--	None. Forages along marshes, swamps, lakes, and ponds. Nests in trees adjacent to foraging habitat. No suitable habitat. Does not occur on site.
Burrowing owl (<i>Athene cunicularia</i>)	--/SSC MSCP	None. Restricted to flattish, open habitat with suitable burrows or rocky areas for nesting. Burrows most often acquired from ground squirrels. No ground squirrels or burrows detected on site.
Coastal cactus wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	--/SSC MSCP	None. Occurs in coastal sage scrub with large cacti for nesting. No cactus detected on site.
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE/SE MSCP	None. Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons. Migrants may be found among other shrubs in wetter areas. Significant known populations within the County only occur on Santa Margarita River and the San Luis Rey River. No suitable habitat on site.
Least bittern (<i>Ixobrychus exilis</i>)	--/SSC	None. Occurs in marshes in association with ponds and reservoirs which do not occur on site.
Mammals		
Pallid bat (<i>Antrozous pallidus</i>)	--/SSC	Low. Roosts colonially in caves, mines, crevices, and abandoned buildings that do not occur on site but could forage in area.
Ringtail (<i>Bassariscus astutus</i>)	--/--	Very Low. Found in various riparian habitats and in brush stands of moist forest and shrub habitats at low to middle elevations.
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	--/SSC	Very Low. Roosts in caves and buildings, but strongly tied to water. Widespread but uncommon through California. Presence negatively correlated with human presence.
Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	--/SSC	Low to moderate. Occurs in coastal sage scrub, chaparral, grasslands, and woodland habitats up to 7,900 feet. Suitable habitat and rodent burrows are present on site.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FE/ST	None. Prefers areas of disturbed or patchy grasslands and open coastal sage scrub. Project site is outside species' known range in San Diego County. No suitable habitat. Nearest known location is in Ramona.
Western mastiff bat (<i>Eumops perotis californicus</i>)	--/SSC	Very Low. Roost in crevices in cliff faces, which are not found on site. Strongly tied to presence of large (100 feet long or more) ponds for drinking.

SPECIES	STATUS*	POTENTIAL TO OCCUR
Mountain lion (<i>Felis concolor</i>)	--/-- MSCP	Low to moderate. Occurs in a variety of habitats, particularly where mule deer are common. Wide-ranging; requires extensive riparian and scrub habitat. May pass through site, but habitat in the Project vicinity is likely becoming too fragmented to support mountain lions.
Western red bat (<i>Lasiurus blossevillii</i>)	--/SSC	Low. Prefer riparian areas where they roost in tree foliage. May be migratory, with U.S. rare observations generally occurring in summer.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/CSC	Low. Found in areas of open vegetation, grasslands, and agriculture fields. While the site has openings, they are in a matrix of denser chaparral that make it unlikely for the species to be present. Would likely have been detected if present.
Western small-footed myotis (<i>Myotis ciliolabrum</i>)	--/--	Low. Generally occurs in deserts and other arid locales. Roost in caves, rock crevices, buildings, and in holes or cracks in trees. Only marginally suitable habitat found on site.
Yuma myotis (<i>Myotis yumanensis</i>)	--/--	Very Low. Presence tied to water sources, which are not available on site. Roosts in caves and buildings, which are not present on site.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	--/SSC	Low. Found in sage scrub or chaparral primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. A few woodrat nests were observed on site at the base of shrubs and are more likely to be the nests of the common desert woodrat because of the lack of rock outcroppings, boulders on cacti on site.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC	None. Prefers desert habitats with high cliffs or rock outcrops. Out of species range. Suitable high rocks not found on site.
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	--/SSC	None. Occurs in low, rugged canyons, which are not found on site. Forages over open water.
Mule deer (<i>Odocoileus hemionus fuliginata</i>)	--/-- MSCP	Present. Require a mixture of habitats, including shrublands, grasslands, and woodlands, providing ample cover. Scat found on site. Species possibly pass through or forage on site.
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	--/SSC	Low. Generally found in desert habitats with loose, friable soils. Less common in coastal scrub and chaparral. Habitat on site is only moderately suitable. No records in Project vicinity.
American badger (<i>Taxidea taxus</i>)	--/SSC MSCP	Low. Occurs in a variety of scrub habitats, particularly in open areas with friable soils. Require fossorial rodents upon which they prey. Habitat on site is suitable, but burrow would have been detected on site if present.

*Refer to Appendix C for a listing and explanation of status and sensitivity codes

APPENDIX G

Resume

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DEREK LANGSFORD PHD, CSE

Project Manager

EXPERIENCE SUMMARY

Over 30 years of experience as an ecologist and over 22 years in government and consulting as a CEQA regulator, project manager, and group manager in San Diego. He has managed projects on behalf of federal, state, county, and municipal governments; water, school, college, and hospital districts, as well as numerous private clients. Participates in all biological aspects of projects including field surveys, habitat evaluations, data analysis, preparation of technical reports, wetland permitting applications and regulatory compliance, and mitigation, monitoring, and management plans. Key aspects of his experience include impact assessment in a wide range of biological resources, both wetland/riparian and upland, and in coastal, inland, and desert environments. He has negotiated project mitigation requirements for impacts to threatened and endangered species with federal and state wildlife agencies in the complex regulatory environment of San Diego County. Management capabilities include client liaison, budgeting, research, fieldwork scheduling and supervision of field biologists, agency liaison, scientific review, and quality control. He is a County of San Diego Approved Biologist and has extensive experience in the San Diego region.

EDUCATION

PH.D. IN ECOLOGY

University of California, Davis/SDSU
1996

B.SC. IN ECOLOGICAL SCIENCE

University of Edinburgh, Scotland 1985

PERMITS, CERTIFICATIONS, TRAINING

- Certified Sr. Ecologist, Ecological Society of America, 2012- Present
- Approved Biological Consultant, County of San Diego, 1999– Present
- Certificate in GIS, Cuyamaca College 2013
- AED/CPR, March 2017
- 38-hr ACOE Wetland Delineation Training Program, Richard Chinn, 2017
- CPESC Review & CESSWI Integrations Course, Michael Harding, 2017

PROJECT EXPERIENCE

WEST MISSION BAY DRIVE BRIDGE REPLACEMENT

Kleinfelder | San Diego, CA | 2018-Present

Primary Qualified Biologist for the replacement of the current 4-lane bridge with two 3-lane bridges with bike lanes and sidewalks across the San Diego River Flood Control Channel. Managed pre-construction surveys in fulfillment of Coastal Development Permit and have overseen monitoring of light-footed Ridgway's rail, marine mammals and sea turtles, airborne noise and hydroacoustic sound during impact pile driving, monitoring of bird nests, weeding, and planting at two mitigation sites (Dog Beach and Pacific Highway). Also perform weekly checks of construction and mitigation sites. Prepare and provide QA/QC for weekly, monthly, and seasonal monitoring reports in satisfaction of project conditions and permits. Work performed for Kleinfelder Construction Services on behalf of the City of San Diego.

BIOLOGICAL SUPPORT FOR THE CITY OF SAN DIEGO ENGINEERING ON-CALL (INCLUDING RENEWAL)

Rick Engineering | San Diego, CA | 2015-Present

Acted as Project Manager, Lead Biologist, and Wetland Delineator. TDI provided biological resource surveys and reporting to Rick Engineering for various City of San DPW Diego projects which required vegetation mapping, rare plant surveys, jurisdictional delineation, biology reports, and Revegetation Plans.

- *Maple Canyon Jurisdictional Determination and Biology Report Addendum 2018-2019*
- *Southcrest Green Infrastructure Improvements 2018-present*
- *Scripps Ranch Storm Drain Replacement Project - 2017-present*
- *Coast Blvd Walkway Improvements Project - 2016-2019*
- *Serra Mesa Storm Drain Replacement & Green Infrastructure Project - 2016-present*
- *Clairemont Mesa Storm Drain Replacement – 2018-present*
- *Sunset Cliffs Natural Park Building Removal – 2016-present*
- *Sunset Cliffs Natural Park Drainage Improvements – 2018-present*

AS-NEEDED BIOLOGICAL CONSULTING SERVICES**City of Vista | Vista, CA | 2013-Present**

Acted as project manager, senior biologist, and chief reviewer of reports.

Third-Party Review: Review to ensure compliance of the proposed projects and biological resource reports with the biologically related regulatory requirements of the City, State of California, and the federal government; that the studies followed state and federal, and industry-accepted methodologies; and to verify that all appropriate findings for the resources present on site are made.

- *Emerald Drive - Subdivision*
- *Rancho Lomas Verdes – Major Subdivision*
- *Santa Fe Avenue – Persea multi-family*
- *Sycamore-Watson Condominiums*

Biological Resource Reports: Biological Resource surveys and preparation of reports in satisfaction of regulatory requirements.

- *Vista Grande Subdivision*
- *Monte Mar Center – Shopping Center*
- *Sunroad Plaza – Shopping Center*

BUSINESS PARK DRIVE & POINSETTIA AVENUE PARCEL**Commercial Development Resources | Vista, CA | 2018-2019**

Biology Project Manager. Biological survey and wetland delineation to determine edge centerline and bank of drainage feature in conservation area adjacent to site and from which City required setbacks for development. Prepared a Constraints Report of findings.

BIOLOGICAL CONSULTING SERVICES FOR THE VISTA TERRACE MARKETPLACE PROJECT**Black Lion Investment Group | Vista, CA | 2017-2019**

Biology Project Manager. Biological Survey, Jurisdiction Delineation (JD), Biology and JD Report for this proposed Sprouts Market in north Vista. Proposed Project needed to culvert section of Buena Vista Creek which required wetland permits. Prepared applications and secured all wetland approvals, identified, and secured mitigation.

KEYSTONE VICTORY PARK PROJECT**Badiee Development | Vista, CA | 2015-2017**

Biology Project Manager for biological resource surveys and processing of the project that proposed two concrete-tilt buildings on a 10.4-acre site off Keystone Way in the City of Vista. Performed vegetation mapping, rare plants surveys, census of Nuttall's scrub oak and California adolphia, prepared biology report, and identified mitigation in compliance with CEQA, and MHCP.

PORTSIDE PIER PROJECT**RECON Environmental | San Diego, CA | 2016-2017**

Biology Project Manager. Field survey, biology report, and Essential Fish Habitat (EFH) assessment for the demolition of the existing restaurant and construction of the new Portside Pier complex of eateries on the North Embarcadero of San Diego Bay. Issues included effects on marine mammals and sea turtles of pile removal during demolition and driving for construction, effects on EFH, increase in shading of bay water, and bird collisions on glass surfaces. Work performed for RECON under their on-call environmental contract with Port of San Diego.

SUNSET CLIFFS NATURAL PARK TRAIL IMPROVEMENTS**Estrada Land Planning | Point Loma, CA | 2011-2013**

Biology Project Manager. Planned trail system with fencing and overlooks, to protect sensitive habitats, improve drainage and reduce erosion, remove an abandoned ball field and dwellings, and revegetate unauthorized trails, disturbed areas, and demolition areas. Required conformance to the Park's adopted Master Plan and MEIR, and the MSCP. Required updated biological studies and preparation of a biological technical report and revegetation plan. Work performed while at URS for Estrada Land Planning under their on-call environmental contract with City of San Diego.



BEN G. VAN ALLEN, PHD

Wildlife Biologist

EXPERIENCE SUMMARY

Over 10 years of experience as an ecologist and over four years in government environmental services and consulting as a project manager and wildlife biologist in San Diego and Central Ohio. He has managed projects in California on behalf of federal clients, water districts, cities, and private clients. Participates in all biological aspects of projects including field surveys, habitat evaluations, data analysis, preparation of technical reports, regulatory compliance, and mitigation, monitoring, and management plans. He has over 20 years of experience in bird identification and has experience assisting in wetland delineations in California, Ohio, and Virginia. Management capabilities include client liaison, budgeting, research, fieldwork scheduling and supervision of field biologists, agency liaison, scientific review, and quality control.

EDUCATION

PH.D. IN ECOLOGY & EVOLUTIONARY BIOLOGY

Rice University
2014

M.S. IN BIOLOGY

Virginia Commonwealth
University 2009

B.SC. IN ENVIRONMENTAL SCIENCE

Otterbein University
2006

PROJECT EXPERIENCE

AS-NEEDED BIOLOGICAL CONSULTING SERVICES

Metropolitan Water District of Southern California | Southern California | 2018-Present

Project manager, senior biologist, and chief reviewer of reports.

Biological Resource Reports: Biological Resource survey, activity monitoring, and preparation of reports in satisfaction of regulatory requirements.

- *Santa Ana Upper Feeder Bird Survey and Vegetation Removal 2018 - 2019*
- *Bull Creek Vegetation Maintenance Biomonitoring 2018 - 2019*
- *Diemer Slope Erosion Remediation Biological Resource Survey and Monitoring 2018 - 2019*
- *Rialto Feeder Biological Resource Surveys and Construction Monitoring 2018 – 2019*
- *Rio Honda Middle Feeder Vegetation Removal 2020*

Management: Liaise with MWD, scheduling work, and review reports in satisfaction of regulatory requirements.

- *All of the above projects*
- *Eagle Rock Tree Evaluation 2018-2019*
- *Walnut OCF Station 2019*

WEST MISSION BAY DRIVE BRIDGE REPLACEMENT PROJECT

Kleinfelder Construction Services | San Diego, CA | 2018-Present

Survey Coordinator/Biological Monitor for the replacement of the current 4-lane bridge with two 3-lane bridges with bike lanes and sidewalks across the San Diego River Flood Control Channel. Coordinate monitoring and report preparation to maintain compliance with Coastal Development Permit conditions and have coordinated monitoring of light-footed Ridgway's rail, marine mammals and sea turtles, airborne noise and hydroacoustic sound during impact pile driving, monitoring of bird nests, weeding, and planting at two mitigation sites (Dog Beach and Pacific Highway). Also manage weekly project personnel schedule. Help prepare weekly, monthly, and seasonal monitoring reports in satisfaction of project conditions and permits. Work performed for construction services prime on behalf of the City of San Diego.

ENVIRONMENTAL COMPLIANCE & NATURAL RESOURCES MANAGEMENT SUPPORT FOR CHULA VISTA BAYFRONT DEVELOPMENT

San Diego Unified Port District | San Diego, CA | 2019-Present

Wildlife Biologist. As part of an on-call contract, performing construction and biomonitoring at multiple sites planned for development on the Chula Vista Bayfront on San Diego Bay.

BUSINESS PARK DRIVE & POINSETTIA AVENUE PARCEL Commercial Development Resources | Vista, CA | 2018-2019

Wildlife Biologist. Biological survey and wetland delineation to determine edge centerline and bank of drainage feature in a conservation area adjacent to site and from which City required setbacks for development. Prepared a Constraints Report of findings.

GREEN OAK RANCH

Green Oak Ranch RV Resort | Vista, CA | 2019-Present

Wildlife Biologist. Biological survey including experience with coastal California gnatcatchers and assistance on jurisdictional determination of drainage features. Habitat assessment. Work performed for Green Oak Ranch.

CITY OF SAN DIEGO ENGINEERING ON-CALL (INCLUDING RENEWAL)

Rick Engineering | San Diego, CA | 2018-Present

Wildlife Biologist. TDI provided biological resource surveys and reporting to Rick Engineering for various City of San Diego projects which required vegetation mapping, rare plant surveys, wetland delineation, biology reports, and Revegetation Plans. Acted as Field Biologist and provided Wildlife Surveys and reports as well as assisting with wetland delineations.

- *Scripps Ranch Storm Drain Replacement Project - 2018-present*
- *Serra Mesa Storm Drain Replacement & Green Infrastructure Project - 2018-present*
- *Clairemont Mesa Storm Drain Replacement - 2018-2019*
- *Southcrest Green Infrastructure Improvements 2018-2019*
- *Sunset Cliffs Natural Park Drainage Improvements – 2018-2020*
- *Maple Canyon Jurisdictional Determination – 2019 - present*

BIOLOGICAL RESOURCES SERVICES FOR SRF APPLICATION ASSISTANCE FOR THE VALLEY CENTER MUNICIPAL WATER DISTRICT

Birdseye Planning Group | Valley Center, CA | 2019

Wildlife Biologist. Habitat Assessment and biological resources survey along ten separate Project alignments planned for water line replacement and maintenance in the VCMWD area of northern San Diego County.

POMERADO TERRACE PROPERTY STORM DRAIN OUTFALL CLEARING

Lincoln Military Housing | San Diego, CA | 2019

Biological Monitor and Tierra Data Project Coordinator for the clearing of seven compromised storm drain outfalls along approximately 1,000 feet of Scripps Ranch Row in San Diego, CA. Clearing of outfalls was needed to prevent flooding of Scripps Ranch Row. Evaluated outfalls for native and invasive species, rare plants, wetlands, and animal species of special concern. Assisted with and managed production of pre-project scoping and post-outfall clearing monitoring reports. Work performed for prime on behalf of Lincoln Military Housing.

BAYVIEW HILLS STORMWATER EROSION CONTROL PROJECT

Lincoln Military Housing | San Diego, CA | 2019

Wildlife Biologist. Habitat Assessment, biological resources survey and jurisdictional assessment for proposed work to repair a broken stormwater conveyance pipe in San Diego, CA. Site included sensitive sage scrub habitat occupied by federally-listed coastal California gnatcatcher. Assisted with preparation of a memorandum identifying sensitive resource issues and potential avoidance measures. Work performed for Lincoln Military Housing.

MURPHY CANYON BRUSH MANAGEMENT IMPLEMENTATION MONITORING

Lincoln Military Housing | San Diego, CA | 2019

Biological Monitor and Tierra Data Project Coordinator for the clearing of brush for fire safety around five canyon- top communities in San Diego, CA. Coordinated team mark-outs of 100-foot buffers around structures to be cleared and marked sensitive environmental resources for avoidance. Coordinated weekly monitoring of progress and monthly reporting across the over five-month project. Work performed for Lincoln Military Housing.