RICHARDS RANCH, LLC

MIXED USE DEVELOPMENT PROJECT

CITY OF SANTA MARIA, CA

BIOLOGICAL RESOURCES ASSESSMENT

WATERS OF THE U.S./STATE JURISDICTIONAL DETERMINATION

CALIFORNIA TIGER SALAMANDER SITE ASSESSMENT

JULY 8, 2022

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1.0 EXECUTIVE SUMMARY

The Richards Ranch, LLC Project (project) proposes a mixed use residential and commercial development on approximately 43.64 acres to be annexed into the City of Santa Maria. The proposed project site is essentially an infill parcel between residential developments to the north, south and east of the site. Several vacant parcels surrounded by residential development are to the east. Orcutt Expressway runs along the western border of the project site that is bisected by Union Valley Parkway. Field surveys established existing conditions of the site at the time of the February 8, 2022 Environmental Impact Report Notice of Preparation (EIR NOP) as mostly non-native annual grassland habitat, with two patches of disturbed coastal scrub, stands of non-native eucalyptus and ornamental trees, and several coast live oak trees. Based on a formal jurisdictional determination, no jurisdictional wetlands or other waters of the U.S./State or riparian habitat occur on the project site.

The search and review of the CNDDB revealed 63 special-status species composed of 33 special-status plants, 25 special-status wildlife species, along with five natural communities of special concern with recorded occurrences within an approximately 10-mile radius of the proposed project site. In summary, two formally listed plants and four CNPS rank species associated with sandy soils have the potential to occur. A floristic inventory and rare plant survey conducted during the spring/summer 2022 confirmed that no special-status plant species occur on the project site.

The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for the northern legless lizard and Blainville's (coast) horned lizard. However, the regular mowing/discing of the site, periodic removal of shrubs reduces the suitability and value of the onsite habitat, and focused surveys determined the site does not support these species. A California tiger salamander site assessment determined that Orcutt Expressway (four lane Highway 135), Orcutt Road, and Union Valley Parkway are barriers to any California tiger salamander dispersal onto the site from known or potential breeding ponds. A small aggregation of wintering monarch butterflies (34 in 2022) have been observed in the onsite eucalyptus trees. There is no suitable habitat for any other special-status wildlife species on the site.

The conversion of disturbed non-native annual grassland, disturbed coastal scrub, and stands of non-native trees would not result in the loss CNPS rank plant species. Displacement of common local wildlife within the infill parcel may be considered a less than significant impact. A floristic inventory and rare plant survey conducted in spring/summer 2022

determined the absence of any special-status plants for a no impact determination. Locally common resident and migratory ground nesting birds that may use the site for breeding, foraging, and roosting could be impacted by project construction. Mitigation to avoid potentially significant impacts on nesting birds is recommended. Based on the findings described in this biological resources assessment and addendum, establishing the existing conditions of the proposed project site at the time of the EIR NOP, and incorporation of the recommended mitigation measure, implementation of the proposed project would not result in any substantial adverse effects on biological or botanical resources. No jurisdictional waters of the U.S./State, wetlands, or riparian habitat occur onsite so none would be impacted. Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources would be considered less than significant.

2.0 INTRODUCTION, PROJECT DESCRIPTION, AND PURPOSE

The Richards Ranch, LLC Mixed Use Development Project (project) proposes mixed use residential and commercial development on approximately 43.64 acres undeveloped as part of annexation to the City of Santa Maria. The BRA study area habitats including developed roadways totaled 53.57 acres. The site supports disturbed non-native grassland and coastal scrub habitats, and stands of non-native eucalyptus and ornamental trees. Two patches of arroyo willows occurred at mesic sites from developed area runoff that have been removed to deter homeless encampments prior to the EIR NOP and are not considered part of the existing conditions. The project site is essentially an infill site bordered by residential development on north, south, and east. Several vacant parcels next to residential development are on the east. The Orcutt Road alignment weaves through the western portion of the site. Orcutt Expressway (four lane Highway 135) frontage borders the site on the west with the Foxenwood residential development and expanses of active agricultural lands west of Hwy 135. The site is bisected by Union Valley Parkway. Figures 1 and 2 in Appendix A provide regional and vicinity location maps respectively.

The project proposes 27.40 acres of apartment and townhome residential development on the south of Union Valley Parkway (UVP) and 16.24 acres of commercial development concepts to the north of UVP and in the areas between Orcutt Road and Orcutt Expressway (clover leaf). A project layout schematic map is provided as Figure 3.

David Wolff Environmental (DWE) conducted the review of available background data, and biological resources field surveys, focused surveys for special-status wildlife, and a floristic inventory and rare plant survey on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. The purpose of the field surveys and this biological resources assessment is to document existing conditions of the proposed project site, determine the suitability and presence/absence of rare, threatened, or endangered plants or wildlife (special-status species), and to evaluate the potential for any direct or indirect significant impacts on biological or waters of the U.S./State resources, or adverse effects on any special-status species.

3.0 EXISTING CONDITIONS – SETTING

The proposed project site is essentially an infill parcel surrounded on all sides by residential developments, with active agriculture to the northwest across Orcutt Expressway (Highway 135) some of which has been recently approved for commercial development. Union Valley Parkway bisects the project site with Orcutt Road realignments creating two "clover leaf" areas proposed for commercial development. A church property is adjacent to the southwest corner of the site. See Figures 2 and 3.

The site is mostly flat gently sloping downwards from east to west along with manufactured embankments and fill slopes from adjacent residential development and Union Valley Parkway construction. Roadside drainage from Union Valley Parkway construction and Orcutt Road realignment is managed through several constructed rocked ditches leading to culverts under Orcutt Road. No natural drainage features are present on the project site and there is no riparian context or natural drainages associated with the onsite roadside drainage ditches. The site is mostly disturbed non-native annual grassland, disturbed coastal scrub, and stands of non-native eucalyptus and landscape trees. There are several coast live oaks around the site but do not constitute an oak woodland habitat. The site appears have been substantially and regularly disturbed over time from Union Valley Parkway construction, and vegetation management (mowing/discing) for fire suppression and removal and discouragement of homeless encampments.

The USDA Natural Resources Conservation Service has identified three predominantly sandy soil series mapping units on the site as shown in Figure 4.

- Betteravia loamy sand 0 to 2 percent slopes (BmA), is a moderately well drained soil on terraces formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface of loamy sand to 36 inches with a cemented layer below the surface horizon. It is not a hydric (wetland) soil.
- Marina sand 0 to 2 percent slopes (MaA), is a somewhat excessively drained soil on terraces formed from eolian deposits (windblown) parent material. This mapping unit is characterized by surface horizons of sand to 88 inches. It is not a hydric (wetland) soil.
- Oceano sand 2 to 15 percent slopes severely eroded (OcD3), is an excessively drained soil on dunes formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface horizons of sand to 60 inches. It is not a hydric (wetland) soil.

Observations of surface soils, gopher mounds, ground squirrel burrows, and 24-inch-deep wetland delineation soil test pits corroborate the very sandy characteristics of these mapping units on the project site.

4.0 METHODS

Prior to field surveys, DWE Principal Ecologist David Wolff conducted a review of available background information including aerial photography of the project area over time (Google Earth), the Natural Resources Conservation Service soil survey, and final environmental impact reports for the Union Valley Parkway Extension/Interchange project and Santa Maria Airport Business Park Specific Plan Amendment (approved commercial development on active agriculture across Hwy 135), and the query results of an approximately 10-mile search radius of the California Natural Diversity Data Base (CNDDB). The CNDDB provided a list and mapped locations of special-status plant and wildlife species, and natural communities of special concern, that have been recorded in the region of the project site. The CNDDB records help to focus the field survey efforts and evaluation of potential project effects on specific species or habitats. It is noted that the CNDDB does not necessarily include all special-status species potentially occurring onsite or in the region, but rather only those that have been recorded by the CNDDB. In addition, the California Native Plant Society (CNPS) online rare plant inventory and the U.S. Fish and Wildlife Information for Planning and Conservation (USFWS IpaC) were queried for relevant potential rare, threatened or endangered plants or wildlife with the potential to occur in the onsite habitats. Data on monarch butterfly winter roost sites was gathered from the Xerces Society for Invertebrate Conservation community science program. To evaluate the potential for wetlands and other waters of the U.S./State, the National Wetlands Inventory (NWI) and USGS National Hydrography Dataset were queried for any onsite mapping of wetland or waters resources.

DWE Principal Ecologist David Wolff reviewed the available background data described above, and biological resources field surveys, focused surveys for special-status wildlife, and a floristic inventory and rare plant survey on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. to document existing conditions of the onsite biological resources. Surveys were conducted by walking the entirety of the proposed project site recording plant and wildlife species observed and general site characteristics. Conditions for the site survey were conducive to the purpose of documenting plant and wildlife habitat to establish existing conditions. The March 7, 2022 field survey included a wetland delineation and jurisdictional determination of potential wetlands or other waters of the U.S./State with detailed report included as Appendix C. Additionally, the field surveys provided data to complete a California tiger salamander site assessment report that is included as Appendix D. The results of focused field surveys for special-status wildlife and the floristic inventory and rare plant survey are provided in Appendix E. The Pismo Beach monarch butterfly preserve was visited prior to conducting the December and January field surveys as a reference site for potential monarch butterfly winter use of the project site. The March 7 and April 27, 2022 field surveys included raking the surface around coastal scrub shrubs to attempt detection of legless and/or horned lizards. The overall purpose of the field surveys was to document existing conditions in terms of habitat for plant and wildlife species, determination of the presence/absence of special-status plant or wildlife species, the

potential to support wetland and/or riparian habitats, and/or other waters of the U.S./State. The study area habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted and through review of multiple years of aerial photography.

DWE Principal Ecologist David Wolff reviewed the available background information and available aerial photography, conducted the field surveys, and is the primary author and principal in charge of report preparation. The survey data collected on plant and wildlife species and conclusions presented in this biological resources assessment are based on the methods and field reconnaissance conducted over the project site as described above.

5.0 RESULTS

5.1 HABITAT TYPES AND PLANT COMMUNITIES

Plant communities are generally described by the assemblages of plant species that occur together in the same area forming habitat types. The best fit based on observed site conditions for community alliance and alliance codes habitat classifications used in this report follow, *A manual of California vegetation, 2nd edition* (Sawyer et al. 2009) and California Department of Fish and Wildlife *California Natural Community List*. Plant names used in this report follow *The Jepson Manual, Vascular Plants of California, Second Edition Thoroughly Revised and Expanded* (Baldwin et al. 2012). The proposed project site supports three plant communities, non-native grassland over the majority of the site, disturbed coastal scrub to the north of Union Valley Parkway, and stands of non-native trees throughout. There are 15 coast live oak trees at various locations on the site. Figure 5 in Appendix A provides a habitat map showing the locations and extent of the habitat types on the proposed project site. Figure 7 includes a set of onsite representative photographs from DWE field surveys. Figure 8 provides a series of aerial photographs over time demonstrating periodic site disturbances mostly from what appears to be construction of Union Valley Parkway and the realignment of Orcutt Road. Table A-1 in Appendix E provides a complete list of plant species observed during DWE field surveys.

5.1.1 WILD OATS NON-NATIVE GRASSLAND

The Wild Oats Non-Native Grassland or *Avena (barbata, fatua) Semi-Natural Herbaceous Stands* (CDFW: 44.150.02), is best described as disturbed non-native annual grassland habitat from the past disturbance and regular weed suppression discing over time. The disturbed non-native annual grassland habitat covers most of the project site. It is dominated by non-native annual grasses and herbaceous broadleaf plant species, with few native forbs and wildflowers. Dominant plant species in the disturbed annual grassland habitat include oats (*Avena spp.*), ripgut brome (*Bromus diandrus*), and veldt grass (*Ehrharta calycina*). Other associated grasses and herbaceous broadleaf species include, soft chess (*Bromus hordeaceus*), filarees (*Erodium* spp.), wild radish (*Raphanus sativus*), croton (*Croton californicus*),

telegraph weed (*Heterotheca grandiflora*), thistles and mustards. The few wildflowers observed included fiddleneck (*Amsinckia intermedia*), California poppy (*Eschscholzia californica*), miniature lupine (*Lupinus nanus*), and popcorn flower (*Plagiobothrys nothofulvis*). The entirely of the annual grassland habitat had been recently disced as evidence by discing furrows throughout. Approximately 33.66 acres of disturbed non-native annual grassland habitat occur on the study area.

On the north side of Union Valley Parkway within the disturbed non-native annual grassland habitat is a small patch of 10 single and multi-trunk oak trees with approximate diameter at breast height (dbh) with trunk inches in parenthesis as follows (8), (10,10), (8,4,12), 15), (10), 10, 5, 4), (3,3), (3,2), (20,5), and (8,6,6,6). One oak tree is along Orcutt Road (6). Approximately 0.33 acre of coast live oak canopy (including those below) occurs within the study area.

5.1.2 COASTAL SCRUB – COYOTE BRUSH SCRUB / SILVER BUSH LUPINE SCRUB (DISTURBED)

The coyote brush scrub, or *Baccharis pilularis – Artemesia californica Shrubland Alliance* (CDFW: 32.060.05), is considered a sub-type of central Lucian coastal scrub. It differs primarily by the dominance of coyote brush. This scrub type habitat classification consists of coyote brush and California sagebrush shrubs with non-native grassland understory herbaceous species. However, on the study area only silver bush lupine (*Lupinus albifrons*) comprises the coastal scrub habitat onsite. The disturbed coastal scrub (from past removals and ongoing weed suppression discing) occurs on the north side of Union Valley Parkway with what appears to be disturbance and removal between 2012 and 2015 possibly associated with Union Valley Parkway construction with regrowth over time. More recently in 2021 a patch of dense disturbed coastal scrub was removed to discourage homeless encampments. Figure 8 provides a series of aerial photographs showing the removal and regrowth of the coastal scrub habitat areas over an approximately 27-year time period. Approximately 4.14 acres of disturbed coastal scrub habitat mapped off a January 2021 aerial photograph occurs in the study area.

5.1.3 NON-NATIVE EUCALYPTUS AND ORNAMENTAL TREE STANDS

The project site has several stands (wind rows) and individual eucalyptus trees mostly along the south side and north side of Union Valley Parkway frontage, and along the eastern border of the site north of Union Valley Parkway. It appears to be around 100 individual trees. There is an understory of non-native grassland amongst the typical accumulated eucalyptus leaf litter and bark debris. Approximately 7.67 acres of eucalyptus stands/trees occur in the study area.

The southwest corner of the project site supports an approximately 3.05-acre stand of mostly non-native trees and shrubs best described as an "Ornamental Wood" that does not fit any Manual of Vegetation community alliances. Non-native tree species include Chinese elm,

liquid amber, Bailey's acacia, African sumac, eucalyptus, olive, and lemon. The few native plant species in the "wood" include three coast live oak trees with dbh (10,8), (15), and (15), coyote brush, and California blackberry. While these are generally ornamental species, this stand appears as an unmaintained mix of trees and shrubs.

5.2 WILDLIFE

The project site oats, ripgut brome, and veldt grass dominated non-native grassland and coastal scrub habitats mowed and disced annually for fire/weed suppression, amidst the surrounding mosaic of urbanized residences and the Orcutt Expressway corridor around the project site, provides minimal quality habitat for locally common wildlife species that have become adapted to the residential environment. Common wildlife expected to use the site include raccoons, opossum, gopher, ground squirrel, and old world rats and mice. Bird species observed mostly around the stands of eucalyptus included acorn woodpecker, norther flicker, Audubon's warbler, Anna's hummingbird, red tailed hawk, and turkey vultures flying over. At some point prior to mowing or coastal scrub habitat disturbance when the grasses and shrubs are growing the site could provide habitat for ground/grassland/shrub nesting songbird species such as sparrows and finches.

The habitat on the project area does not support a substantial amount habitat in the context of the greater expanse of surrounding urban development and active agricultural lands. As such, the isolated site surrounded by development does not represent a migratory or movement corridor for wildlife.

5.3 WATERS OF THE U.S., WETLANDS, AND WATERS OF THE STATE

No jurisdictional wetlands or other waters of the U.S./State or riparian habitat under any regulatory authority or definition occur on the project site. A detailed wetland delineation and jurisdictional determination report is provided in Appendix C with the following summary of these findings.

There is a series of constructed rock-lined stormwater ditches and culverts receiving upland and roadside runoff from storm drain inlets on UVP and Orcutt Road that lacked any vegetation, wetland or otherwise. The varied network of rock lined roadside drainage ditches did not support any wetland vegetation only sporadic non-wetland non-native grasses. These ditches likely only flow in immediate response to impervious road surface runoff during rainfall. The current Rapanos guidance for definition of waters of the U.S. directs the Corps to not take jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The review of aerial photography over time clearly demonstrates that the onsite drainage ditches are excavated in uplands and are only draining uplands mostly as a result of UVP and Orcutt Road realignment construction.

Two patches of arroyo willow (*Salix lasiolepis*) associated with mesic (moist) areas from upland and roadway runoff occurred in the study area but were removed in 2021 to discourage homeless encampments. As such, they are not considered part of the existing conditions based on the February 8, 2022 EIR NOP. Based on review of aerial photographs, one patch of 0.55 acre along the east property border appears to have formed after the residential development construction and associated impervious surface runoff. There was no evidence of a drainage feature, culvert outfall, or other evidence of a drainageway or basin topography through the area or project site during DWE field review of the cleared area. This likely mesic (moist) area of willows may be from stormwater runoff from the low point of the adjacent townhome development. No hydric soil indicators or indicators of wetland hydrology are present. The National Wetlands Inventory (NWI) has a Freshwater Emergent Wetland polygon mapped within this patch of willows. The NWI is a broad view aerial photograph mapping of potential wetlands that requires field verification. In this case, the mapping is not an accurate depiction of the previous site conditions of a willow patch.

The second patch of 0.41 acre along Orcutt Highway appears to be supported by road runoff ditches, storm drain inlets, and culverts under the roadways. One small oak tree of unknown size occurred with these willows. Both patches were removed in 2021 to discourage homeless encampments. This patch appears to be persistent in location and extent from upland and roadside runoff from 1994 to 2021. No hydric soil indicators or indicators of wetland hydrology are present.

A total of approximately 0.96 acre of willows in the study area were mapped from the 2021 aerial photograph. Neither willow patch is associated with any recent or historic natural drainageway and lack any riparian context as a classified plant community or habitat type. A wetland delineation and jurisdictional determination report detailing these findings is included as Appendix C. Figure 6 in Appendix A provides a jurisdictional determination map. Based on collection of data at three data observation points in the above described removed willow patches (See Appendix C), while the presumed 100 percent cover of arroyo willow (FACW) meets the hydrophytic (wetland) vegetation criteria, in can be determined that the willow patches are not jurisdictional wetlands because of the lack of hydric soils and lack of any primary or secondary indicators of wetland hydrology. Further, there is no evidence of any historic natural drainage features at either of these willow locations or anywhere else on the site. No other potential wetland features were observed to be investigated.

The State Water Resources Control Board (Water Board) issued policy, procedures, and wetland definition for the discharge of dredged or fill material into waters of the State (Procedures). In brief, the Procedures define wetlands as waters of the State to be consistent with the federal three parameter definition requiring the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As described above and detailed in Appendix C, the project site does not support any three parameter wetlands. As such, there are no State wetlands present on the project site.

The Procedures are silent on artificial ditches constructed wholly in and draining only uplands that is the case for the network of roadside ditches constructed mostly for the recent UVP extension and Orcutt Road realignment. There is no evidence of any historic natural drainage through the project site, so the ditches do not represent realigned natural drainages, and do not represent a bed, bank, or channel of a river or stream. As such, the network of roadside drainage ditches do not represent waters of the State.

Based on the above summary of findings and jurisdictional determination report included as Appendix C, no waters of the U.S./State, wetlands, or riparian habitat under any regulatory jurisdictions or definitions occur on the project site.

5.4 SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (FESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFW; and plants occurring as a rank 1B, 2, and 4 of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants of California.* Natural Communities of Special Concern are habitat types considered rare and worthy of tracking in the California Natural Diversity Database (CNDDB) by the CNPS and CDFW because of their limited distribution or historic loss over time.

The search and review of the CNDDB, CNPS Inventory, and USFWS IpaC, revealed 63 special-status species composed of 33 special-status plants, 25 special-status wildlife species, along with five natural communities of special concern with recorded occurrences within an approximately 10-mile radius of the proposed project site. The following briefly describes or summarizes the special-status species issues and potential for occurrence on the project site. Figure 6 provides CNDDB mapped locations and Table B-1 in Appendix B provides a list of special-status species recorded in the CNDDB that includes scientific and common name, listing status, habitat requirements, and potential to occur on the project site.

5.4.1 Special-Status Botanical Resources

The CNDDB revealed the recorded occurrences of 33 special-status plant species and five natural communities of special concern within a 10-mile radius of the project site, eight of which are formally listed under the Federal or State Endangered Species Acts with the remainder being noted with a CNPS rank suggesting rarity. The five natural communities of special concern Central Dune Scrub, Central Foredunes, Coastal and Valley Freshwater Marsh, Southern Vernal Pool, and Southern California Three-spine Stickleback Stream do not occur on the entirely upland project site that is dominated by disturbed non-native

annual grassland, disturbed coastal scrub, and stands of non-native trees. While the site is predominantly eolian (windblown) sands in origin, the patches of disturbed coastal scrub habitat do not represent a sensitive dune community. None of the CNDDB plant or natural community occurrences are mapped within the project site. The floristic inventory and rare plant survey conducted on the project site on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022 resulted in no observations of any special-status plant species.

The special-status plant species occurrences recorded in the CNDDB include perennial woody shrubs and herbaceous annuals that are commonly associated with a specific soil type, moisture regime (marsh/creek/wetlands), habitat type, elevation range, and proximity to the immediate coast that dictates the range or microhabitat of the species and potential to occur on the project stie. The following provides a suitability analysis for special-status plant species with CNDDB recorded occurrences in the region. In summary, two formally listed plants and six CNPS rank species associated with sandy soils have the potential to occur. No special-status woody shrubs, wetland associated plants, or sandy soil plants have been observed on the project site.

The perennial species such as all the manzanitas (La Purisima, Refugio, sand mesa; *Arctostaphylos* spp.*)*, Lompoc yerba santa (*Eriodictyon capitatum*), Santa Barbara ceanothus (*Ceanothus impressus* var. *impressus*), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), mesa and Kellogg's horkelia (*Horkelia cuneata* var. *puberula; H. c.* var*. sericea*), and slender bush-mallow (*Malacothamnus gracilis*) would have been noticeable and identifiable throughout the year and were not observed during the DWE floristic inventory and rare plant survey.

The special-status plant species recorded in the CNDDB known from mesic, moist, seep, wetland type habitats occurring in the region are marsh sandwort (*Arenairia paludicola*), Bolaner's water-hemlock (*Cicuta maculata* var. *bolanderi*), La Graciosa thistle (*Cirsium scariosum v*ar. *loncholepis*), California saw-grass (*Cladium californicum*), aparejo grass (*Muhlenbergia utilis*), Gambel's water cress (*Nasturtium gambelii*) and San Bernardino aster (*Symphyotrichum defoliatum*)). No natural mesic/moist/wetland habitats occur on the project site; therefore, these species are not expected to occur. None of these species were observed during the DWE floristic inventory and rare plant survey.

Special-status dune plants recorded in the CNDDB associated with various forms of dunes near the immediate coast that are not expected to occur on the project site include aphanisma (*Aphanisma blitoides*), surf thistle (*Cirsium rhothophilum*), beach spectaclepod (*Dithyrea maritima*), dune larkspur (*Delphinium parryi* ssp. *blochmaniae*), and beach layia (*Layia carnosa*). Special-status plants associated with non-sandy conditions such as rock outcrop, granite, clay, or shale soils not expected to occur on the project site include Miles' milk-vetch (*Astragualus didymocarpus* var. *milesianus*), straight-awned spineflower (*Chroizanthe rectispina*), and pale-yellow layia (*Layia heterotricha*). None of these species were observed during the DWE floristic inventory and rare plant survey.

Sandy soil associated special-status plants with the low potential to occur on the disturbed habitats on the project site include Hoover's bent grass (*Agrostis hooveri*), seasinde bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), Gaviota tarplant (*Deinandra increscens* ssp. *villosa*; out of current known range), paniculate tarplant (*Deinandra paniculata*), (Blochman's leafy daisy (*Erigeron blochmaniae*), three species of monardella (M*onardella sinuata* ssp. *sinuata*, *M. undulata* ssp. crispa, *M.u.* ssp. *undulata*), and black flowered figwort (*Scrophularia atrata*). None of these species have been observed by DWE field surveys. None of these species were observed during the DWE floristic inventory and rare plant survey.

5.4.2 Special-Status Wildlife

The CNDDB and USFWS IpaC search revealed the recorded occurrences of 25 special-status wildlife species within the region of the project site. Special-status wildlife species known from the region evaluated for this study are discussed below by groups based upon habitat preferences, specific habitat use requirements (i.e. terrestrial or aquatic), mobility, and migratory patterns. Table B-1 provides listing status, habitat detail, and potential to occur on the project site for each of the species discussed below.

Aquatic/Riparian Species – The CNDDB has recorded occurrences for aquatic stream associated tidewater goby (*Eucyclogobius newberryi*), unarmored three-spine stickleback (*Gasterosteus aculeatus williamsoni*), arroyo chub (*Gila orcuttii*), and steelhead (*Oncorhynchus mykiss irideus*). No stream habitat or any drainages are on the project site so these species would not occur.

The project site does not support habitat for any of the highly aquatic permanent pond, vernal pool, or riverine/riparian species vernal pool fairy shrimp (*Branchinecta lynchi*), California tiger salamander (*Ambystoma californiense*), arroyo toad (*Anaxyrus californicus*), western pond turtle (*Emys marmorata*), California red-legged frog (*Rana draytonii*), or two-striped garter snake (*Thamnophis hammondii*). These species would not occur on the project site.

The CNDDB has a 2011 western spadefoot (toad) (*Spea hammondii*) occurrence of 50 adults calling 600+ feet away offsite in a rain filled pool at the southeast corner of Hummel Drive and UVP. Intervening upland habitat between Hummel Drive and the project site was obliterated for construction of UVP and a detention basin. No suitable seasonal pools occur on project site. Interestingly, the UVP Final EIR had no mention of this occurrence even though the project ran along the site and appears to have disturbed adjacent uplands during construction.

The CNDDB has recorded occurrences of the California red-legged frog in the vicinity of the project site to the west of Highway 135 in ditches and ponds around the Santa Maria Airport, and agricultural ponds and ditches mostly to the west around Highway 1 and Black Road. There is no aquatic habitat of any kind on the project site that may attract a California red-legged frog from other areas. In addition, while the California red-legged frog may disperse

across uplands between breeding sites, Highway 135 creates a barrier to movement of frogs from the west, and there are no breeding sites in the urbanized development around the project site that might prompt movement across the site. As such, there is no suitable breeding or dispersal habitat on the project site for the California red-legged frog.

The California tiger salamander (*Ambystoma californiense*) spends most of its life in upland underground refuges in small mammal burrows and can disperse upwards of 1.3 miles from their temporary (seasonal) breeding ponds. There are known breeding ponds approximately 1.4 miles west of Highway 135 on airport lands and elsewhere mostly to the south. There is substantial residential development, active agriculture, curbs along UVP to the west, and the four-lane Highway 135 separating the project site from any known or potential breeding ponds that represents a positive barrier to any California tiger salamander dispersal onto the project site. The site is mapped by the USFWS as outside of the western Santa Maria/Orcutt metapopulation and potential distribution. Additionally, curbs along Orcutt Road and portions of UVP represent additional barriers to CTS movement. As such, the project site does not support upland dispersal or refuge habitat for the California tiger salamander. A complete CTS site assessment report substantiating these findings is provided in Appendix D.

The project site does not support any habitat for the marsh associated tricolored blackbird (*Agelaius tricolor*) or riparian obligate nesting migratory birds yellow warbler (*Setophaga petechia*) or least Bell's vireo (*Vireo bellii pusillus*), as such, they would not occur on the project site.

Monarch Butterfly – The monarch butterfly (*Danaus plexippus*) uses coastal woodlands and eucalyptus/pine tree stands for fall and winter roosts typically from October through January. The project site supports stands of trees that have been observed with a small aggregation fall/winter roosting site monarch butterflies dating back to 1998 with 176 individuals recorded. Currently 34 were recorded in 2021/2022. DWE visited the Pismo Beach monarch butterfly preserve prior to conducting field surveys on the project site. The 2021-2022 season documented over 22,000 monarch butterflies at the Pismo preserve, considered an excellent year compared to recent years. Monarch butterflies were readily observable in flight (100's in flight) and roosting at the Pismo preserve serving as a reference for project site surveys. No monarch butterflies were observed on the project site by DWE on the December 17, 2021 field survey under ideal sunny 64°F conditions with little wind. Similar ideal conditions for observing monarch butterflies occurred on DWE January 5, 2022 field survey. Four monarch butterflies were observed in flight and stationery on the east edge of the eucalyptus stand on the south side of the project site. Xerces Society community science program recorded 28 monarchs in November 2021 and 34 at "New Years" counts. Table 2 below provides the observation data from the CNDDB and Xerces Society monarch butterfly counts. The most recent observations of less than 40 monarch butterflies does not represent a substantial occurrence of a roosting site compared to the other Xerces Society monitoring sites of 500, 1,000s, and upwards to 20,000 individuals at winter roost sites.

Interestingly, the UVP Final EIR had no mention of this roost site or impacts to monarch butterflies even though the project cut through the northern edge of this stand of eucalyptus.

TABLE 2
MONARCH BUTTERFLY OVER WINTERING ROOST COUNTS
CNDDB OCCURRENCE #354; XERCES UNION VALLEY PARKWAY SITE ID 2688

CNDDB OCCURRENCE #354 COUNTS	
NOVEMBER 1998	71
DECEMBER 1998	176
FEBRUARY 1999	119
MARCH 1999	5
XERCES SOCIETY COMMUNITY SCIENCE COUNTS	
YEAR 2010	NOT COUNTED
YEAR 2011	NOT COUNTED
YEAR 2012	NOT COUNTED
YEAR 2013	NOT COUNTED
YEAR 2014	NOT COUNTED
YEAR 2015	19
YEAR 2016	30
YEAR 2017	18
YEAR 2018	2
YEAR 2019	0
THANKSGIVING COUNT 2021	28
NEW YEAR'S COUNT 2021-2022	34

SOURCE: *CALIFORNIA NATURAL DIVERSITY DATA BASE, ACCESSED MARCH 2022; XERCES SOCIETY FOR INVERTEBRATE CONSERVATION WESTERN MONARCH COUNT COMMUNITY SCIENCE PROGRAM*

Reptiles – The northern legless lizard *(Anniela pulchra)* is closely associated with sandy or very friable loamy soils under coastal scrub or woodland vegetation with soil moisture and vegetative cover being essential. The Blainvilles's (coast) horned lizard *(Phrynosoma blainvillii)* occurs in a wide variety of habitats with sandy soils, abundant ant colonies for food, open areas for sunning, and shrubs for cover needed. The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for these two species. However, the regular mowing/discing of the site and periodic removal of shrubs reduces the suitability and value of the onsite habitat to support these species. DWE field surveys on March 7, 2022 and April 27, 2022 that included raking around the coastal scrub habitat did

not result in any observations of either the legless or horned lizards. Further, the site disturbance over time and infill nature renders the site as unsuitable for these species

Upland Birds – The southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) and California horned lark (*Eremophila alpestris actia*) can occur in grassland and scrubland habitats in the region. The project site could support these species although they were not observed during DWE field surveys. The western burrowing owl *(Athene cunicularia)* use grasslands and areas with low or sparse vegetation for foraging and burrow sites typically associated with ground squirrel burrows. They may be nomadic winter migrants in coastal regions but typically breed further inland. No western burrowing owls or were observed on the project site and may be precluded by regular discing and mowing.

Mammals – The pallid bat (*Antrozous pallidus*) typically roosts in rocky areas and the Townsend's big eared bat *(Corynorhinus townsendii)* roost in colonies or individually in caves, mines, and large undisturbed spaces in buildings or other structures. There is no rocky areas or "structure" habitat to support pallid bat or Townsend's big eared bat roosts on the project site. The western red bat (*Lasiurus blossevillii*) roosts primarily in trees in cismontane and montane forests and riparian habitat that are not represented on the project site.
The American badger *(Taxidea taxus)* is a grassland species needing abundant small mammal prey and are easily detected by their distinctive half-moon shaped burrows. There was no evidence of badger use observed on the project site during DWE field surveys that included close inspection of burrows with the obvious tailings from ground squirrels. Very little small mammal use was observed as well suggesting the isolated infill site has low suitability for the American badger.

6.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

6.1 SUFFICIENCY OF BIOLOGICAL DATA

The DWE field surveys on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022 are sufficient to; 1) adequately establish existing conditions of the project site and context in the landscape and land use mosaic in the vicinity; 2) determine that the site does not support any special-status plant or wildlife species; 3) determine the absence of waters of the U.S./State, wetland or riparian habitats onsite, and 4) adequately evaluate proposed project impacts and provide recommended mitigation measures to reduce potential significant impacts to a less than significant level. The data collected as articulated in this report provide sufficient biological resources information to adequately address potential significance of impacts on biological resources.

6.2 IMPACT ASSESSMENT

Botanical Resources – The proposed project would develop the entire 43.64-acres of non-native annual grassland habitat, disturbed coastal scrub, and non-native stands of trees including oak trees into mixed use commercial and residential urban uses that would include

tree and shrub landscaping around the buildings. No natural communities of special concern occur on the project site so none would be impacted. The sandy soils of the grassland and coastal scrub habitat areas could support non-listed special-status plant species such as the monardellas or the Blochman's leafy daisy, however they were not observed during the DWE floristic inventory and rare plant survey. Other special-status plant species were not observed and are not expected to occur.

Wildlife Resources – Construction of the proposed project and conversion of the entire site to commercial and residential development could result in the mortality and/or displacement of locally common wildlife such as resident and migratory birds, raccoons, opossums, and small mammals.

- The sandy soil and disturbed coastal scrub habitat onsite support potentially suitable habitat for the northern legless lizard and Blainville's horned lizard, albeit not observed and the low-quality disturbed infill habitat. As such, there would be no impact on the northern legless lizard and Blainville's horned lizard.
- There is a low likelihood of western spadefoot refuge occurrence on the project site from the 2011 offsite recorded observation given it is over 600 feet away and the relatively recent disturbance to the intervening habitat. As such, potential impacts on the western spadefoot refuge habitat would be considered less-than significant.
- Removal of the eucalyptus trees would eliminate the opportunity for the small winter roost aggregation of monarch butterflies. There are other nearby groves of eucalyptus monitored by the Xerces Society that could serve as a winter roost site after the project site trees are removed. As such, potential impacts on the monarch butterfly winter roost habitat would be considered less-than significant.
- The project site is essentially an infill location for habitat surrounded by existing residential development and active agriculture, within the developed lands of Orcutt and the City of Santa Maria. The isolated site surrounded by development does not represent a movement corridor for wildlife. As such, there would be no impact on any wildlife movement corridors.

Vegetation removal (tree cutting, clearing and grubbing) during the nesting season for birds could result in the destruction of active bird's nests including tree and ground nesting birds. Destruction of active nests is prohibited by the Fish and Game Code of California Sections 3503 and 3503.1 (raptors specifically), and the Migratory Bird Treaty Act. ***As such, this could be considered a potentially significant impact.*** It is worthy of noting that the addition of tree and shrub landscaping around the development may offset the tree removal and benefit songbird nesting activity.

Project approval that includes the removal of onsite trees requires compliance with the City's landscape standards for tree removals and mitigation plantings. As such, this is considered a less than significant impact with no additional mitigation measures recommended.

6.3 RECOMMENDED MITIGATION MEASURES

The following mitigation measure is recommended to avoid, minimize, and mitigate for potentially significant impacts on nesting birds.

To reduce any potentially significant impact on nesting birds from vegetation removal, the following mitigation measures are recommended.

MM BIO-1: *Vegetation removal and initial site disturbance shall be conducted between September 1 and January 31 outside of the nesting season for birds. If vegetation and/or tree removal is planned for the bird nesting season (February 1 to August 31), then preconstruction nesting bird surveys shall be conducted by a qualified biologist to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required.*

If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

7.0 CONCLUSIONS

Based on the findings described above establishing the existing conditions of biological resources within the project site as of the February 8, 2022 EIR NOP, and incorporation of the recommended mitigation measures, implementation of the proposed project would not result in any substantial adverse effects on biological, botanical, or wetland habitat resources. ***Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources would be considered to be less than significant.***

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APPENDIX A

FIGURES

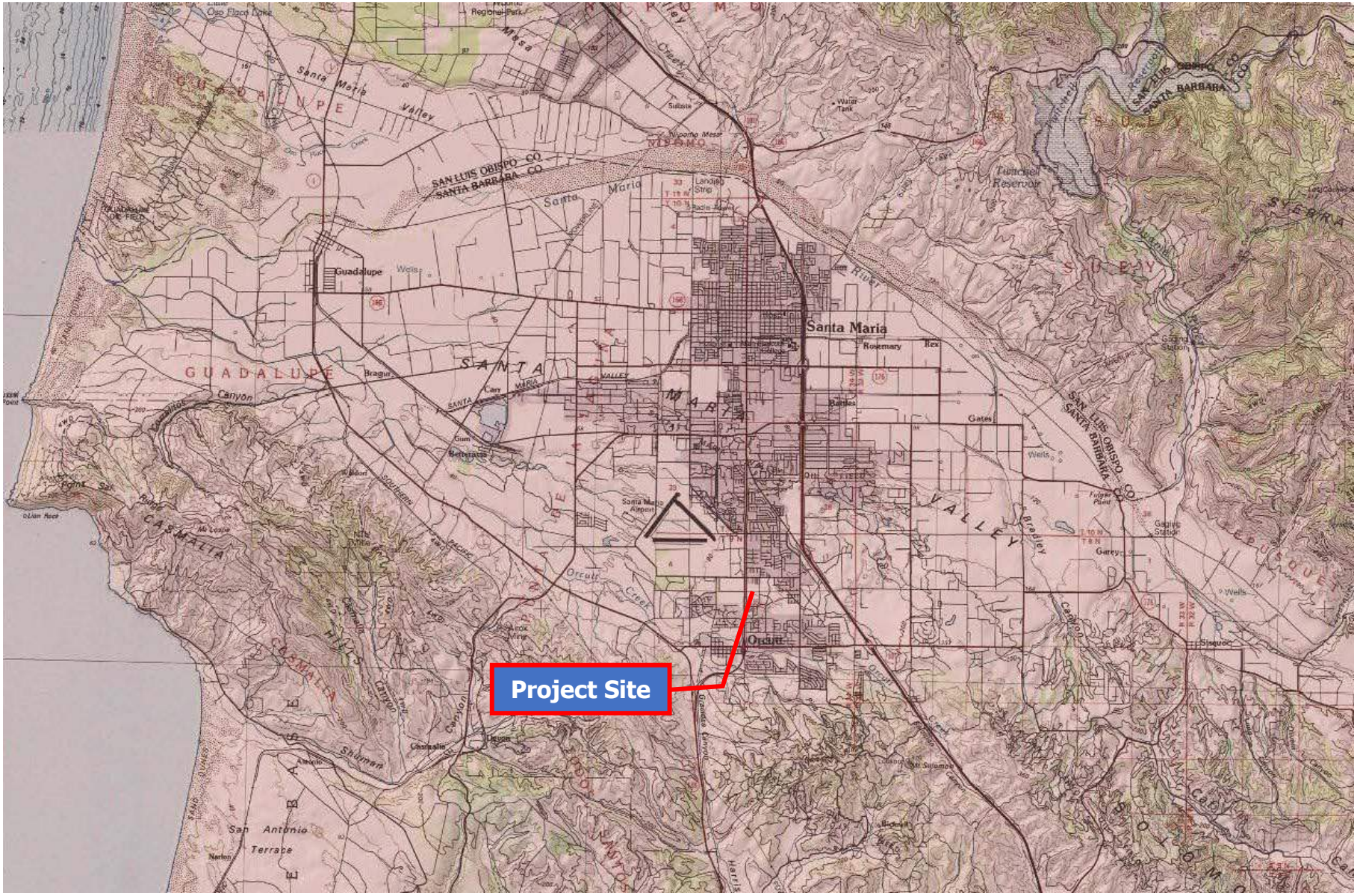
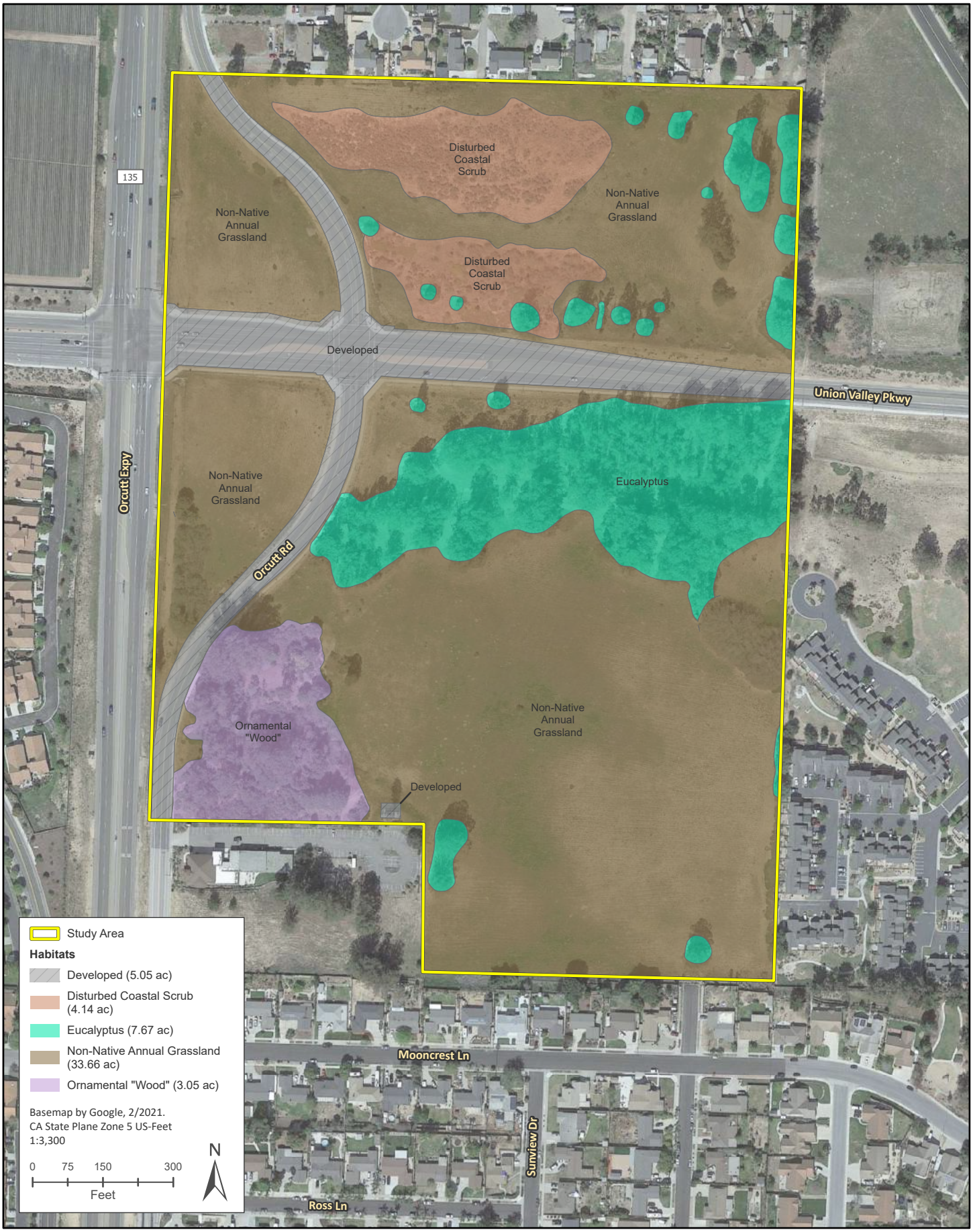


FIGURE 1 – USGS REGIONAL TOPO MAP

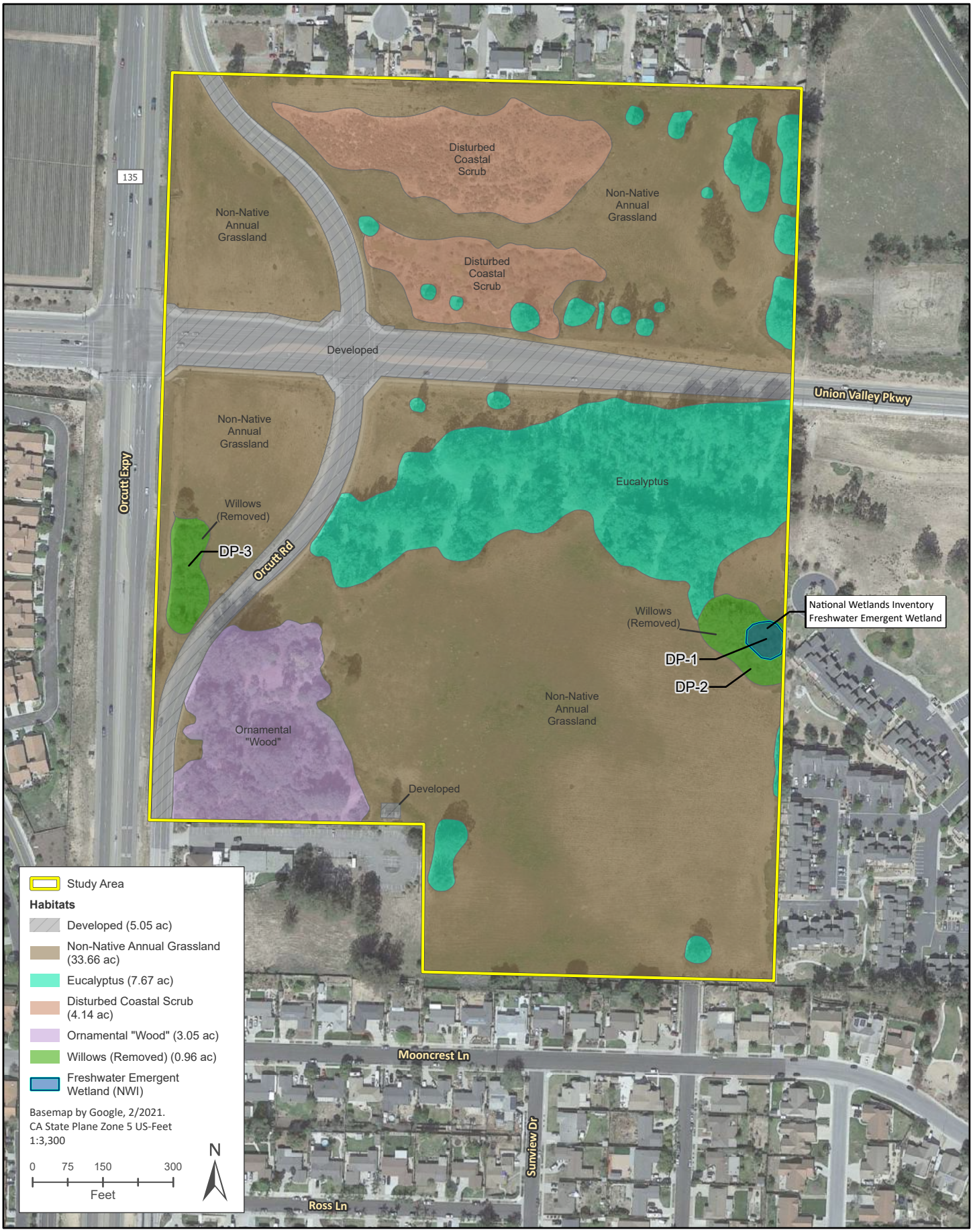
FIGURE 2 – VICINITY AERIAL PHOTO MAP

FIGURE 3 – PROJECT DETAIL SCHEMATIC

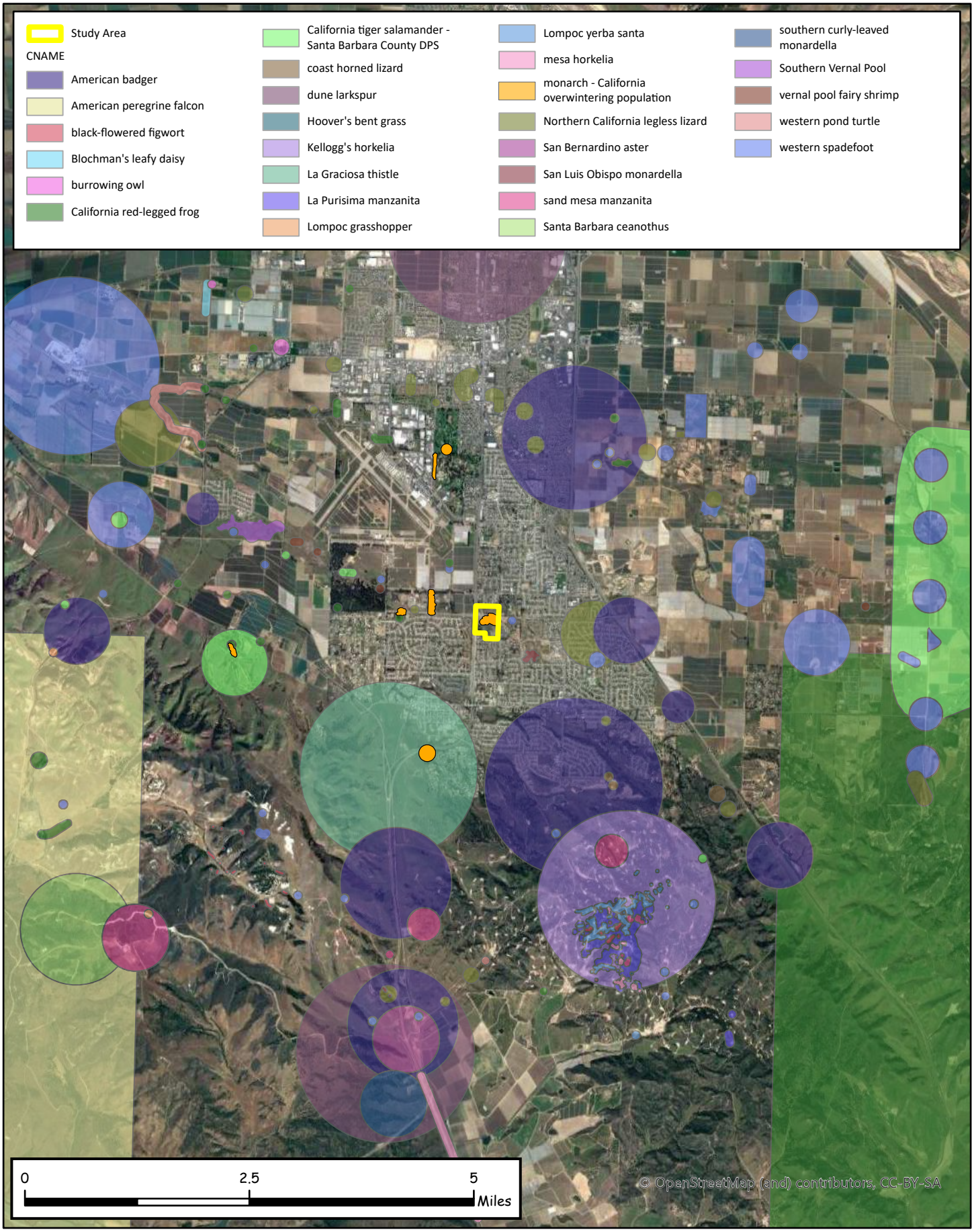
FIGURE 4 – SOILS MAP



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure 5**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENT	**Habitat Map**



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure 6**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENT	**Jurisdictional Determination Map**



sage institute inc David Wolff Environmental, LLC	Richards Ranch Mixed Use Development Project	**Figure 7**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENTS	**CNDDB Map**

Photo 1: View west at project site north of UVP at non-native annual grassland, eucalyptus, and disturbed coastal scrub (arrow). **12/17/2021**

Photo 2: View west at disturbed coastal scrub on project site north of UVP. Fire suppresion discing furrows evident. **12/17/2021**

Photo 3: View east at disturbed coastal scrub, disced grassland, and eucalyptus row along east border of site north of UVP. **12/17/2021**

Photo 4: View west north side of UVP showing discing furrows in disturbed grassland and disturbed coastal scrub. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

Photo 5: View east at eucalyptus stands and grassland, and ice plant along both sides of UVP. **12/17/2021**

Photo 6: View north from south side of UVP at eastern project boundary development, eucalyptus, & willow removal area (arrow). **12/17/2021**

Photo 7: View south at eastern project boundary showing adjacent development & willow removal area (arrow). **3/7/2022**

Photo 8: View west at willow removal area lacking any drainage pattern, grassland, and euclyptus along on south side of UVP. **12/17/2021**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

Photo 9: View west at project area south of UVP at grassland disc furrows, eucalyptus, and non-native ornamental "wood" (arrow). **3/7/2022**

Photo 10: View west at ornamental and native tree "wood" on the south side of UVP. **12/17/2021**

Photo 11: View south on north side of UVP showing disced grassalnd and rows of eucalyptus trees on both sides of UVP. **3/7/2022**

Photo 12. View north at non-native grassland and small patch of single and multi-trunk coast live oaks on north side of UVP. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

Photo13: View west at wetland determination data point DP-1 (arrow) in center of willow removal area. No basin or drainage pattern. **3/7/2022**

Photo 14: View east at wetland determination data point DP-1 (arrow) in center of willow removal area. No basin or drainage pattern. **3/7/2022**

Photo 15: View north at wetland determination data point DP-2 (arrow) near edge of willow removal area. No basin or drainage pattern. **3/7/2022**

Photo 16. View south at wetland determination data point DP-2 (arrow) near edge of willow removal area. No basin or drainage pattern. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

Photo 17: View north at wetland determination data point DP-3 (arrow) in center of willow removal area. Buried culvert yellow arrow. **3/7/2022**

Photo 18: View east at wetland determination data point DP-3 (arrow) in center of willow removal area. Road drainage concrete culvert. **3/7/2022**

Photo 19: View south at constructed rocked ditch drainage to culvert under Orcutt Road to DP-3 area. **3/7/2022**

Photo 20. View north rocked roadside drainage ditch & stormdrain inlet along Orcutt Road towards intersection and culvert under UVP. **3/7/2022**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

Photo 21: View north at stormdrain inlet and constructed ditch drainage management system on UVP at Orcutt Road. **12/17/2021**

Photo 22: View south at constructed rocked ditch roadside drainage management system on Orcutt Road at UVP. **12/17/2021**

Photo 23: View south at constructed ditch drainage management system and culvert under Orcutt Road. **12/17/2021**

Photo 24. View west at drainage rock at culvert under Orcutt Road. No continued drainage pattern. **12/17/2021**

FIGURE 8 – REPRESENTATIVE PHOTOGRAPHS

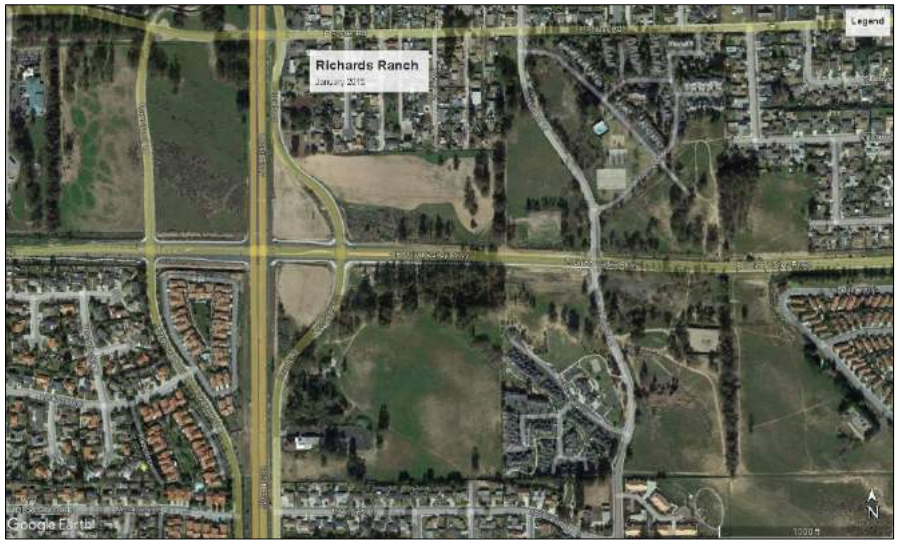
AERIAL VIEW SEPTEMBER 1994 – Showing stands of trees, coastal scrub, and grassland habitats. Some site disturbance evident.

AERIAL VIEW JUNE 2002 - Showing stands of trees, coastal scrub, and grassland habitats. Some site disturbance evident.

AERIAL VIEW JUNE 2012 – Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway construciton evident.

AERIAL VIEW APRIL 2013 - Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway construciton evident.

FIGURE 9 – AERIAL VIEW OVER TIME



AERIAL VIEW JANUARY 2015 - Showing stands of trees, coastal scrub, and grassland habitats. Substantial site disturbance and Union Valley Parkway completion evident.

AERIAL VIEW JANUARY 2021 - Showing stands of trees, coastal scrub, and grassland habitats. Regrowth of coastal scrub habitat in northern portion of the site evident.

FIGURE 9 – AERIAL VIEW OVER TIME

APPENDIX B

TABLE B-1: CNDDB SPECIAL-STATUS SPECIES

Table B-1 Special-Status Species

Scientific Name	Common Name	Fed Status	CA Status	CNPS	General Habitat	Micro Habitat	Presence/Absence Rationale
Plants							
Agrostis hooveri	Hoover's bent grass	None	None	1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland.	Sandy sites. 60-765 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Aphanisma blitoides	aphanisma	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub.	On bluffs and slopes near the ocean in sandy or clay soils. 3-305 m. Channel Islands and immediate coast.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos purissima	La Purisima manzanita	None	None	1B.1	Chaparral, coastal scrub.	Sandstone outcrops, sandy soil. 60-470 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos refugioensis	Refugio manzanita	None	None	1B.2	Chaparral.	On sandstone. 60-765 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arctostaphylos rudis	sand mesa manzanita	None	None	1B.2	Chaparral, coastal scrub.	On sandy soils in Lompoc/Nipomo area. 20-335 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Arenaria paludicola	marsh sandwort	Endangered	Endangered	1B.1	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Astragalus didymocarpus var. milesianus	Miles' milk-vetch	None	None	1B.2	Coastal scrub.	Clay soils. 50-385 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Ceanothus impressus var. impressus	Santa Barbara ceanothus	None	None	1B.2	Chaparral.	Sandy. 10-340 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Chenopodium littoreum	coastal goosefoot	None	None	1B.2	Coastal dunes.	Generally on sandy soils, and on dunes. 5-40 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Chorizanthe rectispina	straight-awned spineflower	None	None	1B.3	Chaparral, cismontane woodland, coastal scrub.	Often on granite in chaparral. 45-1040 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cicuta maculata var. bolanderi	Bolander's water-hemlock	None	None	2B.1	Marshes and swamps.	In fresh or brackish water. 0-20 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cirsium rhothophilum	surf thistle	None	Threatened	1B.2	Coastal dunes, coastal bluff scrub.	Open areas in central dune scrub; usually in coastal dunes. 3-60 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Cirsium scariosum var. loncholepis	La Graciosa thistle	Endangered	Threatened	1B.1	Coastal dunes, coastal scrub, brackish marshes, valley and foothill grassland, cismontane woodland.	Lake edges, riverbanks, other wetlands; often in dune areas. Mesic, sandy sites. 3-220 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Cladium californicum	California saw-grass	None	None	2B.2	Meadows and seeps, marshes and swamps (alkaline or freshwater).	Freshwater or alkaline moist habitats. -40-2150 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Cordylanthus rigidus ssp. littoralis	seaside bird's-beak	None	Endangered	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes.	Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Deinandra increscens ssp. villosa	Gaviota tarplant	Endangered	Endangered	1B.1	Coastal scrub, valley and foothill grassland, coastal bluff scrub.	Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. 10-430 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Deinandra paniculata	paniculate tarplant	None	None	4.2	Coastal scrub, valley and foothill grassland	Ranges to San Diego County. Sandy sometimes vernally mesic sites. 25-980m	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Delphinium parryi ssp. blochmaniae	dune larkspur	None	None	1B.2	Chaparral, coastal dunes (maritime).	On rocky areas and dunes. 18-305 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Dithyrea maritima	beach spectaclepod	None	Threatened	1B.1	Coastal dunes, coastal scrub.	Sea shores, on sand dunes, and sandy places near the shore. 3-60 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	None	1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley/foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-290 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Erigeron blochmaniae	Blochman's leafy daisy	None	None	1B.2	Coastal dunes, coastal scrub.	Sand dunes and hills. 0-185 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Eriodictyon capitatum	Lompoc yerba santa	Endangered	Rare	1B.2	Closed-cone coniferous forest, chaparral, coastal bluff scrub, oak woodland.	Sandy soils on terraces. 60-505 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral.	Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Layia carnosa	beach layia	Endangered	Endangered	1B.1	Coastal dunes, coastal scrub.	On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 3-30 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Layia heterotricha	pale-yellow layia	None	None	1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland.	Alkaline or clay soils; open areas. 90-1800 m.	Absent; suitable soils not present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Monardella sinuata ssp. sinuata	southern curly-leaved monardella	None	None	1B.2	Coastal dunes, coastal scrub, chaparral, cismontane woodland.	Sandy soils. 20-305 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Monardella undulata ssp. crispa	crisp monardella	None	None	1B.2	Coastal dunes, coastal scrub.	Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. 5-125 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Monardella undulata ssp. undulata	San Luis Obispo monardella	None	None	1B.2	Coastal dunes, coastal scrub.	Stabilized sand of the immediate coast. 5-200 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Muhlenbergia utilis	aparejo grass	None	None	2B.2	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland.	Sometimes alkaline, sometimes serpentinite. 25-2325 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Nasturtium gambelii	Gambel's water cress	Endangered	Threatened	1B.1	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Scrophularia atrata	black-flowered figwort	None	None	1B.2	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub.	Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. 10-445 m.	Absent; suitable soils present; Periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	Absent; no suitable wetland habitat occurs on the highly disturbed upland site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Natural Communities of Special Concern							
Central Dune Scrub	Central Dune Scrub	None	None				Absent; highly disturbed inland site is no dune habitat.
Central Foredunes	Central Foredunes	None	None				Absent; highly disturbed inland site is no dune habitat.
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	None	None				Absent; no wetland habitats occur on the site.
Southern Vernal Pool	Southern Vernal Pool	None	None				Absent; no vernal pool habitat occurs on the site.
Southern California Threespine Stickleback Stream	Southern California Threespine Stickleback Stream	None	None				Absent; no stream habitat occurs on the site.
Invertebrates							
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None		Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools.	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Absent. Suitable conditions absent; no vernal pool habitat occurs on the site.

Danaus plexippus	monarch - California overwintering population	Candidate	None		Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	CNDDB Occurrence #354; Xerces #2688 Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Absent. Present; small winter roost site of 5 to 176 individuals observed over a 25 year period.
Fish							
Eucyclogobius newberryi	tidewater goby	Endangered	None		Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River.	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Absent. Suitable conditions absent; no lagoon or stream habitat occurs on the site.
Gasterosteus aculeatus williamsoni	unarmored threespine stickleback	Endangered	Endangered		Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams.	Cool (<24 C), clear water with abundant vegetation.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Gila orcuttii	arroyo chub	None	SSC		Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Oncorhynchus mykiss irideus	steelhead - southern California DPS	Endangered	None		Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Absent. Suitable conditions absent; no stream habitat occurs on the site.
Amphibians							
Ambystoma californiense	California tiger salamander - Santa Barbara County DPS	Endangered	Threatened		Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats.	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Absent. Suitable conditions absent; no breeding ponds occur on the site. Orcutt Hwy is a barrier to CTS movement to the site from known and potential ponds west of Orcutt Highway.
Anaxyrus californicus	arroyo toad	Endangered	SSC		Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Absent. Suitable conditions absent; no river floodplain, breeding ponds, or refuge habitat occur on the site.
Rana draytonii	California red-legged frog	Threatened	SSC		Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Absent. Suitable conditions absent; no aquatic breeding ponds occur on the site. Infill site surrounded by developments and roads and renders the site unsuitable for any CRLF dispersal opportunity.
Spea hammondii	western spadefoot	None	SSC		Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying. 2011 CNDDB rain filled pool occurrence of 50 calling adults 600 feet to the east of project site.	Absent. Suitable conditions absent; no breeding ponds occur on the site. Periodic site disturbance and yearly weed suppression discing renders the site unsuitable.
Reptiles							
Anniella pulchra	Northern California legless lizard	None	SSC		Sandy or loose loamy soils under sparse vegetation.	Soil moisture is essential. They prefer soils with a high moisture content.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.

Emys marmorata	western pond turtle	None	SSC		A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Absent. Suitable conditions absent; no aquatic habitat occurs on the site. Infill site surrounded by developments and roads and renders the site unsuitable for any western pond turtle dispersal opportunity.
Phrynosoma blainvillii	coast horned lizard	None	SSC		Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.
Thamnophis hammondii	two-striped gartersnake	None	SSC		Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Absent. Suitable conditions absent; no aquatic/stream/ riparian habitat occurs on the site. Infill site surrounded by developments and roads and renders the site unsuitable.
Birds							
Agelaius tricolor	tricolored blackbird	None	Threatened		Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Absent. No suitable aquatic/marsh/thicket habitat occurs on the site. Not observed.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	NONE		Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	Absent. No suitable rocky slopes/hillsides on the site. Not observed during 2022 surveys..
Athene cunicularia	burrowing owl	None	SSC		Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Absent. Suitable ground squirrels burrows onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 surveys.
Eremophila alpestris actia	California horned lark	None	None		Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Suitable conditions onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 surveys.
Setophaga petechia	yellow warbler	None	SSC		Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable conditions absent. No suitable riparian habitat onsite. Not recorded on the site and not observed during 2022 surveys.
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered		Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable conditions absent. No suitable riparian habitat onsite. Not recorded on the site and not observed during 2022 surveys.
Mammals							
Antrozous pallidus	pallid bat	None	None		Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Suitable conditions absent. No suitable rocky outcrop or crevice roost sites present.
Corynorhinus townsendii	Townsend's big-eared bat	None	None		Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Suitable conditions absent. No suitable mesic areas, rocky outcrop or crevice roost sites present.

Lasiurus blossevillii	western red bat	None	None		Roosts primarily in riparian trees, 2-40 ft above ground, from sea level up through mixed conifer forests. May roost in orchards.	Prefers riparian habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Marginal suitable habitat conditions present in eucalyptus trees. Not recorded from site.
Taxidea taxus	American badger	None	None		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Absent. Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.

APPENDIX C

WETLAND DELINEATION AND JURISDICTIONAL DETERMINATION REPORT

APPENDIX C

RICHARDS RANCH MIXED USE DEVELOPMENT
BIOLOGICAL RESOURCES ASSESSMENT

WATERS OF THE U.S./STATE
JURISDICTIONAL DETERMINATION
&
WETLAND DELINEATION

PREPARED FOR:
RICHARDS RANCH, LLC

PREPARED BY:
David Wolff Environmental

July 8, 2022

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EXHIBITS

1.0 INTRODUCTION AND PURPOSE

David Wolff Environmental (DWE) has prepared this wetland delineation and waters of the U.S./State jurisdictional determination of the Richards Ranch Mixed Use Development project site in support of the environmental review planning process. This wetland delineation and jurisdictional determination covers the approximately 43.64 acres project site to be annexed into the City of Santa Maria. Biological Resources Assessment report (BRA) Appendix A Figures 1 and 2 provide regional and vicinity location maps respectively.

The purpose of this report is to document the methods and results to determine if any jurisdictional wetlands or other waters of the U.S./State occur within the project site. The Corps 1987 Wetland Delineation Manual, current 2008 Arid West Regional Supplement (Version 2.0), and Rapanos/Carabell guidance were applied to the methods and results of this study. Wetland delineation field survey of the Richards Ranch Mixed Use Development project site was conducted by DWE on March 7, 2022.

The definition of waters of the U.S. has undergone recent changes in response to legal challenges against the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps). In brief, the 2020 Navigable Waters Protection Rule defining waters of the U.S. has been vacated and remanded by the court back to the EPA and Corps rendering it null and void. The 2015 Clean Water Rule still lacked legal stability to rely on so until the EPA and Corps can promulgate a new rule, the courts directed them to use the 2007 "Rapanos Guidance" as the most legally stable definition of waters of the U.S. for determining Clean Water Act jurisdictional status of our nation's waters. As such, the currently accepted "Rapanos Guidance" is the basis for this jurisdictional determination.

2.0 METHODS

2.1 WETLAND DELINEATION

The routine and problem areas methodology detailed in the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* (Corps Manual) were used as the basis to delineate waters of the U.S. including wetlands on the site. The definition of growing season and the basis of determining and recording indicators for hydrophytic vegetation, hydric soils, and wetland hydrology was the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (*Version 2.0*) (Arid West Supplement). Both the Corps Manual (Section G – Problem Areas) and Arid West Supplement (Chapter 5 – Difficult Wetland Situations in the Arid West) were used for the determination and evaluation of normal circumstances, atypical situations, and problem area wetlands as needed.

DWE Principal Ecologist David Wolff reviewed the National Wetlands Inventory (NWI) and USGS National Hydrography Dataset websites, and conducted this study to record observations of vegetation, soils, and hydrology on Arid West Supplement wetland determination data forms on

March 7, 2022. In accordance with the three parameter Corps Manual and Arid West Supplement, indicators and data on vegetation, soils, and hydrology were gathered at data observation points representing potential wetlands to determine what wetland parameters, if any, were present. The wetland determination data forms are included in the Arid West Supplement used for this wetland delineation are attached in Exhibit JD-2. A total of three data observation points (DP-1 through DP-3) were used to delineate potential wetland areas.

Vegetation – As defined in the Corps Manual and Arid West Supplement, the determination of hydrophytic (wetland) vegetation was made if greater than 50 percent of the dominant species were Facultative (FAC), Facultative Wetland (FACW), or Obligate Wetland (OBL) in the Corps 2020 National Wetland Plant List (NWPL). On the NWPL, there are five categories of wetland indicator status ratings, used to indicate a plant's likelihood for occurrence in wetlands versus non-wetlands:

- Obligate Wetland (OBL), almost always occur in wetlands;
- Facultative Wetland (FACW), usually occur in wetlands, but may occur in non-wetlands;
- Facultative (FAC), occur in wetlands and non-wetlands;
- Facultative Upland (FACU), usually occur in non-wetlands, but may occur in wetlands; and
- Upland (UPL), almost always occur in non-wetlands.

The Arid West Supplement Dominance Test and procedure for selecting dominant species using the "50/20 rule" was the hydrophytic vegetation indictor method used for this study. The determination of dominant species included those species that were most abundant and individually or collectively accounted for more that 50 percent of the total absolute aerial coverage of vegetation in each stratum. In addition, any other species that by itself accounted for at least 20 percent of the total plant cover were included as dominant species.

Soils – The Natural Resources Conservation Service (NRCS; formerly Soils Conservation Service) online *Soil Survey of Northern Santa Barbara County, California,* was reviewed to determine the soils mapping units recorded on the site. Soils descriptions were reviewed for profile characteristics to evaluate the consistency between the soils mapped by the NRCS and field observations. The landscape features of the site were reviewed to place the site in a context to support or not support wetlands. The determination of hydric soils was made using the hydric soil indicators detailed in the Arid West Supplement using the field indicators of soil color and texture and presence/absence of any redoximorphic features.

Hydrology – The determination of wetland hydrology was made if one primary indicator or two secondary indicators of wetland hydrology as detailed in the Arid West Supplement were recorded at data observation points.

2.2 WATERS OF THE U.S. – RAPANOS & CARABELL JURISDICTIONAL DEFINITION

The U.S. Army Corps of Engineers (Corps) and Environmental Protection Agency (EPA) have issued a set of guidance documents detailing the process for determining Clean Water Act Jurisdiction following the U.S. Supreme Court's decision in Rapanos v. United States and Carabell v. United States (herein referred to simply in this report as "Rapanos"). The EPA and Corps issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the United States under the Clean Water Act. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for the project site for evaluation by the EPA and the Corps to determine Clean Water Act jurisdiction and to complete the "significant nexus test" as detailed in the guidelines.

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances in situations (B) below the significant nexus test would take into account physical indicators of flow (evidence of an OHWM), if a hydrologic connection to a traditional navigable water exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a traditional navigable water.

Rapanos Key Points Summary

(A) The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent.
- Where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

(B) The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

(C) The Corps and EPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

3.0 RESULTS

3.1 STUDY AREA DESCRIPTION

The Richards Ranch project proposes mixed use residential and commercial development on approximately 43.64 acres of undeveloped land as part of annexation to the City of Santa Maria. See BRA Appendix A Figure 3. The site supports mostly disturbed non-native grassland, disturbed coastal scrub, and stands of non-native eucalyptus and ornamental trees with several coast live oak mixed in the stands. Two patches of arroyo willow (*Salix lasiolepis*) were evident on aerial photographs but were removed in 2021 to remove and discourage homeless encampments. The site appears to have been substantially disturbed over time from Union Valley Parkway construction, and vegetation management (mowing/discing) for fire suppression, and removal/discouragement of homeless encampments. The project site is essentially an infill site bordered by residential development on north, south, and east. Several vacant parcels next to residential development are on the east. The Orcutt Road alignment weaves through the western portion of the site. Orcutt Expressway (Highway 135) frontage borders the site on the west with the Foxenwood residential development and expanses of active agricultural lands west of Hwy 135. The site is bisected by Union Valley Parkway. BRA Appendix A Figure 5 provides a habitat map of the study area.

The site is mostly flat gently sloping downwards from east to west along with manufactured embankments and fill slopes from adjacent residential development and Union Valley Parkway construction. Roadside drainage from Union Valley Parkway and Orcutt Road is managed through several constructed rocked ditches leading to culverts under Orcutt Road to unconsolidated sheet flow. Upland drainage trends east to west to the above described ditches and culverts. No natural drainage features are present on the project site.

3.2 WETLAND DELINEATION – WATERS OF THE U.S.

The two patches of arroyo willow (*Salix lasiolepis*; FACW) evident on recent aerial photographs of the project site were the focus of the wetland delineation. As noted above, both patches have been removed to remove and discourage homeless encampments. There is a series of constructed rock-lined stormwater ditches and culverts receiving upland and roadside runoff from drop inlets on UVP and Orcutt Road that lacked any vegetation, wetland or otherwise. No other wetland features were observed to be investigated. Three wetland determination data observation points were collected to evaluate the areas of arroyo willow as shown on attached Figure JD-1 in attached Exhibit JD-1, and forms attached in Exhibit JD-2. Representative photographs of the site and data observations points are included in BRA Appendix A Figure 8.

3.2.1 VEGETATION

- One patch of willows was on the north side of UVP at the center of the eastern property line. Review of aerial photograph over time indicates this willow patch appeared sometime after 2002 following the construction of adjacent residential development to

the east. The extent of willows seems to have expanded by 2009 and peaked in 2012 at 0.55 acre with the extent of presumed mesic conditions manifested from increased impervious surface runoff from the new development. There is no drainage pattern to or continuing west from the willow patch suggesting the limitations of the artificial mesic conditions. The NWI has a smaller polygon labeled within the willow patch as Freshwater Emergent Wetland at this location that is incorrect. The patch appeared to be 100% dominated by arroyo willow prior to removal in 2021. As such, this would meet the hydrophytic vegetation criteria.

    - With approximately 60 percent bare ground remaining during the wetland delineation field survey, several weedy herbaceous species with less than 10 percent cover observed included yellow sweetclover (*Melilotis officinalis;* FACU), and presumed non-wetland wild radish (*Raphanus sativus*) and ripgut brome (*Bromus diandrus*). See BRA Appendix A Figure 7 for site photographs, and Figure 8 for a series of aerial photographs over time. See Figure JD-1 in attached Exhibit JD-1 and data sheets DP-1 and DP-2 in attached Exhibit JD-2.

- The second willow patch was observed on aerial photography at the end of a roadside drainage ditch at the southwest corner of the site along Orcutt Highway. This patch appears to be persistent in location and extent back to 1994 to 2021 at approximately 0.41 acre. The lack of expansion suggests the limitations of the mesic conditions from the roadside runoff. The patch appeared to be 100% dominated by arroyo willow prior to removal in 2021. As such, this would meet the hydrophytic vegetation criteria.

    - It appears any surface flow is directed to a partially buried culvert under Orcutt Highway daylighting at the constructed ditch along the south side of UVP.

    - With approximately 60 percent bare ground remaining during the wetland delineation field survey, cheeseweed (*Malva parviflorum;* non-wetland) had 15% cover, poison hemlock (*Conium maculatum*; FACW) had 10% cover, with non-native grasses and wild radish making up the rest. See BRA Appendix A Figure 7 for site photographs, and Figure 8 for a series of aerial photographs over time. See Figure JD-1 in attached Exhibit JD-1 and data sheets DP-3 in attached Exhibit JD-2.

- The varied network of rock lined roadside drainage ditches did not support any wetland vegetation only sporadic non-wetland non-native grasses. These ditches likely only flow in immediate response to impervious road surface runoff during rainfall.

3.2.2 SOILS

The USDA Natural Resources Conservation Service has identified three predominantly sandy soil series mapping units on the site as shown in BRA Appendix A Figure 4.

- Betteravia loamy sand 0 to 2 percent slopes (BmA), is a moderately well drained soil on terraces formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface of loamy sand to a depth of 36 inches with a cemented layer below the surface horizon. It is not a hydric (wetland) soil.
- Marina sand 0 to 2 percent slopes (MaA), is a somewhat excessively drained soil on terraces formed from eolian deposits (windblown) parent material. This mapping unit is characterized by surface horizons of sand to a depth of 88 inches. It is not a hydric (wetland) soil.
- Oceano sand 2 to 15 percent slopes severely eroded (OcD3), is an excessively drained soil on dunes formed from eolian (windblown) sands parent material. This mapping unit is characterized by surface horizons of sand to 60 inches depth. It is not a hydric (wetland) soil.

Observations of surface soils and gopher mounds and ground squirrel burrows corroborate the very sandy characteristics of these soil mapping units.

- Two soil test pits were excavated to a 24-inch depth in the willow patch area on the east property line (DP-1 and DP-2; see Figure JD-1). Both test pits were pure sand to depth with a 100% matrix color of 7.5YR 3/2 with no redoximorphic features. To be considered a sandy hydric soil redoximorphic features would need to be present. As such, there were no field indicators of hydric soils present.
- One soil test pit was excavated to a 24-inch depth in the willow patch area on the southwest corner of the property (DP-3; see Figure JD-1). This test pit was pure sand to depth with a 100% matrix color of 7.5YR 3/2 with no redoximorphic features. To be considered a sandy hydric soil redoximorphic features would need to be present. As such, there were no field indicators of hydric soils present.

3.2.3 HYDROLOGY

There were no primary or secondary indicators of wetland hydrology at any of the data observation point locations in the two willow patches. Mesic conditions supporting willows at the east property (DP-1 and DP-2) appears limited in extent with no visible drainage pattern to or from this area. It appears that a detention basin was constructed adjacent to the property on the south side of UVP that may now receive runoff from the residential development. The mesic conditions supporting willows at the southwest corner of the property (DP-3) appears limited in extent from the roadside ditches constructed in uplands and draining only uplands and impervious roadways. As such, there is no wetland hydrology present on the project site.

3.3 WETLAND DETERMINATION

Based on collection of data at three data observation points, while the presumed 100 percent cover of arroyo willow (FACW) meets the hydrophytic (wetland) vegetation criteria, in can be determined that the willow patches are not jurisdictional wetlands because of the lack of hydric soils and lack of any primary or secondary indicators of hydrology.

3.4 RAPANOS/CARABELL GUIDANCE DETERMINATION

The current Rapanos guidance states that the Corps would not take jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The review of aerial photography over time clearly demonstrates that the onsite drainage ditches are excavated in uplands and are only draining uplands mostly as a result of UVP construction. The ditches along UVP also appear to be excavated in uplands. Further, there is no Ordinary High Water Mark (OHWM) connection from the drainage ditches to a traditional navigable water (TNW) or a tributary to a TNW. The project site is not part of the nearest tributary Orcutt Creek watershed as delineated by the USGS national hydrography data set. As such, these ditches are not considered to be other waters of the U.S. subject to Corps jurisdiction.

3.5 WATERS OF THE STATE

The State Water Resources Control Board (Water Board) issued policy, procedures, and wetland definition for the discharge of dredged or fill material into waters of the State (Procedures). In brief, the Procedures define wetlands as waters of the State to be consistent with the federal three parameter definition requiring the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As demonstrated above, the project site does not support any three parameter wetlands. As such, there are no State wetlands present on the project site.

The Procedures are silent on artificial ditches constructed wholly in and draining only uplands that is the case for the network of roadside ditches constructed mostly for the recent UVP extension Orcutt Road realignment. There is no evidence of any historic natural drainage through the project site so the ditches do not represent realigned natural drainages, and do not represent a bed, bank, or channel of a river or stream. As such, the network of drainage ditches do not represent waters of the State.

4.0 CONCLUSIONS

Based on DWE field surveys, review of federal and state regulations, guidelines, and Procedures, there are no wetlands or other waters of the U.S./State present on the Richards Ranch Mixed Use Development Project site.

5.0 REFERENCES

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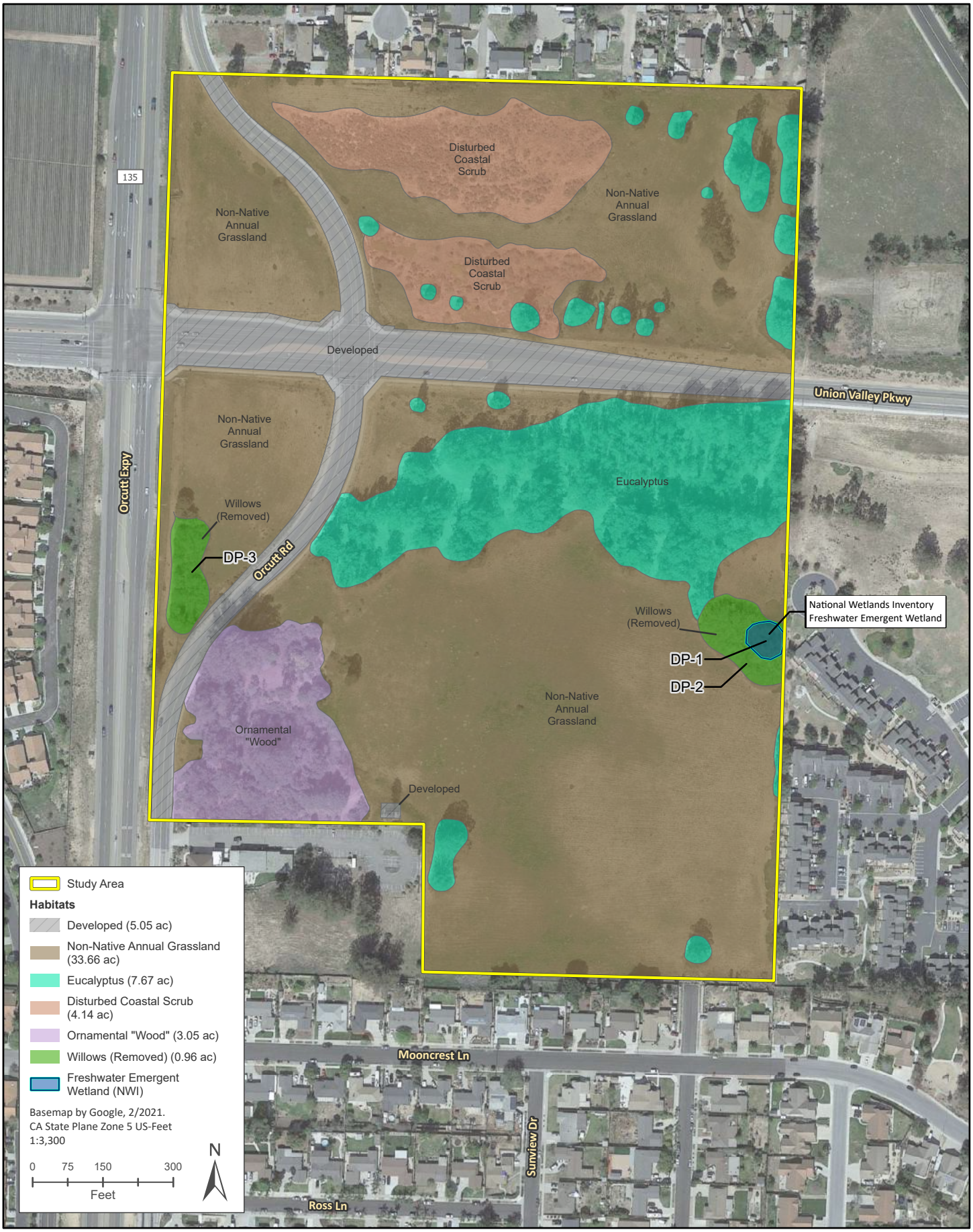
EXHIBIT JD-1

Figure JD-1: Jurisdictional Determination Map



David Wolff Environmental, LLC sage institute	Richards Ranch Mixed Use Development Project	**Figure JD-1**
	WETLAND DELINEATION & JURISDICTIONAL DETERMINATION	**Jurisdictional Determination Map**

EXHIBIT JD-2

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-1

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S11 T9N R34W

Landform (hillslope, terrace, etc.): Upland Terrace Local relief (concave, convex, none): Level Slope (%): 0-3%

Subregion (LRR): LRR C Lat: 34.878050 Long: -120.432294 Datum: WGS 84

Soil Map Unit Name: MaA Marina sand 0 to 2 percent slopes NWI classification: FEW (Incorrect)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. NWI mapping as freshwater emergent wetland (FEW) is incorrect. Willow patch removed to discourage homeless encampments identified from aerial photographs. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.20 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq. ft)			
1. Melilotus officinalis	10%	No	FACU
2. Raphanus sativus	10%	No	--
3. Bromus diandrus	2%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed.
Herb statum more indicative of surrounding disturbed non-native annual grassland.
NWI mapping as freshwater emergent wetland (FEW) is incorrect.

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from impervious surface runoff from upslope residential development.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-2

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S11 T9N R34W

Landform (hillslope, terrace, etc.): Upland Terrace Local relief (concave, convex, none): Level Slope (%): 0-3%

Subregion (LRR): LRR C Lat: 34.877781 Long: -120.432187 Datum: WGS 84

Soil Map Unit Name: MaA Marina sand 0 to 2 percent slopes NWI classification: FEW (Incorrect)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ✓

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. NWI mapping as freshwater emergent wetland (FEW) is incorrect. Willow patch removed to discourage homeless encampments ientified from aerial photographs. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.35 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq .ft)			
1. Raphanus sativus	10%	No	FACU
2. Avena sp.	2%	No	--
3. Bromus diandrus	2%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed.
Herb stratum more indicative of surrounding disturbed non-native annual grassland.
NWI mapping as freshwater emergent wetland (FEW) is incorrect.

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from impervious surface runoff from upslope residential development.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Richards Ranch Mixed Use Development City/County: Santa Maria/Santa Barbara Co Sampling Date: March 7,2022

Applicant/Owner: Richards Ranch, LLC State: CA Sampling Point: DP-3

Investigator(s): David Wolff, DWE Principal Ecologist Section, Township, Range: S 11 T9N R34W

Landform (hillslope, terrace, etc.): Low Terrace Local relief (concave, convex, none): Somewhat concave Slope (%): 0-2%

Subregion (LRR): LRR C Lat: 34.878133 Long: -120.436175 Datum: WGS 84

Soil Map Unit Name: BmA Betteravia loamy sand 0 to 2 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ✓ (If no, explain in Remarks.)

Are Vegetation ✓, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks:

Prolonged Jan to Feb dry period without rain. Willow patch removed to discourage homeless encampments identified from aerial photographs. Part of roadside ditch system excavated on dry land draining uplands. Non-wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 0.41 ac.)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis (presumed cover)	100%	Yes	FACW
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 400 sq. ft)			
1. Malva parviflora	15%	No	--
2. Conium maculatum	10%	No	FACW
3. Raphanus sativus	10%	No	--
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	100 = Total Cover		

% Bare Ground in Herb Stratum 60% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

Presumed 100 % absolute cover by FACW Salix lasiolepis from review of aerial photograph was removed. Herb statum more indicative of surrounding disturbed non-native annual grassland.

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	7.5YR 3/2	100%	NONE				Sand	Root zone; No redox features
10-24	7.5YR 3/2	100%	NONE				Sand	No redox features

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

Sandy soils with no redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary or secondary indicators of wetland hydrology. Mesic conditions for willow growth likely from roadside ditch culvert runoff to partially buried culvert under Orcutt Highway.

APPENDIX D

CALIFORNIA TIGER SALAMANDER SITE ASSESSMENT REPORT

APPENDIX D

RICHARDS RANCH MIXED USE DEVELOPMENT
BIOLOGICAL RESOURCES ASSESSMENT

CALIFORNIA TIGER SALAMANDER
SITE ASSESSMENT REPORT

PREPARED FOR:
RICHARDS RANCH, LLC

PREPARED BY:
David Wolff Environmental

July 8, 2022

Table of Contents

EXHIBITS

I. METHODS

David Wolff Environmental (DWE) has prepared this California tiger salamander (*Ambystoma californiense*; CTS) site assessment in accordance with the U.S. Fish and Wildlife Service (USFWS) *October 2003 Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California tiger Salamander*. This CTS site assessment is based on a desktop review of the Richards Ranch Mixed Use Development project site in relationship to the U.S. Fish and Wildlife (USFWS) northern Santa Barbara County CTS distinct population segment (DPS) distribution, metapopulation areas, designated Critical Habitat, and USFWS mapped known and potential CTS breeding ponds. The "underline" emphasis on known and potential ponds is intentional to distinguish that there is no evidence or field surveys determining CTS use in USFWS identified potential ponds, apparently just mapped from seasonal pond signatures from aerial photograph review. The USFWS CTS distribution, metapopulation, and breeding pond information is based on the USFWS 2016 *Final Recovery Plan for the Santa Barbara County Distinct Population Segment (DPS) of the California tiger salamander*. Field surveys of the Richards Ranch Mixed Use Development project site to identify and map habitat onsite types and windshield surveys to evaluate surrounding land uses were conducted by DWE Principal Ecologist David Wolff on December 17, 2021, January 5, 2022, and March 7, 2022.

II. ELEMENT 1: CTS RANGE & METAPOPULATION ANALYSIS

The project site is on the east side of Highway 135 (Orcutt Highway) at the intersection with Union Valley Parkway (UVP). The USFWS 2016 Final Recover Plan Figure 1 (attached as Exhibit CTS-1) shows the potential distribution (range) of the northern Santa Barbara County CTS DPS and Western Santa Maria/Orcutt Area metapopulation ending at the west side of Orcutt Highway. This clearly indicates USFWS views Orcutt Highway as a positive barrier to CTS movement into the urbanized lands east of the highway. The Western Santa Maria/Orcutt Area metapopulation coincides with USFWS designated Critical Habitat Unit 1 for the CTS. The CTS potential distribution and Eastern Santa Maria Area metapopulation is east of Highway 101 across an urbanized landscape from the project site. The west Los Alamos/Careaga Area metapopulation is south of Clarke Avenue across an urbanized landscape from the project site. See attached Exhibit CTS-1). Therefore, the project site falls across a positive barrier to CTS movement outside any metapopulations, and outside of the CTS range and potential distribution as identified by the USFWS.

III. ELEMENT 2: CTS BREEDING POND LOCALITIES

The closest USFWS mapped known and potential CTS breeding ponds are west of the four-lane Orcutt Highway that represents a positive barrier to CTS movement into the totally urbanized areas east of the Orcutt Highway. See attached Exhibit CTS-2. The closest extant (remaining) known CTS ponds are SAMA-7 and SAMA-6 approximately 1.4 miles to the west of the project site. SAMA-10,

while closer to the project site (still to the west of Orcutt Highway) has been extirpated (no longer exists) and planted in strawberries north of Foster Road all the way west to Blosser Road. The closest extant potential CTS breeding pond is SAMA-20 (the Foxenwood detention basin) that is 0.85 mile to the west of the project site that has never been confirmed for CTS use. There is almost no CTS upland refuge habitat around SAMA-20, and it is now isolated from any ponds to the north by Union Valley Parkway (UVP) curbs on both sides of the road. Potential CTS pond SAMA-8 is 1.1 miles away and has not been confirmed with any CTS use or suitable long-duration ponding. As stated in Section II above, the USFWS CTS distribution, metapopulation, and designated Critical Habitat end at the Orcutt Highway to the west of the project site.

IV. ELEMENT 3: PROJECT SITE HABITATS & DISPERSAL DISTANCE ANALYSIS

The proposed project site supports disturbed non-native annual grassland, disturbed coastal scrub, and stands of mostly non-native trees. There is evidence of ground squirrel and gopher use that CTS typically use for underground refuge. However, the site has undergone substantial surface disturbance and vegetation removal over time, and is regularly disced for weed/fire suppression. There are no seasonal ponds on the project site.

The USFWS established maximum upland dispersal distance based on predictive modelling and straight-line movement assumptions is 1.3 miles from known or potential breeding ponds. This long-distance upland dispersal potential movement is based on studies from the Sacramento Valley in a vastly different nearly level grassland landscape of Central California CTS distinct population segment compared to the woody vegetation covered generally hilly landscape of the northern Santa Barbara County DPS. Actual capture data in the studies used for the 1.3 mile prediction did not exceed 1,000 meters (0.62 mile) (Searcy 2013; Trenham 2005). Observations from an inter-pond dispersal study of CTS from a Monterey County study site in a rolling hills setting similar to the Santa Barbara County CTS DPS did not exceed 670 meters (0.42 mile) (Trenham 2001). A study of upland dispersal of CTS from ponds at the Santa Maria Public Airport District had a maximum dispersal distance of 197 meters (0.12 mile) (Sykes 2006). Dispersal distances of CTS can be much shorter or truncated if impaired by positive barriers to CTS movement such as roads with curbs, highways, and urban development.

As discussed in Section III above, the closest known extant USFWS CTS breeding ponds in the West Santa Maria/Orcutt Metapopulation Area are SAMA-6 and SAMA-7 at 1.4 miles away. This is a greater distance than the maximum presumed 1.3-mile dispersal ability of the CTS. Intervening land uses from Blosser Road to Orcutt Highway are now active agricultural strawberry fields surrounded by silt fences, Foster Road, development, and curbs on both sides of UVP representing positive barriers to CTS movement. Potential CTS ponds SAMA-20 and SAMA-8 are within the 1.3-mile dispersal ability, but the intervening developed and agricultural land uses are prohibitive of CTS overland movement. Only a steep bank narrow constructed drainage ditch runs along UVP from SAMA-20 to Orcutt Highway (stormwater drainage runs from east to west). CTS cannot climb so

this does not represent a viable dispersal opportunity from this constructed detention basin potential pond. There are almost no undeveloped uplands around SAMA-20 for CTS dispersal and there are curbs along both sides of UVP as a positive barrier precluding CTS movement from elsewhere to SAMA-20. It is my understanding that the curbs on both sides of UVP were for mitigation to provide a barrier to potential CTS movement from the northwest airport lands to the UVP roadway.

There are stormwater culverts draining uplands from the project site that run approximately 300 feet under the four-lane Orcutt Highway to narrow drainage ditch corridors along both sides of UVP. These are recently constructed and/or modified by the UVP construction and realignment of Orcutt Road. CTS disperse randomly in all directions from ponds and not necessarily along narrow constructed ditch corridors with curb barriers. While the site has grassland and coastal scrub habitats with small mammal burrows, because of the many impediments to CTS movement, the project site does not represent suitable dispersal upland refuge habitat for the CTS.

V. CONCLUSIONS

Given distances exceeding the maximum predicted CTS upland dispersal from extant known ponds, intervening urbanized and agricultural landscape, improbable use of narrow constructed drainage ditches and curbs along UVP, and long culverts only from potential ponds within the 1.3 mile maximum CTS dispersal ability, there would be no CTS dispersing to the Richards Ranch site from any USFWS known or potential CTS breeding ponds. There are no seasonal ponds or any potential breeding ponds on the project site.

Based on DWE field surveys, review of available literature, and desktop evaluation of the potential CTS dispersal to the Richards Ranch project site using the currently accepted best scientifically available CTS data from the USFWS, the proposed Richards Ranch project would not support any CTS breeding or upland refuge habitat and would have no impact on the CTS.

VI. REFERENCES

Searcy, C.A. et. al. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. Biological Conservation 158 (2013) 80-87. 2013.

Sykes, Stephen A. 2006. Results of California Tiger Salamander Research Conducted from 2001-2004 at Two Ponds at the Santa Maria Airport, Santa Maria, California. Prepared for U.S. Fish and Wildlife Service, Ventura, CA. February 27, 2006.

Trenham, P. C., W. D. Koenig, and H. B. Shaffer. 2001. Spatially autocorrelated demography and interpond dispersal in the California tiger salamander, *Ambystoma californiense*. Ecology 82:3519–3530.

Trenham, Peter C. and Shaffer, H. Bradley. 2005. Amphibian Upland Habitat Use and Its Consequences for Population Viability. Ecological Applications, 15(4), 2005 pp. 1158-1168. Ecological Society of America. 2005.

U.S. Fish and Wildlife Service. 2003. Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander. Joint Service and CDFW survey protocol guidance. October 2003.

U.S. Fish and Wildlife Service. 2016. Final Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander Central California (*Ambystoma californiense*). U.S. Fish and Wildlife Service Pacific Southwest Region, Ventura, California.

CTS SITE ASSESSMENT EXHIBITS

Exhibit CTS-1: Santa Barbara County DPS Distribution Map

Exhibit CTS-2: CTS Site Assessment Map

Exhibit CTS-1

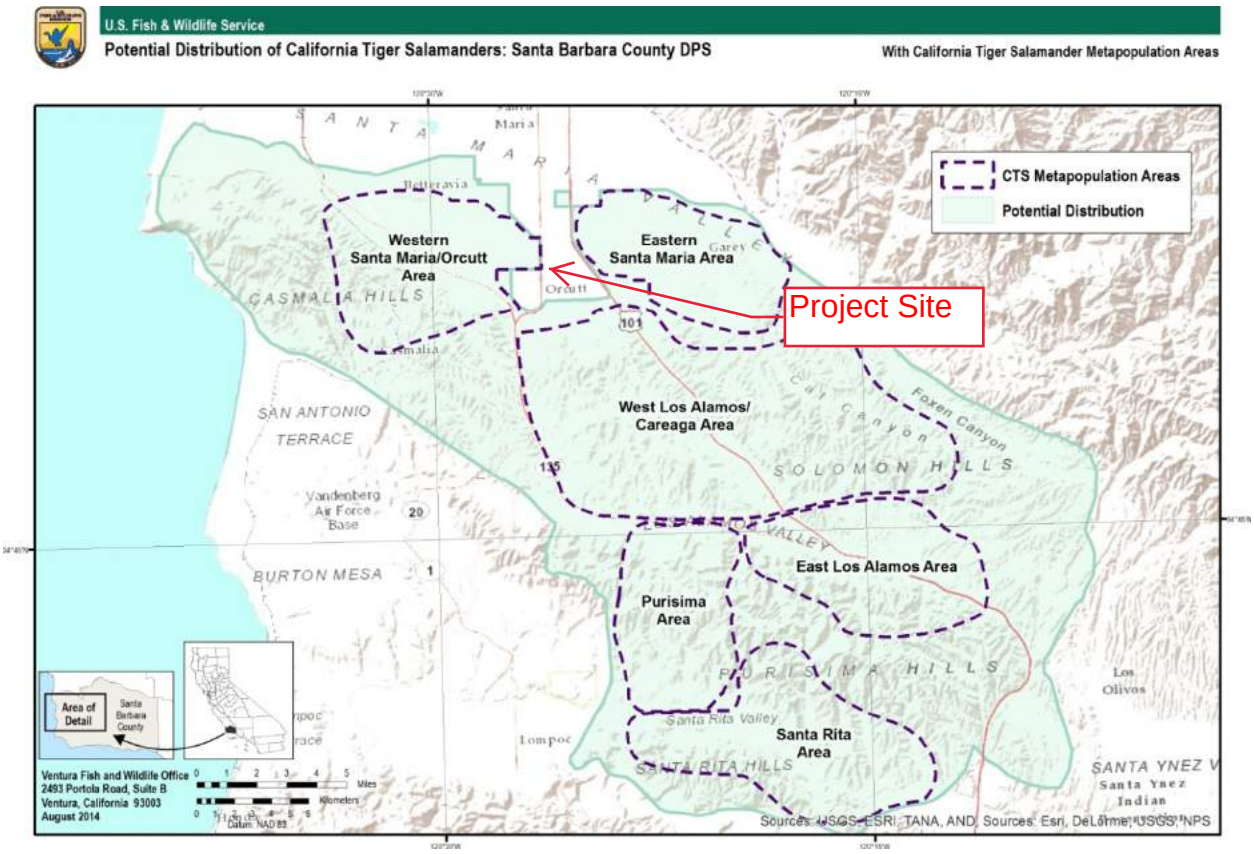
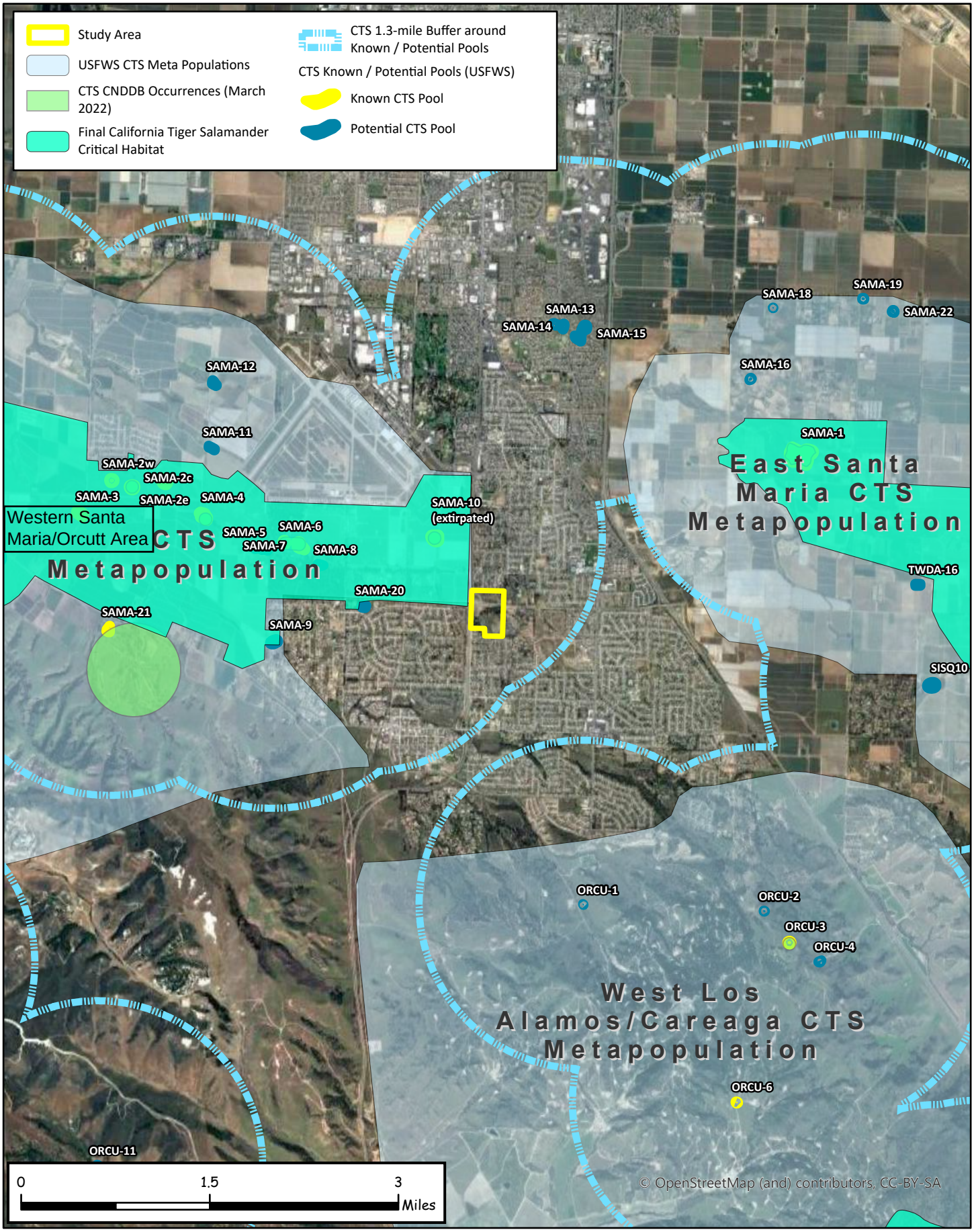


Figure 1. Distribution of Santa Barbara County California Tiger Salamanders. Metapopulation areas encompass the general area of current occurrences and associated habitat and outline the general areas where recovery actions will be focused. Potential Distribution includes the general area of suitable habitat within the range of the species that is currently occupied or has the potential to become occupied.

Source: U.S. Fish and Wildlife Service. 2016. Final Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander Central California (Ambystoma californiense). U.S. Fish and Wildlife Service Pacific Southwest Region, Ventura, California.



sage institute inc David Wolff Environmental, LLC	Richards Ranch Mixed Use Development Project	**Exhibit CTS-2**
	BIOLOGICAL & WETLAND RESOURCES ASSESSMENTS	**CTS Site Assessment Map**

APPENDIX E

BIOLOGICAL RESOURCES ASSESSMENT ADDENDUM

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May 27, 2022

Michael D. Stoltey, MBA
Managing Member
Richards Ranch LLC
Via email

SUBJECT: Biological Resources Assessment Addendum for the Richards Ranch, LLC Mixed use Development Project, Santa Maria, CA

David Wolff Environmental (DWE) is pleased to submit this Biological Resources Assessment Addendum (BRA Addendum) to the April 1, 2022 Biological Resources Assessment (BRA) for the Richards Ranch, LLC, Mixed Use Development Project that is hereby incorporated by reference. This BRA Addendum has been prepared to document the results of completing the 2022 floristic inventory and rare plant survey, and additional surveys for northern legless lizard, coast horned lizard, and American badger. The BRA provided negative findings for rare plants, northern legless lizards, coast horned lizards, and American badger based on surveys conducted by DWE on December 17, 2021, January 5, 2022, and March 7, 2022. DWE Principal Ecologist David Wolff conducted a follow up field reconnaissance on April 27, 2022 to further evaluate project site existing conditions with the specific focus on rare plants, the two species of lizards, and burrow inspection for American badgers. The attached Figure A-1 provides a set of representative photographs from the DWE April 27, 2022 field survey further documenting the existing conditions of the proposed project site. The following provides the results of the April 27, 2022 DWE field survey to complete the biological resources analysis for the proposed project environmental review documentation.

1.0 Floristic Inventory and Rare Plant Survey

DWE conducted the floristic inventory and rare plant survey over four separate surveys on December 17, 2021, January 5, 2022, March 7, 2022, and April 27, 2022. The surveys covered a range of plant expressions on the proposed project site from dormant winter, through completion of the 2022 spring growth period, and to seed set of observable onsite plants. The survey was conducted in accordance with the guidelines recommended by the California Native Plant Society, the California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) that includes:

- Conducting the survey at the proper time of year when rare plants are both evident and identifiable. This is typically during the spring/summer flowering period.
- Surveys that are floristic in nature. That is all plant species noted in the field are identified to the level necessary to determine if it is rare, threatened, or endangered.
- Conducting the survey using systematic field techniques in all habitats of the site to ensure a reasonable and thorough visual coverage.
- Up to three visits to the site may be necessary to ensure that seasonal variations in the flowering period of the target species are adequately covered.

The BRA provided a detailed list and evaluation of the potential special-status plant species that are known from the region with the potential to occur on the proposed project site. The BRA concluded that perennial species, mesic (moist/wetland) species, and coastal dune species were not observed or not expected to occur. The final April 27, 2022 DWE field survey confirmed that they were not observed on the proposed project site.

The BRA suggested sandy soil associated special-status plants with the low potential to occur on the disturbed habitats on the project site include Hoover's bent grass (*Agrostis hooveri*), seasinde bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), Gaviota tarplant (*Deinandra increscens* ssp. *villosa*; out of current known range), paniculate tarplant (*Deinandra paniculata*), (Blochman's leafy daisy (*Erigeron blochmaniae*), three species of monardella (M*onardella sinuata* ssp. *sinuata*, *M. undulata* ssp. *crispa*, *M.u.* ssp. *undulata*), and black flowered figwort (*Scrophularia atrata*). The final April 27, 2022 DWE field survey confirmed that they were not observed on the proposed project site.

In conclusion, no rare, threatened, or endangered plant species were observed on the proposed project site. The expression of plants with a low diversity of native plants is indicative of the regular weed suppression mowing and discing evidenced during the DWE field surveys. Attached Table A-1 provides a list of plant species observed during the 2021 and 2022 DWE field surveys.

2.0 NORTHERN LEGLESS LIZARD AND COAST HORNED LIZARD SURVEY

As stated in the BRA, the northern legless lizard *(Anniela pulchra)* is closely associated with sandy or very friable loamy soils under coastal scrub or woodland vegetation with soil moisture and vegetative cover being essential. The Blainvilles's (coast) horned lizard *(Phrynosoma blainvillii)* occurs in a wide variety of habitats with sandy soils, abundant ant colonies for food, open areas for sunning, and shrubs for cover needed. The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for these two species. However, the regular mowing/discing of the site and periodic removal of shrubs reduces the suitability and value of the onsite habitat to support these species. DWE field surveys on March 7, 2022 and again on April 27, 2022 included raking around the coastal scrub habitat to attempt detection of these two species of lizard.

The coastal scrub habitat is highly disturbed by the discing activities uprooting the shrubs and disturbing the soil surface. There were no observations of either the legless lizard or horned lizard during DWE field surveys. Further, the site disturbance over time and infill nature of the site surrounded by development renders the site as unsuitable for these species.

3.0 AMERICAN BADGER SURVEY

The American badger *(Taxidea taxus)* is a grassland species needing abundant small mammal prey and are easily detected by their distinctive half-moon shaped burrows. There was no evidence of badger use observed on the project site during DWE field surveys in preparation of the BRA. Further close inspection of burrows during the DWE April 27, 2022 field survey did not detect any distinct American badger burrow sign. Only the obvious burrows and tailings (piles of soil) from ground squirrels and gophers.

4.0 CONCLUSION

The results of the DWE field surveys documented in the BRA and this BRA Addendum provide a definitive determination that the site does not support any rare, threatened or endangered plant or wildlife species. Given the potential for nesting birds at the time of project implementation, the BRA recommended mitigation measure MM BIO-1 should stand to avoid impacts on nesting birds. Based on the findings of the BRA and the BRA Addendum, no further mitigation measures are recommended.

Thank you for the opportunity to provide this BRA Addendum to for use in completing the City's environmental review process for the proposed project.

Very truly yours,

David K. Wolff
DWE Principal Ecologist

ATTACHMENT:

TABLE A-1 – PLANT SPECIES OBSERVED
FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS APRIL 27, 2022

TABLE A-1: PLANT SPECIES OBSERVED DWE SURVEYS: DECEMBER 17, 2021, JANUARY 5, 2022, MARCH 7, 2022, APRIL 27, 2022	
SCIENTIFIC NAME	**COMMON NAME**
Acacia baileyana	Bailey acacia
Amsinckia intermedia	Common fiddleneck
Anagallis arvensis	Poor-man's weatherglass
Avena sativa	Oats
Baccharis pilularis	Coyote brush
Brassica rapa	Field mustard
Bromus diandrus	Rip gut brome
Bromus hordeaceus	Soft chess
Camissonia sp.	Sun cup
Carpobrotus edulis	Sea fig
Chorizanthe angustifolia	Spineflower
Claytonia perfoliata	Miner's lettuce
Conium maculatum	Poison hemlock
Croton californicus	Croton
Ehrharta calycina	Veldt grass
Erodium botrys	Filaree
Erodium cicutarium	Redstem filaree
Eschscholzia californica	California poppy
Eucalyptus sp.	Eucalyptus
Heterotheca grandiflora	Telegraph weed
Hirschfeldia incana	Shortpod mustard
Lamarckia aurea	Goldentop grass
Liquidambar styraciflua	American sweetgum
Lupinus bicolor	Miniature lupine
Malva parviflora	Cheese weed
Olea europaea	Olive
Oxalis pes-caprae	Bermuda buttercup
Plagiobothrys nothofulvis	Popcorn flower
Quercus agrifolia	Coast live oak
Raphanus sativus	Wild radish
Rubus ursinus	California blackberry
Rumex acetosella	Sheep sorrel
Rumex crispus	Curly dock
Salix lasiolepis	Arroyo willow
Salsola iberica	Russian thistle
Searsia lancea	African sumac
Trifolium hirtum	Rose clover
Ulmus parvifolia	Chinese elm
Vulpia myuros	Six weeks grass

Photo A-1: View at southeast corner of project site north of UVP at non-native annual grassland; discing furrows evident. **4/27/2022**

Photo A-2: View west of project site north of UVP at non-native annual grassland, non-native wood; discing furrows evident. **4/27/2022**

Photo A-3: View north at non-native grassland and eucalyptus stand on south side of UVP. **4/27/2022**

Photo A-4: View east from at project site north of UVP showing non-native grassland, euclyptus stand, and non-native wood. **4/27/2022**

FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS

Photo A-5: View northwest of non-native grassland on south side of UVP. Stormwater outfall from offsite detention basin. **4/27/2022**

Photo A-6: View east on south side of UVP at eastern project boundary with stands of eucalyptus and oaks. **4/27/2022**

Photo A-7: View west at disturbed coastal scrub and non-native grassland on project site north of UVP. **4/27/2022**

Photo A-8: View northwest at non-native grassland between Orcutt Road and Orcutt Expressway on south side of UVP. **4/27/2022**

FIGURE A-1 – REPRESENTATIVE PHOTOGRAPHS

4.3 BIOLOGICAL RESOURCES

This section presents an analysis of potential impacts to biological resources resulting from implementation of the project. The technical information in this section, including biological survey results and habitat mapping, relies on a Biological Resources Assessment (BRA) prepared for the project by David Wolff Environmental, LLC (DWE 2022), including a waters of the U.S./State jurisdictional determination and wetland delineation and California tiger salamander site assessment report. These technical analyses are provided in Appendix F. The information in the BRA and BRA Addendum were peer-reviewed by SWCA Environmental Consultants and existing conditions were verified during a site visit on February 9, 2022.

4.3.1 Existing Conditions

Union Valley Parkway (UVP) and Orcutt Road intersect the project site, forming a four-way signalized intersection in the northwestern portion of the project site approximately 400 feet east of the UVP/State Route (SR) 135 intersection. The project site is bordered on the west by SR 135 with residential development, the recently approved Santa Maria Airport Business Park project, the Santa Maria Airport, and active agricultural lands generally located farther west of SR 135.

Surrounding land uses to the north generally include residential uses with limited commercial uses along Orcutt Road. Airport facilities and runways for the Santa Maria Airport are located to the northwest along with active agriculture lands, some of which have been recently approved for commercial development as part of the Santa Maria Airport Business Park project. Residential uses, commercial services, offices, and school uses within the community of Orcutt are located to the south of the project site. A church property is adjacent to the southwest corner of the site. A mix of undeveloped lands are located to the east and residential uses border the southeastern portion of the project site.

The site is mostly flat, gently sloping downward from east to west, along with manufactured embankments and fill slopes from adjacent residential development and UVP construction. Roadside drainage from UVP construction and Orcutt Road realignment is managed through several constructed rocked ditches leading to culverts under Orcutt Road. No natural drainage features are present on the project site and there is no riparian context or natural drainages associated with the onsite roadside drainage ditches. The site is mostly non-native annual grassland, disturbed coastal scrub, and stands of non-native eucalyptus and landscape trees. There are several coast live oaks around the site, but they do not constitute oak woodland habitat. The site appears to have been substantially and regularly disturbed over time from UVP construction, and vegetation management (mowing/discing).

The existing conditions section, along with the analysis of the presence/absence of special-status plant and wildlife species, is based on data collected by DWE Principal Ecologist David Wolff from background data searches and during biological field surveys of the project site conducted on December 17, 2021, January 5, 2022, and March 7, 2022. Surveys were conducted by walking the entirety of the proposed project site recording plant and wildlife species observed and general site characteristics. Conditions for the site survey were conducive to the purpose of documenting plant and wildlife habitat to establish existing conditions. The March 7, 2022, field survey included a wetland delineation and jurisdictional determination of potential wetlands or other waters. The overall purpose of the field surveys was to document existing conditions in terms of habitat for plant and wildlife species, suitability for presence/absence of special-status plant or wildlife species, and the potential to support wetland and/or riparian habitats and/or other jurisdictional waters.

4.3.1.1 Soils

The Natural Resources Conservation Service (NRCS) generally characterizes soil types within the project site as follows (NRCS 2022; U.S. Department of Agriculture Soil Conservation Service 1972; see Figure 4.6-1 in Section 4.6, Geology and Soils):

- Betteravia loamy sand 0 to 2 percent slopes (BmA), is a moderately well drained soil on terraces formed from eolian (windblown) sands parent material. It is not a hydric (wetland) soil.
- Marina sand 0 to 2 percent slopes (MaA), is a somewhat excessively drained soil on terraces formed from eolian deposits (windblown) parent material. It is not a hydric (wetland) soil.
- Oceano sand 2 to 15 percent slopes severely eroded (OcD3), is an excessively drained soil on dunes formed from eolian (windblown) sands parent material. It is not a hydric (wetland) soil.

Observations of surface soils, gopher mounds, ground squirrel burrows, and 24-inch-deep wetland delineation soil test pits corroborate the very sandy characteristics of these mapping units on the project site (DWE 2022).

4.3.1.2 Habitat Types

Plant communities are generally described by the assemblages of plant species that occur together in the same area forming habitat types. Community alliance and alliance codes used in this environmental impact report section and the BRA follow *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) and California Department of Fish and Wildlife (CDFW) *California Natural Communities List* (CDFW 2021a), where possible. Landscaped vegetation communities or plant communities dominated by non-native species do not always fall into a *Manual of California Vegetation* or CDFW category. Plant names used in this section follow *The Jepson Manual, Vascular Plants of California, Second Edition* (Baldwin et al. 2012). The project site habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted and a review of multiple years of aerial photography.

The project site supports four main plant communities: wild oats non-native grassland, eucalyptus tree stands, disturbed coastal scrub, and what is being called an ornamental "wood" (a stand of non-native trees). There are 15 coast live oak trees at various locations on the site. Figure 4.3-1 provides a habitat map showing the locations and extent of the habitat types (DWE 2022). The BRA prepared for the project includes a set of onsite representative photographs from field surveys and a series of aerial photographs over time demonstrating periodic site disturbances, mostly from what appears to be construction of UVP and the realignment of Orcutt Road (DWE 2022; see Appendix F).

Table 4.3-1. Habitat Types

Habitat Type	Area (acres)
Wild oats non-native grassland	32.5
Eucalyptus tree stands	7.6
Disturbed coastal scrub – coyote brush scrub / silver bush lupine scrub	4.2
Ornamental tree stands	2.4
Developed	4.5
Total	**51.2**

Source: DWE (2022).

Note: Discrepancy in acreage between Chapter 2 and Table 4.3-1 is from the inclusion of the developed areas of UVP and Orcutt Road.

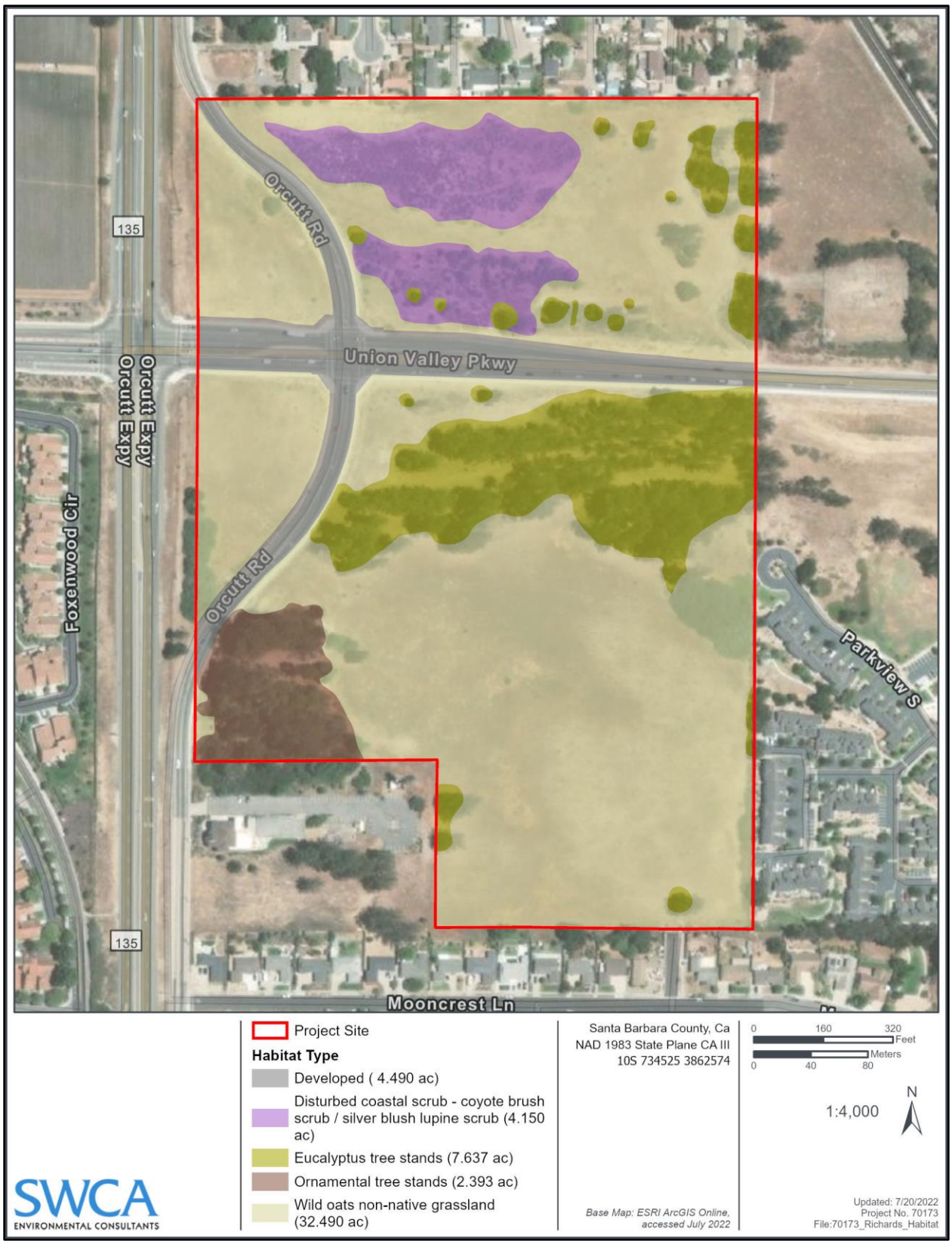

Figure 4.3-1. Habitat map.

WILD OATS NON-NATIVE GRASSLAND

The wild oats non-native grassland or *Avena (barbata, fatua) Semi-Natural Herbaceous Stands Avena spp. – Bromus spp. Herbaceous Semi-Natural Alliance* (CDFW 2021a), is best described as disturbed non-native annual grassland habitat from the past disturbance and regular weed suppression discing over time. The disturbed non-native annual grassland habitat covers most of the project site. Dominant plant species in the disturbed annual grassland habitat include oats (*Avena* spp.), ripgut brome (*Bromus diandrus*), and veldtgrass (*Ehrharta calycina*). Other associated grasses and herbaceous broadleaf species include soft chess (*Bromus hordeaceus*), filaree (*Erodium* spp.), wild radish (*Raphanus sativus*), croton (*Croton californicus*), telegraph weed (*Heterotheca grandiflora*), thistles, and mustards. The few wildflowers observed included fiddleneck (*Amsinckia intermedia*), California poppy (*Eschscholzia californica*), miniature lupine (*Lupinus nanus*), and popcornflower (*Plagiobothrys nothofulvus*).
The entirety of the annual grassland habitat had been recently disced, as evidenced by discing furrows throughout. Approximately 32.5 acres of disturbed non-native annual grassland habitat occurs on the project site. On the north side of UVP within the disturbed non-native annual grassland habitat there are 10 oak trees and along Orcutt Road. In total, approximately 0.33 acre of coast live oak canopy is included within the mapped annual grassland habitat (DWE 2022).

DISTURBED COASTAL SCRUB – COYOTE BRUSH SCRUB / SILVER BUSH LUPINE SCRUB

The coastal scrub or coyote brush scrub / *Baccharis pilularis – Artemisia californica* Shrubland Alliance (CDFW 2021a), is considered a subtype of central Lucian coastal scrub. It differs primarily by the dominance of coyote brush. This scrub type habitat classification consists of coyote brush and California sagebrush shrubs with non-native grassland understory herbaceous species. However, on the project site, silver bush lupine (*Lupinus albifrons*) comprises a large component of the coastal scrub habitat.
The disturbed coastal scrub occurs on the north side of UVP with what appears to be disturbance and removal between 2012 and 2015, possibly associated with UVP construction, with regrowth over time. More recently in 2021, a patch of dense disturbed coastal scrub was removed to discourage homeless encampments. The BRA prepared for the project provides a series of aerial photographs showing the removal and regrowth of the coastal scrub habitat areas over an approximately 27-year period (DWE 2022; see Appendix F). Approximately 4.2 acres of disturbed coastal scrub habitat was mapped on the project site based on aerial photographs from January 2021 and verified during the January 2022 site visit (DWE 2022).

NON-NATIVE EUCALYPTUS TREE STANDS

The project site has several stands (wind rows) and individual blue gum or eucalyptus trees (*Eucalyptus globulus*), mostly along the south side and north side of UVP frontage, and along the eastern border of the site north of UVP. The *Manual of California Vegetation* (Sawyer et al. 2009) vegetation alliance is a much broader habitat alliance referred to as *Eucalyptus* spp. *– Ailanthus altissima – Robinia pseudoacacia* Woodland Semi-Natural Alliance, however, no tree of heaven (*Ailanthus altissima*) or black locust (*Robinia pseudoacacia*) trees are present onsite. For this reason, the *Manual of California Vegetation* is not used to describe this habitat class at the project site. In total, there are around 100 individual eucalyptus trees in this area. There is an understory of non-native grassland amongst the typical accumulated eucalyptus leaf litter and bark debris. The non-native eucalyptus tree stand encompasses approximately 7.6 acres of the project site.

ORNAMENTAL TREE STANDS

The southwest corner of the project site supports an approximately 2.4-acre stand of ornamental trees composed of a variety of mostly non-native trees and shrubs. Non-native tree species include Chinese elm

(*Ulmus parvifolia*), liquid amber (*Liquidambar* sp.), Bailey's acacia (*Acacia baileyana*), African sumac (*Searsia lancea*), eucalyptus, olive (*Olea* sp.), and lemon (*Citrus limon*). There are a few native plant species present and these include three coast live oak trees, coyote brush, and California blackberry (*Rubus ursinus*). While most of the trees are generally considered ornamental species, this stand appears as an unmaintained mix of trees and shrubs, therefore, it was not classified as landscaped vegetation.

DEVELOPED

Developed areas include the paved roads of UVP and Orcutt Road and their sidewalks.

4.3.1.3 Habitat Suitability for Wildlife

The vegetation at the project site includes oats, ripgut brome, and veldtgrass-dominated non-native grassland and coastal scrub habitats mowed and disced annually for fire/weed suppression. The site is generally surrounded by urban residences and the SR 135 corridor. Thus, the project site provides minimal quality habitat for locally common wildlife species that have become adapted to the human residential environment. Common wildlife expected to use the site include raccoons (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), and Old World rats and mice. Bird species observed (mostly around the stands of eucalyptus) included acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), Audubon's warbler (*Setophaga auduboni*), Anna's hummingbird (*Calypte anna*), red-tailed hawk (*Buteo jamaicensis*), and turkey vultures (*Cathartes aura*) (DWE 2022). The site could potentially provide suitable habitat for ground/grassland/shrub-nesting songbird species such as sparrows and finches, however, regular discing for fire and weed suppression has diminished the suitability of the habitat for these species.

4.3.1.4 Waters of the U.S., Wetlands, and Waters of the State

No jurisdictional wetlands or other waters of the U.S./State or riparian habitat under any regulatory authority or definition occur on the project site.

There is a series of constructed rock-lined stormwater ditches and culverts receiving upland and roadside runoff from storm drain inlets on UVP and Orcutt Road. The varied network of rock-lined roadside drainage ditches did not support any wetland vegetation, only sporadic non-wetland non-native grasses. These ditches likely only flow in immediate response to impervious road-surface runoff during rainfall. The current Rapanos guidance for definition of waters of the U.S. directs the U.S. Army Corps of Engineers to not take jurisdiction over ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. The review of aerial photography over time demonstrates that the onsite drainage ditches are excavated in uplands and are only draining uplands mostly as a result of UVP and Orcutt Road realignment construction.

Two patches of arroyo willow (*Salix lasiolepis*) associated with mesic (moist) areas from upland and roadway runoff were once present at the project site but were removed in 2021 to discourage homeless encampments (Figure 4.3-2). Therefore, they are not considered part of the existing conditions that were present at the site in February 2022. Based on analysis of 2021 aerial photography, these two willow patches totaled approximately 0.96 acre. One patch (0.55 acre) was located along the eastern property border south of UVP and the second (0.41 acre) was located along SR 135 south of UVP. Neither willow patch was associated with any recent or historic natural drainageway and neither has any riparian context as a classified plant community or habitat type. A wetland delineation and jurisdictional determination report detailing these findings is included in the BRA (DWE 2022; see Appendix F). Figure 4.3-2 provides the jurisdictional determination map.

Based on review of aerial photographs, the larger patch located along the eastern property border appears to have formed after the construction of the adjacent residential development. The National Wetlands Inventory (NWI; U.S. Fish and Wildlife Service [USFWS] 2022) has a Freshwater Emergent Wetland polygon mapped within this patch of willows (Figure 4.3-2). The NWI is a broad view aerial photograph mapping of potential wetlands that requires field verification. Collection of data at two data observation points in this willow removal area found that while the presumed 100% cover of arroyo willow (Facultative Wetland [FACW]) meets the hydrophytic (wetland) vegetation criteria, the site lacks hydric soils and lacks any primary or secondary indicators of wetland hydrology. Furthermore, there was no evidence of a drainage feature, culvert outfall, or other evidence of a drainageway or basin topography through the area. The mesic (moist) conditions that supported the establishment of willows was likely due to stormwater runoff from the adjacent residential development.

The second patch of willows, along SR 135, appears to have been supported by road runoff from ditches, storm drain inlets, and culverts under the roadways. One small oak tree of unknown size occurred with these willows. Based on review of aerial photographs, this patch appears to be persistent in location and extent from upland and roadside runoff from 1994 to 2021. Collection of data at this location found no hydric soil indicators or indicators of wetland hydrology (DWE 2022).

The State Water Resources Control Board (SWRCB) recently issued policies and procedures, including a State definition of wetlands, to regulate discharge of dredged or fill material into waters of the State (SWRCB Procedures). In brief, the SWRCB Procedures define wetlands as waters of the State consistent with the federal three-parameter definition requiring the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As described above, the project site does not support any three-parameter wetlands, and there are no State wetlands present on the project site. The SWRCB Procedures are silent on artificial ditches constructed wholly in and draining only uplands, which is the case for the network of roadside ditches constructed mostly for the recent UVP extension and Orcutt Road realignment. There is no evidence of any historical natural drainage through the project site, so the ditches do not represent realigned natural drainages, and do not represent a bed, bank, or channel of a river or stream. As such, the network of roadside drainage ditches does not represent waters of the State.

4.3.1.5 Sensitive Natural Communities

"Sensitive Natural Community" is a state-wide designation given by the CDFW to specific vegetation associations of ecological importance. Rarity and ranking of Sensitive Natural Communities involves the knowledge of range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity (CDFW 2021b). Evaluation is conducted at both the Global (G) and State (S) levels, resulting in a rank ranging from 1 for very rare and threatened to 5 for demonstrably secure. Natural Communities with ranks of S1–S3 are considered Sensitive Natural Communities in California need to be addressed in the environmental review processes of California Environmental Quality Act (CEQA).

The California Natural Diversity Database (CNDDB) identifies the recorded occurrences of five Sensitive Natural Communities within a 10-mile radius of the project site. These Sensitive Natural Communities are: Central Dune Scrub, Central Foredunes, Coastal and Valley Freshwater Marsh, Southern Vernal Pool, and Southern California Three-spine Stickleback Stream. There are no aquatic natural communities onsite, as it is an entirely upland project site dominated by non-native annual grassland, disturbed coastal scrub, and stands of non-native trees. While the site contains predominantly eolian (windblown) sands in origin, the patches of disturbed coastal scrub habitat do not represent a sensitive dune community (DWE 2022). No Sensitive Natural Communities were identified at the project site.

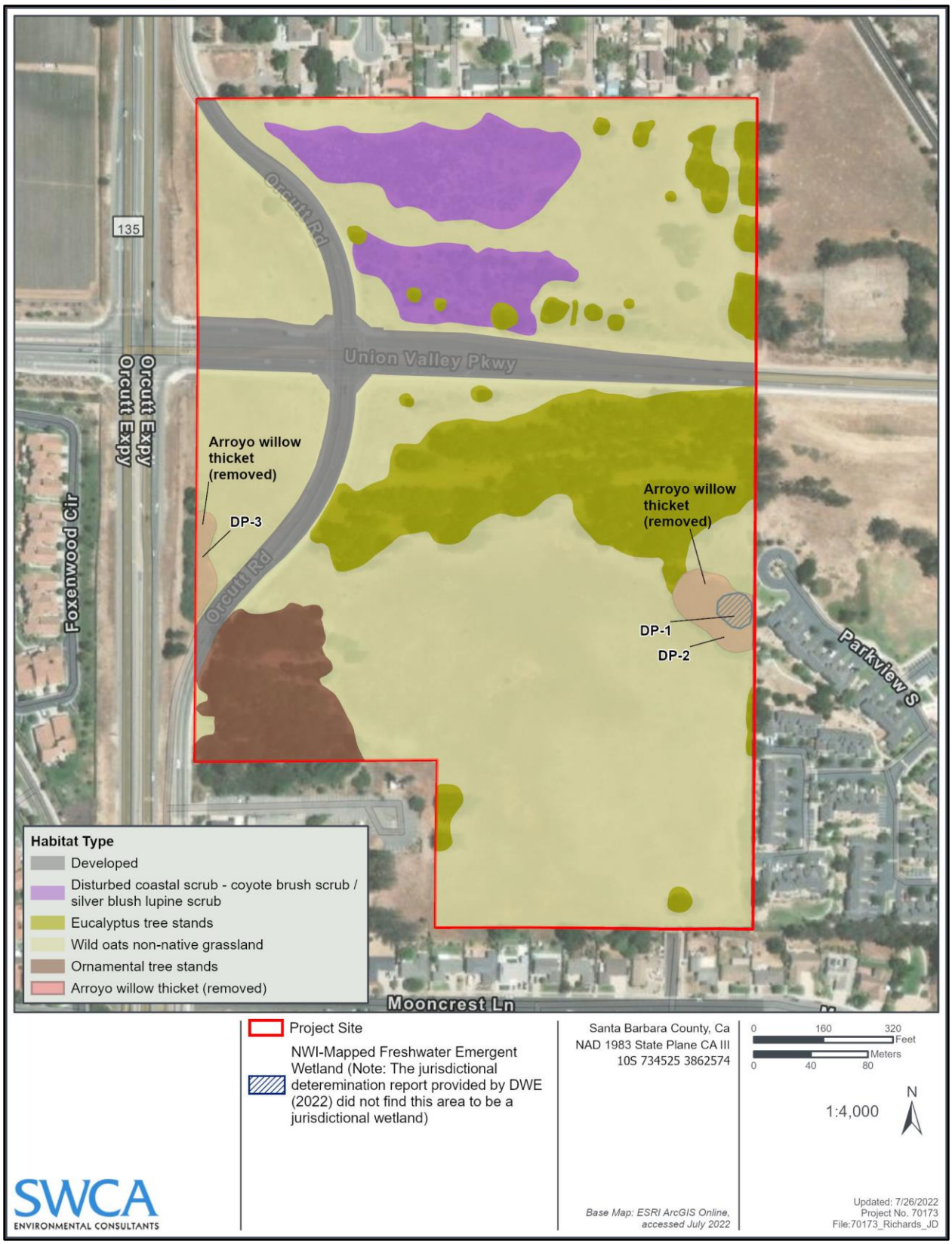

Figure 4.3-2. Jurisdictional determination map.

4.3.1.6 Special-Status Plant Species

For the purposes of this section, special-status plant species are defined as the following:

- Plants listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (50 Code of Federal Regulations [CFR] Section 17.12 for listed plants and various notices in the *Federal Register* for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the FESA.
- Plants that meet the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Plants considered by California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (CNPS California Rare Plant Rank [CRPR] 1, 2, and 3).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (CNPS CRPR 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] Section 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code [CFGC] Section 1900 et seq.).
- Plants considered sensitive by other federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies, or jurisdictions.

A search of the CNDDB revealed the recorded occurrences of 33 special-status plant species within a 10-mile radius of the project site, eight of which are formally listed under the FESA or CESA with the remainder being noted with a CNPS rank suggesting rarity. Table 4.3-2 provides a list of species known to occur in the vicinity of the project and their potential to occur on the project site.

Table 4.3-2. Special-Status Plant Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Hoover's bent grass *Agrostis hooveri*	Sandy sites in chaparral, cismontane woodland, and valley and foothill grassland. Elevation: 197–1,969 feet (60–600 meters [m]).	April–July	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the active disking and disturbance on the project site may preclude the presence of this species. Surveys conducted in 2022 did not identify this species on the site.
Aphanisma *Aphanisma blitoides*	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. Elevation: 10–1,000 feet (3–305 m). Channel Islands and immediate coast.	Feb–Jun	--/--/1B.2	**Suitable Conditions Absent, Species Absent:** Although sandy soils are present, periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the inland site and not observed during 2022 floristic inventory and rare plant survey.
La Purisima manzanita *Arctostaphylos purissima*	Perennial evergreen shrub; sandy soil among chaparral and coastal scrub. Elevation: 197–1,280 feet (60–390 m).	November–May	--/--/1B.1	**Suitable Conditions Present, Species Absent:** No *Arctostaphylos* species were observed in the project area during surveys. Periodic site disturbance and yearly discing for weed suppression renders the site unsuitable.
Refugio manzanita *Arctostaphylos refugioensis*	Perennial evergreen shrub; occurs on sandstone among chaparral. Elevation: 197–2,510 feet (60–765 m).	December–March (May)	--/--/1B.2	**Suitable Conditions Absent, Species Absent:** Site does not contain sandstone. No *Arctostaphylos* species were observed in the project area during surveys.
sand mesa manzanita *Arctostaphylos rudis*	Evergreen shrub; maritime chaparral and coastal scrub with sandy soils. Elevation: 82–1,056 feet (25–322 m).	November–February	--/--/1B.2	**Suitable Conditions Present, Species Absent:** No *Arctostaphylos* species were observed in the project area during surveys. Periodic site disturbance and yearly discing for weed suppression renders the site unsuitable.
marsh sandwort *Arenaria paludicola*	Marshes and swamps, grows through dense mats of *Typha*, *Juncus*, *Scirpus*, etc. in freshwater marsh. Elevation: 33–558 feet (10–170 m).	May–August	FE/SE/1B.1	**Suitable Conditions Absent, Species Absent:** The project site does not support the appropriate mesic conditions for this species. Not observed during 2022 surveys.
Mile's milk-vetch *Astragalus didymocarpus* var. *milesianus*	Annual herb; coastal scrub on clay soils. Elevation: 66–295 feet (20–90 m).	March–June	--/--/1B.2	**Suitable Conditions Absent, Species Absent:** The project site does not support clay soils or the appropriate community. The disking and disturbance of the project site may also preclude the presence of this species. Surveys conducted in 2022 did not identify this species on the site.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Santa Barbara ceanothus *Ceanothus impressus* var. *impressus*	Perennial shrub; chaparral on sandy soils. Elevation: 131–1,542 feet (40–470 m).	February–April	--/--/1B.2	**Suitable Conditions Present, Species Absent:** This perennial species would have been noticeable and identifiable throughout the year and was not observed during 2022 field surveys. Periodic site disturbance and yearly discing for weed suppression renders the site unsuitable.
coastal goosefoot *Chenopodium littoreum*	Annual herb; coastal dunes. Elevation: 33–98 feet (10–30 m).	April–August	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Periodic site disturbance and yearly discing for weed suppression renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
straight-awned spineflower *Chorizanthe rectispina*	Chaparral, cismontane woodland, and coastal scrub, often on granite in chaparral. Elevation: 1,165–3,396 feet (355–1,035 m).	April–July	--/--/1B.3	**Suitable Conditions Absent, Species Absent:** The project site is at a lower elevation than the documented range of this species. Soils onsite are not conducive to this species. Not observed during 2022 floristic inventory and rare plant survey.
Bolander's water-hemlock *Cicuta maculata* var. *bolanderi*	Perennial herb that occurs in marshes and swamps and coastal, fresh or brackish water. Elevation: 0–656 feet (0-200 m).	July–September	--/--/2.1	**Suitable Conditions Absent, Species Absent:** The project site does not contain any coastal marshes or swamps.
surf thistle *Cirsium rhothophilum*	Coastal dunes, coastal bluff scrub, and open areas in central dune scrub; usually in coastal dunes. Elevation: 10–197 feet (3–60 m).	April–June	--/ST/1B.2	**Suitable Conditions Present, Species Absent:** Periodic site disturbance and yearly discing for weed suppression renders the site unsuitable. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
La Graciosa thistle *Cirsium scariosum* var. *loncholepis*	Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps (brackish), and valley and foothill grassland; usually in mesic, sandy soils. Elevation: 13–722 feet (4–220 m).	May–August	FE/ST/1B.1	**Suitable Conditions Absent, Species Absent:** The project site does not support mesic conditions necessary for this species. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
California sawgrass *Cladium californicum*	Rhizomatous herb; meadows and seeps, and marshes and swamps (alkaline or freshwater). Elevation: 197–1,969 feet (60–600 m).	June–September	--/--/2B.2	**Suitable Conditions Absent, Species Absent:** The project site does not support mesic conditions necessary for this species.
seaside bird's-beak *Cordylanthus rigidus* ssp. *littoralis*	Annual herb; closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, and coastal scrub with sandy soils; often found in disturbed sites. Elevation: 0–1,394 feet (0–425 m).	April–October	--/SE/1B.1	**Marginally Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Gaviota tarplant *Deinandra increscens* ssp. *villosa*	Annual herb in the Asteraceae family; coastal bluff scrub, coastal scrub, and valley and foothill grassland, typically associated with sandy soils. Elevation: 115–1,411 feet (35–430 m).	May–October	FE/SE/1B.1	**Marginally Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, it is outside of its known range. The regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
paniculate tarplant *Deinandra increscens* ssp. *villosa*	Coastal scrub, valley and foothill grassland, coastal bluff scrub. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. Elevation: 33–1,411 feet (10-430 m).	May–Oct	--/--/4.2	**Marginally Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
dune larkspur *Delphinium parryi* ssp. *blochmaniae*	Perennial herb; maritime chaparral and coastal dunes with sandy or rocky soils. Elevation: 0–656 feet (0–200 m).	April–May	--/--/1B.2	**Marginally Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
beach spectaclepod *Dithyrea maritima*	Coastal dunes, coastal scrub, seashores, sand dunes, and sandy places near the shore. Elevation: 10–164 feet (3–50 m).	March–May	--/ST/1B.1	**Marginally Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	Coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. Elevation: 16–1,476 feet (5–450 m).	April–June	--/--/1B.1	**Suitable Conditions Absent, Species Absent:** The project site does not contain rocky outcrops, clay soil, or serpentine soil.
Blochman's leafy daisy *Erigeron blochmaniae*	Perennial rhizomatous herb; coastal dunes and coastal scrub on sandy soils. Elevation: 10–148 feet (3–45 m).	July–August	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Lompoc yerba santa *Eriodictyon capitatum*	Ever green shrub; closed-cone coniferous forest and maritime chaparral with sandy soil. Elevation: 131–2,953 feet (40–900 m).	May–August	FE/SR/1B.1	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
mesa horkelia *Horkelia cuneata* ssp. *puberula*	Perennial herb; chaparral, cismontane woodlands, and coastal scrub in sandy or gravelly sites. Elevation: 230–2,658 feet (70–810 m).	February–September	--/--/1B.1	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Kellogg's horkelia *Horkelia cuneata* ssp. *sericea*	Perennial herb; closed-cone coniferous forest, maritime chaparral, and coastal scrub with sandy or gravelly openings. Elevation: 33–656 feet (10–200 m).	April–September	--/--/1B.1	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Beach layia *Layia carnosa*	Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. Elevation: 10–98 feet (3–30 m).	(Mar)May–Jun	--/--/1B.1	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
Pale-yellow layia *Layia heterotricha*	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. Elevation: 295–5,906 feet (90–1,800 m).	Mar–Jul	--/--/1B.1	**Suitable Conditions Absent, Species Absent:** The project site does not contain clay or alkaline soils. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
southern curly-leaved monardella *Monardella sinuata* ssp. *sinuata*	Annual herb; sandy soil among chaparral, cismontane woodland, coastal dunes, and coastal scrub with openings. Elevation: 0–984 feet (0–300 m).	April–September	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
crisp monardella *Monardella undulata* ssp. *crispa*	Perennial and rhizomatous herb; coastal dunes among coastal scrub and maritime chaparral. Elevation: 33–394 feet (10–120 m).	April–August	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
San Luis Obispo monardella *Monardella undulata* ssp. *undulata*	Perennial and rhizomatous herb; coastal dunes among coastal scrub and maritime chaparral on sandy substrates. Elevation: 33–656 feet (10–200 m).	May–September	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Species Name	Habitat and Distribution	Flower Season	Legal Status Federal/ State/CNPS	Rationale for Expecting Presence or Absence
Gambel's water cress *Nasturtium gambelii*	Rhizomatous herb; marshes and swamps (freshwater or brackish). Elevation: 16–1,083 feet (5–330 m).	April–October	FE/ST/1B.1	**Suitable Conditions Absent, Species Absent:** The project site does not support mesic conditions necessary for this species.
Sand almond *Prunus fasciculata* var. *punctata*	Perennial shrub that occurs in chaparral and coastal scrub on coastal dunes. Elevation: 49–656 feet (15–200 m).	March–April	--/--/4.3	**Suitable Conditions Present, Species Absent:** This perennial species would have been noticeable and identifiable throughout the year and was not observed during the 2021 and 2022 surveys.
black-flowered figwort *Scrophularia atrata*	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub; around swales and in sand dunes; and sand, diatomaceous shale, and soils derived from other parent material. Elevation: 33–820 feet (10–250 m).	March–April	--/--/1B.2	**Suitable Conditions Present, Species Absent:** Although soils are appropriate for this species, the regular disking of the project site likely precludes the presence of this species on the site. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.
San Bernardino aster *Symphyotrichum defoliatum*	Rhizomatous herb; meadows and seeps, cismontane woodland, coastal scrub, and foothill grassland. Vernally mesic grassland or near ditches and springs. Elevation: 7–6,693 feet (2–2,040 m).	July–November	--/--/1B.2	**Suitable Conditions Absent, Species Absent:** No suitable wetland habitat occurs onsite. Not recorded on the site and not observed during 2022 floristic inventory and rare plant survey.

Sources: Baldwin et al. (2012). All plant descriptions paraphrased from CNPS (2022).

Status Codes:

-- = No status

Federal: FE = Federal Endangered; FT = Federal Threatened

State: SE = State Endangered; ST= State Threatened; SR = State Rare

CNPS CRPR: ***1B*** **=** rare, threatened, or endangered in California and elsewhere; ***2*** **=** rare, threatened, or endangered in California, but more common elsewhere; ***3*** **=** plants that about which more information is needed; ***4*** **=** a watch list plants of limited distribution

Threat Code: ***0.1*** **=** Seriously endangered I California (over 80% of occurrences threatened / high degree and immediacy of threat); ***0.2*** **=** Fairly endangered in California (20%–80% occurrences threatened); ***0.3*** **=** Not very endangered in California (<20% of occurrences threatened or no current threats known)

Rationale Terms: ***Species Present:*** Species was or has been observed in the survey area. ***Species Absent:*** Based on appropriate survey efforts, absence of the species was confirmed. ***Suitable Conditions Present:*** The appropriate habitat, soils, and elevation are present in the survey area. ***Marginal Conditions Present:*** The appropriate habitat and/or soils are present but other factors (past disturbances, elevation range) may preclude species occurrence. ***Suitable Conditions Absent:*** The survey area did not support the appropriate habitat, soils, and/or elevation for the species.

Of the 33 special-status plant species, it was determined that the site contains potentially suitable habitat for 16 species. Of these 16, eight were perennial species that were not observed onsite during field surveys. The project site was determined to be outside of the range of one of the plant species: Gaviota tarplant (*Deinandra increscens* ssp. *villosa*). Seven sandy soil-associated annual species were determined to have a low potential to occur in the disturbed coastal scrub habitat on the project site. These species include Hoover's bent grass (CNPS CRPR 1B.2), seaside bird's beak (State Endangered and CNPS CRPR 1B.1), paniculate tarplant (CNPS CRPR 4.2), Blochman's leafy daisy, three species of monardella that are CNPS CRPR 1.B2 species, and black-flowered figwort (CNPS CRPR 1B.2). None of these species were observed during 2022 botanical surveys. Therefore, there would be no impact to special-status plant species.

4.3.1.7 Special-Status Wildlife Species

For the purposes of this section, special-status wildlife species are defined as the following:

- Wildlife listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.11 for listed animals and various *Federal Register* notices for proposed species).
- Wildlife that are candidates for possible future listing as threatened or endangered under the FESA.
- Wildlife that meets the definitions of rare or endangered species under CEQA (State CEQA Guidelines Section 15380).
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under CESA (14 CCR 670.5).
- Wildlife listed as Species of Special Concern (SSC) by the CDFW.
- Wildlife species that are fully protected in California (CFGC Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

The CNDDB database query conducted for a 10-mile radius of the project site revealed the recorded occurrences of 24 special-status wildlife species. Eight species are formally listed under the FESA and one (monarch butterfly) is a candidate for listing (DWE 2022). Four species are formally listed under CESA (three of which are also federally listed). The remainder are CDFW SSC. Special-status wildlife species known to occur within the project vicinity were evaluated for their potential to occur within the project site. Table 4.3-3 provides the listing status, habitat details, and potential to occur on the project site for ~~each of these~~ species included in the CNDDB and other species of note. The project site supports at least marginal habitat for eight special-status wildlife species:

- monarch butterfly (*Danaus plexippus*)
- California tiger salamander (*Ambystoma californiense*)
- California red-legged frog (*Rana draytonii*)
- western spadefoot (*Spea hammondii*)
- Northern California legless lizard (*Anniella pulchra*)
- Blainville's horned lizard (*Phrynosoma coronatum*)
- western red bat (*Lasiurus blossevillii*)
- American badger (*Taxidea taxus*)
- Nesting migratory birds and raptors

The potential for each of these species to occur on the project site is discussed in more detail below.

Table 4.3-3. Special-Status Animal Species Investigated for Potential Occurrence

Species Name	Habitat and Distribution	Legal Status Federal/ State/CDFW	Rationale for Expecting Presence or Absence
Insects			
monarch butterfly *Danaus plexippus*	Occur along coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind-protected tree groves (eucalyptus, Monterey pine [*Pinus radiata*], and cypress [*Cupressus* spp.]), with nectar and water sources nearby.	FC/--/SA	**Conditions Present, Species Present:** The eucalyptus trees on the project site historically supported winter roosting monarchs.~~, but recent~~ Recent counts dropped abruptly in 1999~~, and now the project site supports only a small number of individuals~~ (see Table 4.3-4). However, the eucalyptus grove located on the site to the south of UVP continues to be considered important overwintering habitat.
vernal pool fairy shrimp *Branchinecta lynchi*	Occur in vernal pool habitats, including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland.	FT/-- /--	**Suitable Conditions Absent**: The project site does not support vernal pools.
Crotch's bumble bee *Bombus crotchi*	Typically nests in undisturbed ground by using existing burrows from other animals or downed debris as they do not excavate their own nests. Areas subject to surface disturbance become unsuitable for this species. They are generalist forages on a wide variety of flowering plants and require a steady source of nectar and pollen from wildflowers during the flight season suggested as late February to late October.	--/SCE/--	**Suitable Conditions Absent:** The project site is unsuitable for the Crotch's bumble bee and it would not be expected to occur. Field surveys over the entirety of the project site at different time of the year did not have any observations of any bumble bee nests. The project site is at the outer edge of the predicted historic and current range established by the Xerces Society listing petition. The project site as disturbed annual grassland dominated by non-native grasses with little wildflower resources. The site is disced annually for fire suppression on the infill parcel resulting in surface soil disturbance. The project site is bordered by roads and urban development with surrounding lands either under ongoing cultivation of annual crops or urban development (DWE 2024).
Fish			
tidewater goby *Eucyclogobius newberryi*	Occur in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	FE/--/SSC	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CDFW	Rationale for Expecting Presence or Absence
unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	Small freshwater fish (up to 5 centimeters, standard length); inhabit slow-moving reaches or quiet-water streams and rivers. Favorable habitats are usually shaded by dense and abundant vegetation. Current range is restricted to upper Santa Clara River and its tributaries in Los Angeles County, San Antonio Creek on Vandenberg Air Force Base in Santa Barbara County, and Shay Creek vicinity in San Bernardino County (U.S. Fish and Wildlife Service 2009).	FE/SE/FP	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.
arroyo chub *Gila orcuttii*	Small freshwater fish that occur in coastal waters of southern California. Typically occur on sandy and muddy bottoms of flowing pools, creeks, intermittent streams, and small to medium rivers. Known populations occur in Malibu Creek, Santa Clara, San Luis Rey, and Santa Margarita River.	--/--/SSC	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.
Southern California steelhead Distinct Population Segment (DPS) *Oncorhynchus mykiss irideus*	Occur in clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and 1:1 pool-to-riffle ratio.	FT, PCH /--/SSC	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.
South-Central California Coast steelhead DPS *Oncorhynchus mykiss irideus*	Occur in clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and 1:1 pool-to-riffle ratio.	FT, PCH /--/SSC	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.
Amphibians			
California tiger salamander *Ambystoma californiense* – Santa Barbara DPS	Occur in grasslands or oak woodlands that support natural ephemeral pools or ponds that mimic them. Require seasonal water for breeding and small mammal burrows, crevices in logs, piles of lumber, and shrink-swell cracks in ground for refuges. To be suitable, aquatic sites must retain at least 30 centimeters of water for minimum of 10 weeks in winter.	FE/ST/SSC	**Marginally Suitable Upland Habitat Present, Species Absent:** The project site contains suitable upland habitat for the species. Although it is within the dispersal distance from known CTS breeding ponds, Orcutt Road and SR 135 are a barrier to CTS movement to the site from these ponds. Regular disking of the project site further precludes the presence of this species.
arroyo toad *Anaxyrus californicus*	Inhabit coastal southern California from Salinas River Basin in Monterey and San Luis Obispo Counties to Arroyo San Simón in northern Baja California, Mexico. Occupy riparian habitats with sandy streambeds and adjacent pools. Typical vegetation may include cottonwood (*Populus* spp.), sycamore (*Platanus* spp.), and willow (*Salix* spp.) trees. Some populations occur in streams within coniferous forests.	FE/--/SSC	**Suitable Conditions Absent:** The project site does not support sandy riverine or other aquatic habitats capable of supporting this species.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CDFW	Rationale for Expecting Presence or Absence
California red-legged frog *Rana draytonii*	Occur in aquatic habitats with little or no flow and surface water depths to at least 2.3 feet (0.7 meters [m]). Presence of fairly sturdy underwater supports, such as cattails (*Typha* spp.).	FT /-- /SSC	**Marginally Suitable Upland Habitat Present, Species Absent:** No aquatic breeding ponds are on the site. The project site is within the dispersal distance of documented breeding ponds and contains marginal upland habitat. Infill site surrounded by developments and roads renders it unsuitable for any California red-legged frog dispersal opportunity.
western spadefoot *Spea hammondii*	Inhabit vernal pools in primarily grassland, but also in valley and foothill hardwood woodlands.	--/--/SSC	**Marginally Suitable Upland Habitat Present, Species Absent:** No breeding ponds occur on the site. Nearest occurrence extirpated from construction of UVP. Periodic site disturbance and yearly weed suppression discing renders the site unsuitable.
Reptiles			
Northern California legless lizard *Anniella pulchra*	Occur from southern edge of San Joaquin River in northern Contra Costa County south to Ventura County. Occur in scattered locations in San Joaquin Valley, along southern Sierra Nevada mountains, and on desert side of Tehachapi Mountains and part of San Gabriel Mountains. Sandy or loose loamy soils with high moisture content under sparse vegetation.	--/--/SSC	**Marginal Conditions Present, Species Absent**: Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.
western pond turtle *Emys marmorata*	Occur in quiet waters of ponds, lakes, streams, and marshes. Typically, in deepest parts with an abundance of basking sites.	--/--/SSC	**Suitable Conditions Absent:** The project site does not support freshwater habitat with basking structures.
coast horned lizard *Phrynosoma coronatum (blainvillii* population)	Frequent a wide variety of habitats, commonly occurring in lowlands along sandy washes, coastal sage scrub, and chaparral in arid and semi-arid climate conditions. Prefer friable, rocky, or shallow sandy soils.	--/--/SSC	**Marginal Conditions Present, Species Absent**: Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 focused surveys.
two-striped garter snake *Thamnophis hammondii*	Occur in coastal California from Salinas to Baja California and at elevations up to 7,000 feet (2,134 m). Found along streams with rocky beds and permanent freshwater.	--/--/SSC	**Suitable Conditions Absent:** The project site does not support aquatic habitats capable of supporting this species.
Birds			
tricolored blackbird *Agelaius tricolor*	(Nesting colony); require open water, protected nesting substrate, such as cattails or tall rushes (*Juncus* spp.), and foraging area with insect prey.	MBTA/--/SSC	**Suitable Conditions Absent:** The project site does not support freshwater marsh habitat for nesting.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	MBTA/--/WL	**Suitable Conditions Absent:** The project site is not sloped and does not support the appropriate habitats.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CDFW	Rationale for Expecting Presence or Absence
burrowing owl *Athene cunicularia*	Occur in open, dry grasslands, deserts, and scrublands. Subterranean nester, dependent on burrowing mammals.	MBTA/-- /SSC	**Suitable Conditions Absent:** Suitable ground squirrels burrows onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the site and not observed during 2022 surveys.
yellow warbler *Setophaga petechia*	Usually found in riparian deciduous habitats in summer. Stays among cottonwoods, willows, alders (*Alnus* spp.), and other small trees and shrubs. Nest is an open cup placed 2–16 feet (0.6–4.9 m) aboveground in a deciduous sapling or shrub.	--/--/SSC	**Suitable Conditions Absent:** The project site does not support riparian habitats.
least Bell's vireo *Vireo bellii pusillus*	Summer resident of southern California. Occur in low riparian areas in vicinity of water or in dry river bottoms below 2,000 feet (610 m) elevation. Nest along margins of bushes or twigs of willow, *Baccharis*, or mesquite.	FE/SE/--	**Suitable Conditions Absent:** The project site does not support riparian habitats.
Class Aves Other migratory bird species (nesting)	Annual grasslands, coastal scrub, chaparral, and oak woodlands may provide nesting habitat.	MBTA/--/--	**Suitable Conditions Present:** Suitable nesting habitat occurs in the eucalyptus and ornamental tree stands on the fringes of the project site. The site could potentially provide suitable habitat for ground/grassland/shrub-nesting songbird species such as sparrows and finches, however, regular discing for fire and weed suppression has diminished the suitability of the habitat for these species.
Mammals			
pallid bat *Antrozous pallidus*	Prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and buildings.	--/--/SSC	**Suitable Conditions Absent**: The site does not support rocky outcrops or crevices for roosting.
Townsend's big-eared bat *Corynorhinus townsendii*	Occur in a wide variety of habitats; most common in mesic (wet) sites. May use trees for day and night roosts; however, require caves, mines, rock faces, bridges, or buildings for maternity roosts. Maternity roosts are in relatively warm sites.	--/--/SSC	**Suitable Conditions Absent:** The lack of mesic conditions, rock faces, caves, bridges, and other structures on the project site precludes this species from roosting on the project site.
western red bat *Lasiurus blossevillii*	Roost primarily in trees, often in edge habitats adjacent to streams, fields, or urban areas (Zeiner et al. 1990). Mating occurs in August and September and young are born from late May through early July.	--/--/SSC	**Marginal Conditions Present:** Marginal suitable habitat conditions present in eucalyptus trees. Not recorded from site.

Species Name	Habitat and Distribution	Legal Status Federal/ State/CDFW	Rationale for Expecting Presence or Absence
American badger *Taxidea taxus*	Occur in open stages of shrub, forest, and herbaceous habitats; need uncultivated ground with friable soils.	--/--/SSC	**Marginal Conditions Present**: Suitable sandy soils onsite. Low quality marginal habitat from periodic site disturbance and yearly weed suppression discing renders the site unsuitable. Not recorded on the project site and not observed during 2022 focused surveys.

Source: Unless otherwise noted, all habitat and distribution data provided by the CNDDB (CDFW 2021c).

Status Codes:

-- = No status

Federal: FE = Federal Endangered; FT = Federal Threatened; FC = Federal Candidate; CH = Federal Critical Habitat; PCH = Proposed Federal Critical Habitat; MBTA = Protected by Federal Migratory Bird Treaty Act

State: SE = State Endangered; ST = State Threatened; SCT = State Candidate Threatened, SCE = State Candidate Endangered

CDFW: SSC = Species of Special Concern; FP = Fully Protected Species; SA = Not formally listed but included in CDFW Special Animals List; WL = Watch List

Rationale Terms: ***Species Present:*** Species was or has been observed in the survey area. ***Suitable Conditions Present:*** Survey area is within the species' range and supports the appropriate habitat, soils, elevation, and other habitat requirements. ***Marginal Conditions Present:*** Survey area is in the species' range and supports the appropriate habitat but other factors (past disturbances, presence of predators, etc.) may preclude species occurrence. ***Suitable Conditions Absent:*** Survey area is not in the species' range and/or does not support the appropriate habitat, soils, elevation, and/or other habitat requirements.

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MONARCH BUTTERFLY

The monarch butterfly (*Danaus plexippus*) is a candidate for listing under the FESA and on CDFW's Special Animals list (CDFW 2022). It uses coastal woodlands and eucalyptus/pine tree stands for fall and winter roosts, typically from October through January. The project site supports stands of trees that have been observed with a small aggregation of fall/winter roosting monarch butterflies dating back to 1998. The original 1998 record recorded 176 individuals. Currently ~~only~~ 34 were recorded in 2021/2022 (Table 4.3-4).

Table 4.3-4. Monarch Butterfly Overwintering Roost Counts—CNDDB Occurrence #354; Xerces Union Valley Parkway Site ID 2688

Survey Date	Count
CNDDB Occurrence #354 Counts	
November 1998	71
December 1998	176
February 1999	119
March 1999	5
Xerces Society Community Science Counts	
Year 2010	Not Counted
Year 2011	Not Counted
Year 2012	Not Counted
Year 2013	Not Counted
Year 2014	Not Counted
Year 2015	19
Year 2016	30
Year 2017	18
Year 2018	2
Year 2019	0
Thanksgiving Count 2021	28
New Year's Count 2021–2022	34

Sources: CNDDB (CDFW 2021c) accessed March 2022; Xerces Society for Invertebrate Conservation Western Monarch Count Community Science Program (2022)

No monarch butterflies were observed on the project site during the December 17, 2021, field survey under sunny conditions with little wind. Similar conditions for observing monarch butterflies occurred during DWE's second survey on January 5, 2022; four monarch butterflies were observed in flight and stationary on the east edge of the eucalyptus stand on the south side of the project site.

The Xerces Society community science program (Xerces Society Western Monarch Thanksgiving Count 2022) recorded 28 monarchs in November 2021, and 34 during the "Thanksgiving" counts (Table 4.3-4). The BRA (DWE 2022) provides a detailed breakdown of the results of survey data over multiple years. Based on this, there appears to have been a sizable overwintering population in 1998, then a sharp decline to five individuals in 1999. Subsequent surveys between 2015 and 2022 yielded between 0 and 34 butterflies (DWE 2022). Based on the results of these surveys, the Xerces Society has identified the stand

of eucalyptus trees along the southern side of UVP as a Western Monarch Overwintering Site (mapped as #2688).

Regardless of the small survey counts between 2015 and 2022, the eucalyptus grove that is south of UVP is an important inland overwintering grove of the monarch butterfly. The stands of eucalyptus trees to the north of UVP could provide additional support to the southern overwintering grove by providing a wind break to the southern grove. The CDFW has designated the area of the project site to the south of UVP as an area of high conservation value for monarch butterflies (Area of Conservation Concern HEX ID 50049) (CDFW 2023).

The majority of roosts supporting overwintering monarchs in Santa Barbara County from 2016 to 2022, tracked by CDFW and the Xerces Society, contain an average of 451 individuals. Of these Santa Barbara County data, many sites had a low population count of zero for many years, and the highest population was recorded at 34,000 individuals at The Nature Conservancy preserve in 2022 (CDFW 2023). Inland winter roosts in the Santa Maria area contain lower numbers of monarch butterflies than coastal roosts but are still biologically significant resources for this species. The inland Santa Maria overwintering sites have always been aggregations of smaller numbers of individuals but provide a valuable ecological niche to the species. Removal of smaller overwintering roosts could force the congregation of monarchs into larger colonies where stochastic events (disease, fire, grove removal, climate change) could significantly impact the species. Multiple overwintering sites that are widely distributed buffers the species against catastrophic loss and extinction. For these reasons, the existing 7.63-acre overwintering site that is within the project site is considered significant habitat (CDFW 2023).

~~The Pismo Beach monarch butterfly preserve was visited prior to conducting the December and January field surveys as a reference site for potential monarch butterfly winter use of the project site. The 2021–2022 season documented over 22,000 monarch butterflies at the Pismo Beach preserve, which was considered an excellent year compared to recent years. Hundreds of monarch butterflies were readily observable in flight and roosting at the Pismo Beach preserve the same days surveys were conducted for the project site. No monarch butterflies were observed on the project site during the December 17, 2021, field survey under ideal sunny conditions with little wind. Similarly idyllic conditions for observing monarch butterflies occurred during DWE's second survey on January 5, 2022, but only four monarch butterflies were observed in flight and stationary on the east edge of the eucalyptus stand on the south side of the project site.~~

~~The Xerces Society community science program (Xerces Society Western Monarch New Year's Count 2022) recorded 28 monarchs in November 2021, and 34 during the "New Years" counts (Table 4.3-4). The BRA (DWE 2022) provides a detailed breakdown of the results of survey data over multiple years. Based on this, there appears to have been a sizable winter roosting population in 1998, then a sharp decline to only five individuals in 1999. Subsequent surveys between 2015 and 2022 only yielded between 0 and 34 butterflies (DWE 2022). The most recent observations of less than 40 monarch butterflies do not represent a substantial occurrence of a roosting site compared to other Xerces Society monitoring sites, which contain numbers ranging from 500 and upwards to 20,000 individuals at winter roost sites. Based on recent data, the eucalyptus stands onsite do not constitute a winter roosting site; however, individual butterflies do occur onsite.~~

CALIFORNIA TIGER SALAMANDER

The California tiger salamander (*Ambystoma californiense*) Santa Barbara County Distinct Population Segment (DPS) is listed as endangered under the FESA and threatened under CESA. It spends most of its life in upland underground refuges in small mammal burrows and can disperse upwards of 1.3 miles from its temporary (seasonal) breeding ponds. There are known breeding ponds approximately 1.4 miles west

of SR 135 on airport lands and elsewhere mostly to the south. There was a closer breeding occurrence west of SR 135, but it has been extirpated. The entire area north of Foster Road all the way west to Blosser Road has been planted in strawberries (see DWE 2022; see Appendix F). There is substantial residential development, active agriculture, and the four-lane SR 135 separating the project site from any known or potential breeding ponds, which are barriers to any California tiger salamander dispersal onto the project site. The USFWS maps the project site as outside of the western Santa Maria/Orcutt metapopulation and potential distribution (USFWS 2016). Additionally, curbs along Orcutt Road and portions of UVP represent additional barriers to California tiger salamander movement. For these reasons, the project site does not support upland dispersal or refuge habitat for the California tiger salamander. A complete California tiger salamander site assessment report substantiating these findings was provided by DWE as an appendix to the BRA (DWE 2022; see Appendix F). After reviewing the California tiger salamander site assessment report, USFWS has also provided feedback to the City that the agency is in agreement with the assessment report. Specifically, USFWS indicates that UVP, SR 135, and other developed lands between the project and the breeding ponds west of SR 135 create an impermeable barrier for California tiger salamander dispersal and that the project area is not California tiger salamander upland habitat (USFWS 2023a).

CALIFORNIA RED-LEGGED FROG

The California red-legged frog (*Rana draytonii*) is listed as threatened under the FESA and is a State SSC. The CNDDB has recorded occurrences of the California red-legged frog in the vicinity of the project site to the west of SR 135 in ditches and ponds around the Santa Maria Airport, and agricultural ponds and ditches mostly to the west around Highway 1 and Black Road. There is no aquatic habitat on the project site that may attract a California red-legged frog from other areas. In addition, while the California red-legged frog may disperse across uplands between breeding sites, SR 135 creates a barrier to movement of frogs from the west, and there are no breeding sites in the urbanized development around the project site that might prompt movement across the site. Therefore, there is no suitable breeding or dispersal habitat on the project site for the California red-legged frog.

WESTERN SPADEFOOT

The western spadefoot (*Spea hammondii*) is listed as a CDFW SSC. The CNDDB search identified a 2011 western spadefoot occurrence of 50 adults in a rain-filled pool at the southeast corner of Hummel Drive and UVP, over 600 feet east of the project site. Intervening upland habitat between Hummel Drive and the project site was removed during construction of UVP and a detention basin. No suitable seasonal pools occur on the project site. Given the site's proximity (600 feet) to a recently (2011) extirpated breeding site, there is a very low likelihood that an estivating western spadefoot could still occur on the project site.

NORTHERN CALIFORNIA LEGLESS LIZARD

The northern California legless lizard (*Anniella pulchra*), a CDFW SSC, is closely associated with sandy or very friable loamy soils under coastal scrub or woodland vegetation with soil moisture and vegetative cover being essential. Lizard population densities have been reported associated with certain plant species that provide leaf litter and strong root structures attracting preferred prey and offering cover. Large lupines (*Lupinus arboreus*, *L. chamissonis*, *L. albifrons*), mock heather (*Ericameria ericoides*), and coast live oak (*Quercus agrifolia*) are among the most common indicators for this species (Kuhnz et al. 2005). There are three CNDDB records within 2 miles of the project site. One, less than 1 mile from the project site, was found during clearing the site for construction along UVP (Occurrence # 85). A second record, approximately 1.6 miles southeast, was found in the backyard of a residential development (Occurrence # 314). The third record, approximately 1.75 miles east of the project site, was found along a sandy dirt

access road by an environmental monitor during trenching activities. The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for this species. However, regular mowing/discing of the site and periodic removal of shrubs has likely reduced their population numbers. Field surveys conducted by DWE on March 7 and April 27, 2022, which included raking around the coastal scrub habitat, did not result in any observations of the northern California legless lizard (DWE 2022). This species is rarely observed aboveground, requires extensive search efforts to find, and can be easily missed. Therefore, this species could still potentially occur onsite.

BLAINVILLE'S (COAST) HORNED LIZARD

The Blainville's (coast) horned lizard (*Phrynosoma blainvillii*), a CDFW SSC, occurs in a wide variety of habitats, requiring sandy soils, abundant ant colonies for food, open areas for sunning, and shrubs for cover. Sandy loam or loamy sand and alkali soils are key predictors for the presence of Blainville's horned lizards in the San Joaquin Valley (Gerson 2011). Appropriate habitat for Blainville's horned lizard must include an abundance of the native harvester ant (*Pogonomyrmex* and *Messor* sp.). Non-native Argentine ants (*Linepithema humile*) are detrimental to Blainville's horned lizard food resources, as they outcompete the native harvester ant, and the lizard will not eat the Argentine ant (CDFW 2007, 2021c; Gerson 2011). There are no CNDDB occurrences within the urban areas of Santa Maria. The closest CNDDB occurrence is approximately 4.15 miles southeast of the project site and is likely extirpated from development (Occurrence # 619). The remainder of the CNDDB occurrences in the vicinity of Santa Maria are associated with the Santa Maria River. While the project site does contain sandy soils, gopher burrows, and shrubs for cover, this species is unlikely to be in an infill parcel such as this because of the lack of their primary prey source, native ants. Urban environments are heavily dominated by invasive Argentine ant. Field surveys conducted by DWE on March 7 and April 27, 2022, did not result in any observations of horned lizards (DWE 2022). While it is a cryptic species and difficult to spot, it was determined that this species is unlikely to occur on the project site.

WESTERN RED BAT

The western red bat (*Lasiurus blossevillii*) is a CDFW SSC. The closest CNDDB occurrences are located approximately 6 miles south on Vandenberg Air Force Base and are associated with either Barka slough or San Antonio Creek (CDFW 2021c). Western red bats roost on the underside of overhanging leaves (Pierson et al. 2002). In the Central Valley, they were found to be more abundant in remnant stands of cottonwood/sycamore riparian habitats, but also roosted extensively in orchards and were observed roosting in planted eucalyptus stands (Pierson et al. 2006). On Vandenberg Air Force Base, western red bats were primarily associated with creek drainages (Pierson et al. 2002). The eucalyptus and ornamental tree stands have the potential to provide roosting habitat for the western red bat. However, the isolated and infill nature of the site, along with the lack of proximity to water, particularly riparian areas for foraging, make it an unlikely area for roosting. Nevertheless, no focused bat surveys were conducted for the property, so their presence cannot be ruled out.

AMERICAN BADGER

The American badger (*Taxidea taxus*), a CDFW SSC, is a grassland species needing abundant small mammal prey; they are easily detected by their distinctive half-moon shaped burrows. There was no evidence of badger use observed on the project site during DWE field surveys that included close inspection of burrows with the obvious tailings from ground squirrels. Very little evidence of small mammal use was observed onsite, suggesting the isolated infill site has low suitability for the American badger.

4.3.2 Regulatory Setting

4.3.2.1 Federal

ENDANGERED SPECIES ACT

The FESA provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. "Critical Habitat" is a term in the FESA designed to guide actions by federal agencies and is defined as "an area occupied by a species listed as threatened or endangered within which are found physical or geographical features essential to the conservation of the species, or an area not currently occupied by the species which is itself essential to the conservation of the species." Actions that jeopardize endangered or threatened species and/or critical habitat are considered a "take" under FESA. "Take" under federal definition means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Projects that would result in "take" of any federally listed threatened or endangered species, or critical habitats, are required to consult with the USFWS through either FESA Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan), depending on the level of federal government involvement in permitting and/or funding of the project. The FESA does not protect plants unless there is a federal nexus. Plants may not be removed from lands under federal jurisdiction, and activities with a federal nexus have the consultation requirement described above (16 United States Code 1536 – Interagency Cooperation).

MIGRATORY BIRD TREATY ACT

All migratory, non-game bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (50 CFR 10.13), as amended under the Migratory Bird Treaty Reform Act of 2004. The MBTA makes it illegal to purposefully take (pursue, hunt, shoot, wound, kill, trap, capture, or collect) any migratory bird, or the parts, nests, or eggs of such a bird, except under the terms of a valid federal permit. Migratory non-game native bird species are protected by international treaty under the federal MBTA.

4.3.2.2 State

CALIFORNIA ENDANGERED SPECIES ACT

The CESA, like the FESA, contains a process for listing of species and regulating potential impacts to listed species. State threatened and endangered species include both plants and wildlife, but do not include invertebrates. The designation "rare species" applies only to California native plants. State threatened and endangered plant species are regulated largely under the Native Plant Preservation Act in conjunction with the CESA. State threatened and endangered animal species are legally protected against "take." The CESA authorizes the CDFW to enter into a memorandum of agreement for take of listed species to issue an incidental take permit for a state-listed threatened and endangered species only if specific criteria are met. Section 2080 of the CESA prohibits the take of species listed as threatened or endangered pursuant to the Act. Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: 1) the taking is incidental to an otherwise lawful activity; 2) the taking will be minimized and fully mitigated; 3) the applicant ensures adequate funding for minimization and mitigation; and 4) the authorization will not jeopardize the continued existence of the listed species.

CALIFORNIA FISH AND GAME CODE

CFGC Section 3511 includes provisions to protect Fully Protected species, such as: 1) prohibiting take or possession "at any time" of the species listed in the statute, with few exceptions; 2) stating that "no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species; and 3) stating that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFW is unable to authorize incidental take of "fully protected" species when activities are proposed in areas inhabited by those species. CFGC Sections 3503 and 3503.5 state that it is unlawful to take, possess, or destroy the nest or eggs of any bird, with occasional exceptions. In addition, Section 3513 states that it is unlawful to take or possess any migratory bird as designated in the MBTA or any part of such migratory birds except as provided by rules and regulations under provisions of the MBTA. The CDFW also manages the California Native Plant Protection Act of 1977 (CFGC Section 1900, et seq.), which was enacted to identify, designate, and protect rare plants. In accordance with CDFW guidelines, CNPS 1B list plants are considered "rare" under the CESA, and are evaluated in CEQA documents.

OTHER SECTIONS OF THE CALIFORNIA FISH AND GAME CODE

Fully Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW. Information on these species can be found within Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish) of the CFGC.

CALIFORNIA FISH AND GAME CODE SECTION 1602

CFGC Section 1602 requires any person, state or local government agency, or public utility proposing a project that may affect a river, stream, or lake to notify the CDFW before beginning the project. If activities would result in the diversion or obstruction of the natural flow of a stream, substantially alter its bed, channel, or bank, impact riparian vegetation, or adversely affect existing fish and wildlife resources, a Streambed Alteration Agreement is required. A Streambed Alteration Agreement lists the CDFW conditions of approval relative to the proposed project and serves as an agreement between an applicant and the CDFW for a term of not more than 5 years (for standard agreements) for the performance of activities subject to this section. Implementation of the proposed project may require a Section 1602 Streambed Alteration Agreement for any impacts within the banks of drainages and extending to the outer edge of riparian vegetation (whichever is greater) if these areas are determined to be jurisdictional by CDFW.

4.3.2.3 Local

CITY OF SANTA MARIA GENERAL PLAN RESOURCES MANAGEMENT ELEMENT

The *City of Santa Maria General Plan Resources Management Element* (RME) was adopted by the City Council on April 4, 1981, updated and readopted in 1996, and contains amendments through January 16, 2001. The biological resources section of the RME identifies biological resources as vegetation and wildlife in the city inclusive of plant species, wildlife species, and their habitats. The RME recognizes biological resources to provide ecological, educational, historic, scientific, and aesthetic value to the people of the Santa Maria Valley.

The RME also identifies the urban forest as having ecological value. The RME defines an urban forest as the planted environment within a city. It includes both public and private open space areas planted with trees, shrubs, lawns, and other forms of vegetation. Street trees, landscaped easements and medians, and parks are also part of the urban forest.

Goal 3 – Preserve natural biological resources and expand Santa Maria's urban forest.

Policy 3. Protect and preserve biological resources, and expand the urban forest within the Planning Area[1] in order to enhance the quality of life in the Santa Maria Valley.

Objective 3.1.a - Plant and Animal Taxa and Habitats. Ensure that all development near sensitive habitats avoids significant impacts to these areas.

Implementation Program 5. Require street trees to be incorporated into the design and plans of new developments.

Implementation Program 6. Preserve and maintain existing trees along and in public streets and parking lots.

Implementation Program 7. Enforce the tree replacement standards contained in Chapter 44 of Title 12 of the Municipal Code.

Implementation Program 9. Enforce the existing ordinance that requires developers of new buildings to plant trees and shrubs to improve energy efficiency and to preserve existing trees on building sites.

CITY OF SANTA MARIA MUNICIPAL CODE

The City of Santa Maria's (City's) Municipal Code is designed to preserve and expand the urban forest by requiring replacement trees for those proposed for removal. Section 12-44.04 provides specific landscape design standards and mitigation ratios as follows:

Section 12-44.04. Specific landscape design standards. The location, size and species of all existing trees in excess of six (6) inches in diameter and any existing street trees, shall be indicated on landscape plans submitted to the City. Existing trees shall be retained unless the finding can be made by the City Parks Department staff that the preservation of the tree presents a hazard to the health, safety and general welfare of the public or cannot be reasonably accommodated by the proposed development.

1) The grades around existing trees designated to remain shall not be altered more than three (3) inches within the area from the trunk to the canopy dripline.
2) Pavement within the canopy dripline of existing trees should not exceed twenty-five percent (25%) of the area of the canopy.
3) Existing trees that are approved for removal shall be replaced by suitable species sized as follows or as approved by the Zoning Administrator:

Size of Tree Removed	Replace With
Trunk diameter: 6 to 8 inches	Two 24-inch box size trees (height 4 feet 6 inches) (3- to 5-inch trunk diameter)
Trunk diameter: 9 to 12 inches	Four 24-inch box size trees (height 4 feet 6 inches) (3- to 5-inch trunk diameter)
Trunk diameter: 12+ inches	Six 24-inch box size trees (height 4 feet 6 inches) (3- to 5-inch trunk diameter)

[1] The General Plan (City of Santa Maria 1996), which includes the RME, uses the term Planning Area to describe the area within the city limits and the Sphere of Influence of the City of Santa Maria.

4.3.3 Thresholds of Significance

The following thresholds of significance for the effects on biological resources are based on Appendix G of the State CEQA Guidelines. An impact is considered significant if the project would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

b. Have a substantial adverse effect on any riparian habitat or other Sensitive Natural Community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

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

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Each of these thresholds is discussed under Section 4.3.5, Project-Specific Impacts and Mitigation Measures, below.

4.3.4 Impact Assessment Methodology

The impact assessment focuses on identifying potential impacts associated with implementation of the project and is based on the site's existing conditions, the regulatory setting, and the project description. The emphasis is on determining the potential effects of the project on federal, state, and locally regulated species and habitats on the project site. Adverse impacts could occur if the project could result in temporary or permanent modification of sensitive communities, or habitats occupied by special-status species, or directly affect special-status species. The impact assessment is based on the results of technical studies prepared for the project by David Wolff Environmental, LLC (DWE 2022; see Appendix F).

4.3.5 Project-Specific Impacts and Mitigation Measures

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Based on the special-status species assessment, it was determined that three special-status wildlife species (monarch butterfly, northern California legless lizard, and western red bat) and nesting migratory birds and raptors could potentially occur on the project site (DWE 2022).

CONSTRUCTION-PERIOD IMPACTS – PROJECT SITE

Project construction activities, including tree removal, grading, utility installation, paving, etc., could potentially result in impacts to special-status wildlife if they are present on the 43.75-acre project site. Direct impacts could include trampling, being exposed to desiccation and/or predation, being collected, being entombed, and loss of habitat. Indirect impacts could include stress and loss of reproductive success among relocated individuals, excessive noise resulting in site or nest abandonment, or increased human activity resulting in changes to wildlife movement and behaviors. The potential for direct and indirect impacts to special-status animal species resulting from construction-period impacts would be *significant without mitigation*.

BIO Impact 1	
The project could directly or indirectly impact special-status wildlife species during project construction.	
Mitigation Measures	
Implement Mitigation Measures BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, BIO/mm-5.1, and BIO/mm-11.1.	
BIO/mm-1.1	***Prohibition of Invasive Plants.*** *The landscape architect shall provide a signed statement on the landscape plans that the planting plan does not include any plant that occurs on the California Exotic Pest Plant Council and the California Invasive Plant Council Lists 1, 2, and 4. Plants considered to be invasive by the California Exotic Pest Plant Council and the California Invasive Plant Council shall not be used onsite.*
BIO/mm-1.2	***Biological Monitor.*** *Prior to grading or building permit issuance for any future development within the project site, the developer shall retain a City-approved project biologist to provide monitoring services for all measures requiring biological mitigation. The biologist shall be responsible for ensuring that compliance with biological resource mitigation measures occurs, conducting construction crew training regarding sensitive species that have the potential to occur, maintaining the authority to stop work, and outlining actions in the event of non-compliance. Biological monitoring shall be conducted full time during the initial disturbances (site clearing) and be reduced to monthly following initial disturbances, or more frequently, if necessary, as determined by the City-approved project biologist.*
BIO/mm-1.3	***Worker Environmental Training Program.*** *Prior to implementation of construction activities (including staging and mobilization), the developer shall ensure all personnel associated with project construction attend a training to facilitate Worker Environmental Training. The Worker Environmental Training shall be conducted by a City-approved biologist to help workers recognize special-status plants and animals to be protected in the project site. The training program shall include identification of relevant sensitive species and habitats, description of the regulatory status and general ecological characteristics of sensitive resources, documentation of each employee's participation in trainings and information presented. Any future contractor and/or subcontractor with employees working at the project site shall set aside time for the City-approved biologist to provide Worker Environmental Training for all employees that will be onsite. Topics will include regulatory framework and best practices to avoid and minimize impacts to protected plants, animals, and their habitats. Each group of new personnel or individuals shall be provided with an environmental briefing by the City-approved project biologist.*

BIO Impact 1	
BIO/mm-1.4	***Cover Excavations.*** *During construction, all trenches, holes, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope and 2 or more feet deep shall be covered when workers or equipment are not actively working in the excavation. If any such excavations remain uncovered, they shall have an escape ramp of earth or a non-slip material with a 1:1 (45 degree) slope or flatter. All excavated areas shall be inspected by the City-approved biologist before backfilling.*
BIO/mm-1.5	***Biodegradable Erosion Control.*** *During construction, use erosion control products made of natural fiber (biodegradable) to prevent wildlife from getting ensnared or strangled by monofilament, coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products.*
Residual Impacts	
With implementation of the identified mitigation measures, and additional species-specific mitigation measures listed below, residual impacts to special-status species would be less than significant with mitigation.	

MONARCH BUTTERFLY

Monarch butterflies are a candidate for listing under the FESA. The project site supports stands of trees that have historically supported an aggregation of winter roosting monarch butterflies; this site is located to the south of UVP and is 7.63 acres. There was a sudden drop in the use of this site in 1999, and since then, the counts have ranged between 0 and 34. The recorded count for 2021/2022 was 34 (Table 4.3-4; CNDDB and Xerces Society monarch butterfly counts [DWE 2022]). However, the Xerces Society and CDFW have identified the stand of eucalyptus trees along the southern side of UVP as a Western Monarch Overwintering Site (mapped as #2688). Additionally, the CDFW letter dated March 14, 2023, states that the site is designated as an area of high conservation value for monarch butterflies as an important inland overwintering grove for the monarch butterfly (Area of Conservation Concern HEX ID 50049) (CDFW 2023). Inland winter roosts in the Santa Maria area contain lower numbers of monarch butterflies than coastal roosts but are still biologically significant resources for this species. The inland Santa Maria overwintering sites have always been aggregations of smaller numbers of individuals but provide a valuable ecological niche to the species. Removal of smaller overwintering roosts could force the congregation of monarchs into larger colonies where stochastic events (disease, fire, grove removal, climate change) could significantly impact the species. Multiple overwintering sites that are widely distributed buffers the species against catastrophic loss and extinction. For these reasons, the existing 7.63-acre overwintering site that is within the project site is considered significant habitat (CDFW 2023).

CDFW recommends that future development of the property be planned to avoid removal of trees used by western monarchs for over-wintering. As well, CDFW has indicated that the stands of eucalyptus trees to the north of UVP could provide support to the southern overwintering grove by providing a wind break to the southern grove. Full build out of the site per the conceptual development plan provided with this EIR would require all of the eucalyptus trees onsite to be removed. If monarchs were found to be present in the eucalyptus trees during construction, they could be directly impacted by construction activities. Direct adverse impacts could include direct mortality of overwintering monarch butterflies; indirect adverse impacts could include excessive noise from construction equipment prompting the overwintering monarchs to abandon the site. As well, removal of the eucalyptus trees, including the overwintering grove south of UVP, would result in complete removal of this important inland habitat for the monarch butterfly. The potential for direct and indirect impacts to monarch butterflies during project construction would be *significant*.

~~Monarch butterflies are a candidate for listing under the ESA. The project site supports stands of trees that have historically supported an aggregation of winter roosting monarch butterflies. There was a sudden drop in the use of the site in 1999, and since then, the counts have only ranged between 0 and 34. The recorded count for 2021/2022 was 34 (Table 4.3-4; CNDDB and Xerces Society monarch butterfly counts [DWE 2022]). All the eucalyptus trees onsite are proposed to be removed by the project. Since these trees are not currently used as a winter roost site, impacts from the tree removal will be low. However, a few monarchs do show up each year, and if present in the eucalyptus trees during construction, they could be directly impacted by construction activities. Direct adverse impacts could include direct mortality of overwintering monarch butterflies; indirect adverse impacts could include excessive noise from construction equipment prompting the overwintering monarchs to abandon the site. The potential for direct and indirect impacts to monarch butterflies during project construction would be *significant*.~~

BIO Impact 2	
The project could directly impact monarch butterflies.	
Mitigation Measures	
Implement Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5.	
BIO/mm-2.1	~~*If possible, site disturbance and construction activity that would impact eucalyptus trees onsite shall not occur during the monarch butterflies' fall and winter migration (October 15 through February 29) period. If tree or vegetation removal or site disturbance is required during the monarch butterflies' fall and winter migration, a City-approved biologist shall conduct a preconstruction survey for monarch butterflies that could be using the eucalyptus trees on the site for overwintering within 7 days of proposed vegetation removal or site disturbance or when known monarch overwintering is occurring at other locations within the region. If monarch butterflies are detected, development shall be postponed until after the overwintering period or until a City-approved biologist determines monarch butterflies are no longer using the trees for overwintering.*~~ *The developer shall ensure the following actions are undertaken to minimize potential direct and indirect impacts to western monarch butterflies:* a. *If possible, site disturbance and construction activity that would impact eucalyptus trees onsite shall not occur during the monarch butterflies' fall and winter migration period (October 15 through February 29).* b. *If tree or vegetation removal or site disturbance is required during the monarch butterflies' fall and winter migration period (October 15 through February 29), a City-approved biologist familiar with monarchs and monarch overwintering habitat shall conduct focused surveys for monarch colonies within the identified overwintering site and will identify any colonies found within 7 days of proposed vegetation removal or site disturbance or when known monarch overwintering is occurring at other locations within the region. If monarch butterflies are detected, development shall be postponed until after the overwintering period or until the City-approved biologist determines monarch butterflies are no longer using the trees for overwintering.* c. *To provide further protection to non-overwintering populations and/or adjacent over-wintering populations, no* Asclepias curassavica *(tropical milkweed) will be allowed in any planting palettes for the project. Native milkweed species*, such as Asclepias fascicularis *(narrowleaf milkweed) are also not recommended by the USFWS to be planted adjacent to existing overwintering sites as this may interfere with normal migrating behavior (USFWS 2023b). To contribute to local monarch butterfly conservation efforts, native nectar-providing plant species will be incorporated into landscaping following construction activities, such as those recommended in the Monarch Butterfly Nectar Plant List for Conservation Plantings, to enhance local nectar sources (Xerces Society 2018).*

BIO Impact 2
d. *Prior to the approval of a Planned Development permit and prior to the removal of any trees within the overwintering site, the developer shall hire a City-approved biologist familiar with monarchs and monarch overwintering habitat to prepare and implement a monarch butterfly habitat enhancement plan. At a minimum, the plan shall identify area(s) on the property appropriate for onsite habitat enhancement to partially address the direct impacts of tree removal within the approximately 7.6-acre western monarch butterfly overwintering site. The recommendations in this plan shall be included within the project's future project's landscaping plans for review and approval by the City prior to implementation.* e. *Prior to the approval of a Planned Development permit, the developer shall identify appropriate local land management conservation organizations and provide a donation in order to assist with the organization's overwintering monarch butterfly conservation goals. This donation may be for conservation activities for known and mapped overwintering sites in the immediate vicinity of the project site, or a donation may be provided to a local non-profit organization focused on monarch butterfly conservation. The developer will work with the City and local conservation organizations to provide funding for 5 years of conservation research and/or maintenance and management activities for an area equivalent to that impacted on the project site (approximately 7.6 acres).*
Residual Impacts
~~*With implementation of the identified mitigation measures, residual impacts to monarch butterflies would be less than significant with mitigation.*~~ *Development of the site under the conceptual development plan or any project of a similar density would necessitate the removal of the 7.63-acre monarch overwintering site (mapped as #2688) that exists on the project site. Removal of this habitat would create a significant and unavoidable impact that cannot be fully mitigated. CDFW is concerned that the loss of trees used by monarch butterflies for overwintering could contribute to extirpation of western monarch populations and has indicated that off-site mitigation is not feasible for the loss of overwintering habitat at the project site. Impacts could not be fully mitigated because there is a lack of information regarding the ability to develop off-site mitigation, there are no known local mitigation banks for monarch butterfly overwintering habitat, there is significant risk that restored off-site habitat would not be used by the monarch for overwintering, and there would be a significant temporal loss of the habitat while created overwintering habitat matures. For these reasons, the City determines that feasible mitigation measures are not available to reduce potentially significant impacts to the monarch butterfly from loss of habitat to a less-than-significant level. Thus, residual impacts to monarch butterflies would continue to be significant and unavoidable with the build out of the conceptual development plan or of a project on the project site that is similar in density.*

NORTHERN CALIFORNIA LEGLESS LIZARD

The sandy soils on the project site and remnants of disturbed coastal scrub represent suitable habitat for the northern California legless lizard, a CDFW SSC. Even though the project site is regularly disced for weed suppression, and surveys during 2022 did not detect them, there is still potential for them to occur in low numbers. The nearby CNDDB occurrences were of individuals uncovered during construction activities and one was found in the backyard of a residence. Project activities such as grading and other excavation could result in direct impacts, loss of habitat, and mortality. The potential for direct and indirect impacts to northern California legless lizard during construction of the project would be *significant*.

BIO Impact 3	
The project could directly and indirectly impact northern California legless lizards during project construction.	
Mitigation Measures	
Implement Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5.	
BIO/mm-3.1	*Within 30 days prior to and during initial ground disturbance of the coastal scrub and grassland habitat onsite, a City-approved biologist shall conduct surveys for northern California legless lizards within suitable habitat areas within the development footprint and any adjacent staging areas. Prior to initial ground disturbance, the City-approved biologist shall identify an appropriate receptor site with suitable habitat for any northern California legless lizards that may be found during the survey. The biologist shall use hand search or cover board methods in areas of disturbance where legless lizards are expected to be found (e.g., under shrubs, other vegetation, or debris). If cover board methods are used, they shall commence at least 30 days prior to the start of construction. Hand search surveys shall be completed immediately prior to and during disturbances to the vegetated areas. During vegetation-disturbing activities, the biologist shall walk behind the equipment to capture northern California legless lizards that are unearthed by the equipment. The biologist shall capture and relocate any legless lizards or other reptiles observed during the survey effort. The captured individuals shall be relocated from the construction area and released at the predetermined receptor site.*
Residual Impacts	
With implementation of the identified mitigation measures, residual impacts to northern California legless lizard would be less than significant.	

NESTING BIRDS

All the vegetation onsite has the potential to support nesting birds. If the trees or other vegetation were removed while birds were nesting, the nesting individuals could be directly or indirectly impacted by the vegetation removal. The potential for direct impacts may include physically destroying an active nest and the nest's occupants. Indirect impacts may include excessive noise or movement causing nest abandonment. Direct and indirect impacts to nesting birds and raptors during construction of the project would be *significant*.

BIO Impact 4	
The project could directly and indirectly impact nesting birds during project construction.	
Mitigation Measures	
Implement Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5.	
BIO/mm-4.1	*Vegetation removal and initial site disturbance shall be conducted between September 1 and January 31 outside of the nesting season for birds. If vegetation and/or tree removal is planned for the bird nesting season (February 1 to August 31), then preconstruction nesting bird surveys shall be conducted by a City-approved biologist to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required. If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by the City-approved biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival, as determined by the monitoring biologist.*

BIO Impact 4
Residual Impacts
With implementation of the identified mitigation measures, residual impacts to nesting birds would be considered less than significant with mitigation.

WESTERN RED BATS

The eucalyptus trees onsite have the potential to support roosting western red bats (a CDFW SSC). If bats were roosting in the trees at the time the trees were removed, the bats could be directly impacted by the tree removal. Impacts to bats could include disrupting a maternal roost, loss of roosting habitat, and/or crushing or otherwise physically harming individuals. The potential for direct and indirect impacts to roosting western red bats during construction of the project would be *significant*.

BIO Impact 5	
The project could directly and indirectly impact roosting western red bats during project construction.	
Mitigation Measures	
BIO/mm-5.1	*The developer shall retain a qualified biologist to conduct roosting bat surveys prior to any tree removal. Pre-disturbance surveys for bats shall include two daytime and two dusk surveys no more than 30 days prior to the tree removal to determine if bats are roosting in the trees. The biologist(s) conducting the preconstruction surveys shall identify the nature of the bat utilization of the area (i.e., no roosting, night roost, day roost, maternity roost). If bats are found to be roosting in the project area, the developer shall develop the project in such a way that avoids the bat roost. If avoidance of the bat roost is not feasible, tree removal shall be delayed until the bats have left the area.*
Residual Impacts	
With implementation of the identified mitigation measure, residual impacts to western red bat would be less than significant.	

OPERATIONAL IMPACTS – PROJECT SITE

Upon completion of construction activities associated with the buildout of the project site, the project site would mainly consist of a built urban environment with landscaped areas, several parks, and one or more stormwater detention basins. Landscaped areas and parks would include planted trees and vegetation that would be maintained in accordance with the City's Landscape Standards provided in the City's Municipal Code (Chapter 12 Section 44). Based on the developed nature of the environment and limited habitat features, the project site would provide negligible quality habitat onsite to support locally common wildlife species, and no special-status plant or wildlife species would be expected to reside within the project site.

The project site is generally surrounded by residential developments to the north, east, and south, and SR 135 and active agricultural cultivation to the west. Some of the active agricultural fields to the west of the project site have been recently approved for commercial development. Connectivity within the project site is further fragmented by UVP, which bisects the project site. Based on the developed urban uses and heavily traveled roadways that surround the project site, wildlife movement through the project site and

immediately surrounding area would be extremely limited. Locally common bird species may move through the project site, but nesting activities would not be expected due to the ongoing noise and other disturbances commonly associated with developed areas and limited tree canopy available onsite.

Based on the developed nature of the project site and surrounding urban land uses, operational impacts to special-status species and their habitats would be *less than significant*.

BIO Impact 6
Project operation would not directly or indirectly impact special-status wildlife species.
Mitigation Measures
No mitigation is required.
Residual Impacts
Impacts to biological resources during project operation would be less than significant.

OFF-SITE INFRASTRUCTURE IMPROVEMENTS

The project would require several utility infrastructure improvements that would result in work outside of the boundaries of the 43.75-acre project site. Off-site infrastructure improvements associated with the project would include upsizing of the existing water lines under Orcutt Road and UVP and upsizing of an existing wastewater pipeline from the Laguna County Sanitation District (LCSD) sewer manhole MH1010, located near the northwest corner of the project site in Orcutt Road, to Foster Road (approximately 675 feet of pipeline). Based on the best available information provided by Golden State Water Company, it is assumed that the water main upgrades would be limited to pipelines that would be replaced underneath paved roads and/or within existing roadway rights-of-way.

Similar to conditions within the project site, none of the proposed off-site improvement areas overlay existing surface waterways or riparian vegetation. In addition, the off-site improvement areas are all located east of SR 135, which functions as a movement barrier for California red-legged frogs that may travel upland from documented breeding ponds located west of SR 135. Due to the close proximity of the proposed off-site improvements to the project site, same climate conditions, and underlying sandy soils, these off-site improvement areas have the potential to support suitable habitat to the same special-status species as the project site, with the exception of overwintering habitat for monarch butterflies, as there are no mature eucalyptus trees located within or immediately adjacent to proposed off-site disturbance areas.

Proposed off-site improvements would occur within existing paved roadways and unpaved road shoulder areas within roadway rights-of-way. Paved areas would have no potential for natural vegetation to occur. Based on the heavily disturbed and ruderal nature of the unpaved roadway shoulder areas, and the absence of special-status plant species within the adjacent 43.75-acre project site, special-status plant species are not expected to occur within the off-site improvement areas and potential impacts would be less than significant.

Special-status wildlife species that may have the potential to be impacted by proposed off-site improvements include California legless lizard, nesting birds, and roosting bats. Direct impacts could include trampling, being exposed to predation, being collected, being entombed, and loss of habitat. Indirect impacts could include stress and loss of reproductive success among relocated individuals, excessive noise resulting in site or nest abandonment, increased human activity resulting in changes to

wildlife movement and behaviors, increased vehicle use of the area exacerbating road kills, or introduction of invasive plant species that could change habitat conditions to open space preserved onsite. While construction and installation of off-site utility improvements are not anticipated to require removal of any existing trees, indirect impacts to nesting birds and roosting may occur during grading, construction, or installation of off-site utility infrastructure.

With implementation of Mitigation Measures BIO/mm-1.2 through BIO/mm-1.5, and BIO/mm-3.1, BIO/mm-4.1, and BIO/mm-5.1, potential impacts to special-status species would be *less than significant with mitigation*.

BIO Impact 7
The development of the infrastructure improvements beyond the 43.75-acre project site boundary could directly or indirectly impact special-status wildlife species.
Mitigation Measures
Implement Mitigation Measures BIO/mm-1.2 through BIO/mm-1.5, BIO/mm-3.1, BIO/mm-4.1, and BIO/mm-5.1.
Residual Impacts
With implementation of Mitigation Measures, potential impacts to special-status wildlife species would be less than significant with mitigation.

Would the project have a substantial adverse effect on any riparian habitat or other Sensitive Natural Community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No riparian habitat or other sensitive natural communities were mapped on the project site (DWE 2022); therefore, there would be *no impact* to sensitive habitats.

BIO Impact 8
There is no riparian habitat or other sensitive natural communities located within the project site; no impact would occur.
Mitigation Measures
No mitigation is required.
Residual Impacts
There would be no impacts to sensitive habitats.

Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No jurisdictional wetlands or other waters of the U.S./State or riparian habitat under any regulatory authority or definition occur on the project site. The very deep, excessively drained sandy soils of the project site have rapid permeability with low water capacity. A small area on the eastern edge of the project site—where there was once a stand of willows prior to its removal in 2021—in mapped in the NWI as a freshwater emergent marsh (USFWS 2022); however, a detailed wetland delineation and jurisdictional determination report provided by DWE (2022) did not find this area to be a jurisdictional wetland. Therefore, there would be *no impact* to federally protected wetlands.

BIO Impact 9
There are no jurisdictional wetlands located within the project site; no impact would occur.
Mitigation Measures
No mitigation is required.
Residual Impacts
There would be no impacts to jurisdictional wetlands.

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

The project site does not support any significant surface water resources with potential to support aquatic species, migratory corridors, or nursery sites. The project site is not located within an Essential Connectivity Area based on the California Essential Habitat Connectivity Project (CDFW 2021d). Furthermore, the proposed project site is an infill parcel surrounded by residential developments to the north, east, and south and SR 135 and active agriculture to the west. Some of the active agricultural field across from SR 135 has been recently approved for commercial development. Connectivity within the project site is further fragmented by UVP, which bisects the project site. The Orcutt Road realignment also fragments the project site. The proposed project would not significantly restrict the movement of any native resident or migratory fish or wildlife species, or established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites; therefore, *no impact* would occur.

BIO Impact 10
No impacts would occur to migratory wildlife corridors or native wildlife nurseries.
Mitigation Measures
No mitigation is required.
Residual Impacts
No impacts would occur to migratory wildlife corridors or native wildlife nursery sites.

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of Santa Maria RME identifies biological resources as vegetation and wildlife in the city inclusive of plant species, wildlife species, and their habitats. The RME recognizes biological resources to provide ecological, educational, historic, scientific, and aesthetic value to the people of the Santa Maria Valley. The RME also identifies the urban forest as having ecological value. The RME defines an urban forest as the planted environment within a city. It includes both public and private open space areas planted with trees, shrubs, lawns, and other forms of vegetation. Street trees, landscaped easements and medians, and parks are also part of the urban forest.

The proposed project site supports mature eucalyptus tree stands, scattered coast live oak trees, and a stand of ornamental trees (see Figure 4.3-1). These trees provide biological habitat for nesting birds and monarch butterflies. The City's RME Policy 3 states, "Protect and preserve biological resources, and expand the urban forest […]." The project's potential impacts to special-status wildlife species would be reduced through implementation of Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, and BIO/mm-5.1, as described in detail above.

The City's RME Objective 3.1.a requires proposed development to avoid impacts to sensitive habitats if possible. Implementation Program 9 under this objective states that the City will enforce the existing Municipal Code requirements to preserve existing trees on building sites. City Municipal Code Chapter 12 Section 44.4 dictates "Existing trees shall be retained unless the finding can be made by the City Parks Department staff that the preservation of the tree presents a hazard to the health, safety and general welfare of the public or cannot be reasonably accommodated by the proposed development."

Under the development plan for the project, the entire project site would be graded and developed, which would result in the removal of all of the trees on the property. An arborist report has not been prepared for the project at this time; therefore, the precise number, size, and species of tree to be removed has not been quantified. However, if all existing trees located onsite are removed, in whole or in part, the project would have the potential to result in a conflict with RME Objective 3.1.a and Implementation Program 9 of the City RME and Section 12-44.04 of the City Municipal Code. Mitigation Measure 11.1 has been identified to require preparation of a tree protection, replacement, and monitoring program to ensure compliance with the City RME and Municipal Code. This program would include preservation of existing trees onsite to the greatest extent feasible, subject to the review and approval of City Parks Department staff. In accordance with the City Municipal Code requirements, the project would include planting of replacement trees for every tree with a trunk of 6 inches in diameter or greater (see City of Santa Maria Municipal Code Chapter 12-44, Landscape Standards) that is removed as a result of project activities. These new tree plantings would be maintained until they are fully established and would become a part of the city's urban forest.

With implementation of Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, BIO/mm-5.1, and BIO/mm-11.1, the project's potential impacts associated with conflicts with local policies and ordinances protecting biological resources would be *less than significant with mitigation*.

BIO Impact 11	
The project could result in conflicts with local policies and ordinances protecting biological resources, specifically considerations under the City's RME and Municipal Code.	
Mitigation Measures	
Implement Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, and BIO/mm-5.1.	
BIO/mm-11.1	*Prior to approval of a Planned Development Permit, the developer shall retain a City-approved biologist or arborist to prepare a tree protection, replacement and monitoring program or another mechanism that ensures consistency with RME Goal 3 and Policy 3, and compliance with the City's Municipal Code.* *The tree protection, replacement, and monitoring program shall include a tree survey report identifying the number, size, species, and status (live, dead, diseased, etc.) of trees to be protected in place, trees to be trimmed and/or pruned, and trees to be removed. The program shall demonstrate protection of existing trees with a trunk diameter of 6 inches or greater to the greatest extent feasible, in accordance with Municipal Code Section 12-44.4.* *Trees to be protected in place shall have high-visibility exclusion fencing placed around their critical root zone during project site disturbance, grading, and construction activities. Pavement within the canopy dripline of existing trees to be protected in place should not exceed twenty-five percent (25%) of the area of the canopy. All trees planted as mitigation shall have an 80% survival rate after 5 years. If the survival rate is not at least 80%, then enough trees shall be replanted to bring the total number of survived specimens to at least 80% of the original number of trees planted, as measured 5 years after the replanting. Annual monitoring reports that evaluate tree survivability, health and vigor shall be prepared by a qualified specialist and submitted to the City by October 15 each year, for 5 years. The project shall comply with City of Santa Maria Municipal Code Chapter 12-44 as it pertains to tree protection. Requirements shall include but not be limited to: construction setbacks to protection retained trees; construction fencing around trees; grading limits around the base of trees as required; and a replacement plan for trees removed.* *The final report shall include the final number of replacement trees utilizing the City's replacement ratio identified above. The developer shall submit a copy of the building and grading plans to the City for review and approval prior to the issuance of building or grading permits. Prior to site occupancy trees shall be planted, fenced, and appropriately irrigated.* *City Parks Department staff or a City-approved biologist shall verify that the tree protection, replacement, and monitoring program is adequate. The City shall conduct site inspections throughout all phases of development to ensure compliance with and evaluate all tree preservation and replacement measures.*
Residual Impacts	
With implementation of the identified mitigation measure, residual impacts related to consistency of the project with RME Goal 3, RME Objective 3.1.a, Implementation Program 9, and the City Municipal Code related to protection of biological resources, expansion of the city's urban forest, and tree preservation and replacement requirements would be less than significant.	

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

Based on the records and literature research conducted for the project, the project does not overlap with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plans. Therefore, the project would not conflict with any approved state, regional, or local habitat conservation plans, and *no impacts* would occur.

BIO Impact 12
The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.
Mitigation Measures
No mitigation is required.
Residual Impacts
There would be no conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impacts would occur.

4.3.6 Cumulative Impacts

The proposed project's contribution to cumulative impacts on biological resources is based on the loss of open space and associated wildlife habitat within the project region. The proposed project site is an infill parcel, which limits its ability to support wildlife and wildlife movement. Despite the disturbed nature of the site and location surrounded by developed urban land uses, the proposed project site does provide marginal habitat for ~~monarch butterflies,~~ northern California legless lizard, nesting birds and raptors, and roosting bats. In addition, the project site provides eucalyptus grove habitat, including overwintering habitat, for the monarch butterfly. The City anticipates the following five notable development projects located in the vicinity of the proposed project to occur in the near term:

- Lakeview Mixed Use project at the southeast corner of Mercury Drive and Auto Park Drive on an undeveloped parcel.
- People's Self Help Housing residential development project to include 49 new single-family residences at 3170 Santa Maria Way on a developed parcel.
- Northman Residential project located east of Santa Maria Way and north of Koval Lane on an undeveloped parcel.
- Park Edge Apartments at the southeast corner of Santa Maria Way and South Miller Street on a primarily undeveloped parcel.
- Santa Maria Studios Senior Apartments located at the northeast corner of Santa Maria Way and South Miller Street on a primarily undeveloped parcel.

In addition, the County anticipates the following ~~nine~~ eight notable development projects located in the vicinity of the proposed project to occur in the near term:

- AMG & Associates, LLC Affordable Housing located at 1331 East Foster Road.

- Oasis Meeting Center (Key Site 18) located on Clark Avenue west of Foxenwood Lane.
- Key Site 3 Multi-Family Residential Project located south of the intersection of Clark Avenue and U.S. 101.
- Orcutt Public Marketplace (Key Site 1) located in the northwest corner of the intersection of U.S. 101 and Clark Avenue.
- Orcutt Gateway Retail Center (Key Site 2) located south of Clark Avenue between U.S. 101 and Stillwell Road.
- Orcutt Union Plaza Phase II Amendment located at 201 South Broadway Street.
- OUSD Senior Housing (Key Site 17) Development Plan located on West Rice Ranch Road bordered to the north by Soares Avenue between South 1st Street and Dyer Street.
- The Neighborhoods of Willow Creek and Hidden Canyon Specific Plan (Key Site 21) residential project located on Highway 1 between Solomon Road and Black Road.

Based on a desktop review of each of these 13 proposed development projects using Google Earth (imagery dated May 5, 2023), the publicly available Map of Monarch Butterfly Overwintering Sites (Xerces Society for Invertebrate Conservation 2023), and the CNDDB (CDFW 2021c), none of these projects should have an impact on overwintering monarch butterfly populations or habitat. Eleven of these projects would not be in or near known overwintering populations. Two proposed projects in Santa Barbara County are each located within 900 feet of CNDDB overwintering site records and numbered western monarch overwintering sites (Xerces Society for Invertebrate Conservation 2023), as follows:

- OUSD Senior Housing (Key Site 17) Development Plan. This site does not appear to support overwintering monarch habitat, but is located approximately 900 feet north of Overwintering Site 2819. This site has no Thanksgiving Counts recorded and the CNDDB record is from 1983. Santa Barbara County prepared a staff report in 2013 that included a summary of the final impact and mitigation measures for the project; no impacts to monarch butterflies or their habitat were noted in this summary (Santa Barbara County 2013). The County Planning Commission approved this project in December 2022.
- The Neighborhoods of Willow Creek and Hidden Canyon Specific Plan (Key Site 21) residential project. This is a large site that should necessitate surveys for determination of appropriate habitat onsite, but based on preliminary review, does not appear to support overwintering monarch. This site is located approximately 900 feet north-northeast of Overwintering Site 2692. During Thanksgiving Counts recorded at the site between 2016 and 2021, six monarchs were recorded in 2017 with no counts documented any other year. The CNDDB record corresponds with these findings but has an observation of 1,000 at this site in 1990. Further, in the Supplemental EIR for the project, the County found that the project site provides suitable roosting habitat in the form of large mixed eucalyptus windbreaks in the central, central-northern, and central-eastern portions of the site and that the Neighborhoods of Willow Creek project would permanently impact approximately 0.49 acre of eucalyptus stands on the site. Due to the small overall area of impact (0.49 acres of impact to the total 5.08 acres of eucalyptus stands on Key Site 21), the impact was found to be minimal and less than significant (Santa Barbara County 2019). This project is currently in review by the County of Santa Barbara and has not been approved.

In summary, these ~~These~~ projects have the potential to convert undeveloped lands to urban development. The lands in question are also infill parcels and, like the project site, only provide marginal habitat for wildlife. While the proposed Neighborhoods of Willow Creek and Hidden Canyon project has some potential to remove monarch habitat, the County documents that this removal would be small, overall, because most of the eucalyptus stand would be preserved with development of this particular project.

Regardless, when considering these projects in the cumulative context, the sites do support some habitat for ~~Despite the poor habitat conditions on the project site and the three sites mentioned above, the sites do support marginal habitat for~~ special-status species. Development of these sites would result in a loss of available wildlife habitat in the area.

Similar to the proposed project, development projects within the city would be subject to review for consistency with the goals and policies of the RME and the City's Municipal Code, which includes provisions for avoidance of sensitive habitats and retention of existing trees when they can be reasonably accommodated by future development. Development projects within the unincorporated areas of the county would be subject to review for consistency with the goals and policies of the Santa Barbara County Comprehensive Plan, including, but not limited to, the Conservation Element which includes recommendations regarding ecological systems as well as an Oak Tree Protection supplemental document. In addition, development projects with the potential to result in significant impacts to biological resources would be subject to review under CEQA and mitigation measures similar to the measures identified in this section would likely be required, as applicable.

Although the proposed project in conjunction with the projects mentioned above would contribute to the cumulative loss of wildlife habitat in the area, the quality of habitat in these areas is marginal and the project's contribution to this cumulative impact would be minimized through implementation of mitigation measures identified above. These measures include biological monitoring, worker environmental training, special-status species surveys and protection measures, and preparation and implementation of a tree protection, replacement, and monitoring program. ~~Therefore, the anticipated cumulative loss of wildlife habitat that the project would contribute to would be less than cumulatively considerable and *less than significant with mitigation*.~~

While the application of the mitigation measures previously identified would reduce impacts to most species to less-than-significant levels, this is not the case for the monarch butterfly. As noted previously, the Xerces Society has identified the stand of eucalyptus trees along the southern side of UVP as a Western Monarch Overwintering Site (mapped as #2688). Regardless of the small survey counts between 2015 and 2022, the eucalyptus grove that is south of UVP is an important inland overwintering grove of the monarch butterfly. The CDFW has designated the project site as an area of high conservation value for monarch butterflies (Area of Conservation Concern HEX ID 50049) (CDFW 2023). The inland Santa Maria overwintering sites, which includes the overwintering site south of UVP at the Richards Ranch site, have always been aggregations of smaller numbers of individuals. However, they still provide a valuable ecological niche to the species. Removal of smaller overwintering roosts could force the congregation of monarchs into larger colonies where stochastic events (disease, fire, grove removal, climate change) could significantly impact the species. For these reasons, the existing 7.63-acre overwintering site that is within the project site is considered significant habitat (CDFW 2023) and any removal or reduction of the grove would be considered *cumulatively considerable and significant*.

BIO Impact 13
The project could result in cumulatively considerable impacts to biological resources.
Mitigation Measures
Implement Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, and BIO/mm-5.1.

BIO Impact 13
Residual Impacts
With implementation of the identified mitigation measures, most residual cumulative biological resource impacts would be less than significant. However, development of the site under the conceptual development plan or any project of a similar density would necessitate the removal of the 7.63-acre monarch overwintering site (mapped as #2688) that exists on the project site. Removal of this habitat would create a significant and unavoidable impact that cannot be fully mitigated. CDFW is concerned that the loss of trees used by monarch butterflies for overwintering could contribute to extirpation of western monarch populations and has indicated that off-site mitigation is not feasible for the loss of overwintering habitat at the project site. Impacts could not be fully mitigated because there is a lack of information regarding the ability to develop off-site mitigation, there are no known local mitigation banks for monarch butterfly overwintering habitat, there is significant risk that restored off-site habitat would not be used by the monarch for overwintering, and there would be a significant temporal loss of the habitat while created overwintering habitat matures. For these reasons, the City determines that feasible mitigation measures are not available to reduce potentially significant impacts to the monarch butterfly from loss of habitat to a less-than-significant level. Thus, residual cumulative impacts to monarch butterflies would continue to be significant and unavoidable with the build out of the conceptual development plan or of a project on the project site that is similar in density.

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TECHNICAL MEMORANDUM

To: Dana Eady
Interim Director of Community Development
City of Santa Maria
110 South Pine Street, Suite 101
Santa Maria, California 93458

From: Robert MacAller, Natural Resources Senior Director
Sharif Durzi, Pollinator Ecologist

Date: June 28, 2024

Re: **Monarch Butterfly Habitat Conservation and Mitigation Opportunities, Richards Ranch Annexation Project / SWCA Project Number 70173**

INTRODUCTION AND BACKGROUND

The City of Santa Maria (City), as the Lead Agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) to assess the impacts that would result from the approval of the proposed Richards Ranch Annexation Project (project). The Final EIR will provide an evaluation of the environmental effects associated with the annexation and development project and will also identify potential mitigation measures recommended to address or minimize those effects. During the review process of the Partially Recirculated Draft EIR (PRDEIR), the California Department of Fish and Wildlife (CDFW) requested that additional information regarding possible monarch butterfly (*Danaus plexippus*) mitigation and conservation measures be included in the Final EIR (CDFW 2024).

The Richards Ranch project site is in the community of Orcutt, approximately 10.5 miles east of the Pacific Ocean and 4 miles south of downtown city of Santa Maria in Santa Barbara County, California (Figure 1). The project site is adjacent to the southeastern Santa Maria city limits. Union Valley Parkway (UVP) and Orcutt Road intersect the project site, forming a four-way signalized intersection in the northwestern portion of the project site approximately 400 feet east of the UVP and State Route (SR) 135 intersection. The project site is bordered on the west by SR 135, with residential development, the recently approved Santa Maria Airport Business Park project, the Santa Maria Airport, and active agricultural lands generally located farther west of SR 135.

The project site is mostly flat, gently sloping downward from east to west. The site is mostly nonnative annual grassland and disturbed coastal scrub, and also included stands of nonnative eucalyptus and landscape trees. The site appears to have been substantially and regularly disturbed over time from UVP construction and vegetation management (mowing/discing) (SWCA 2024).

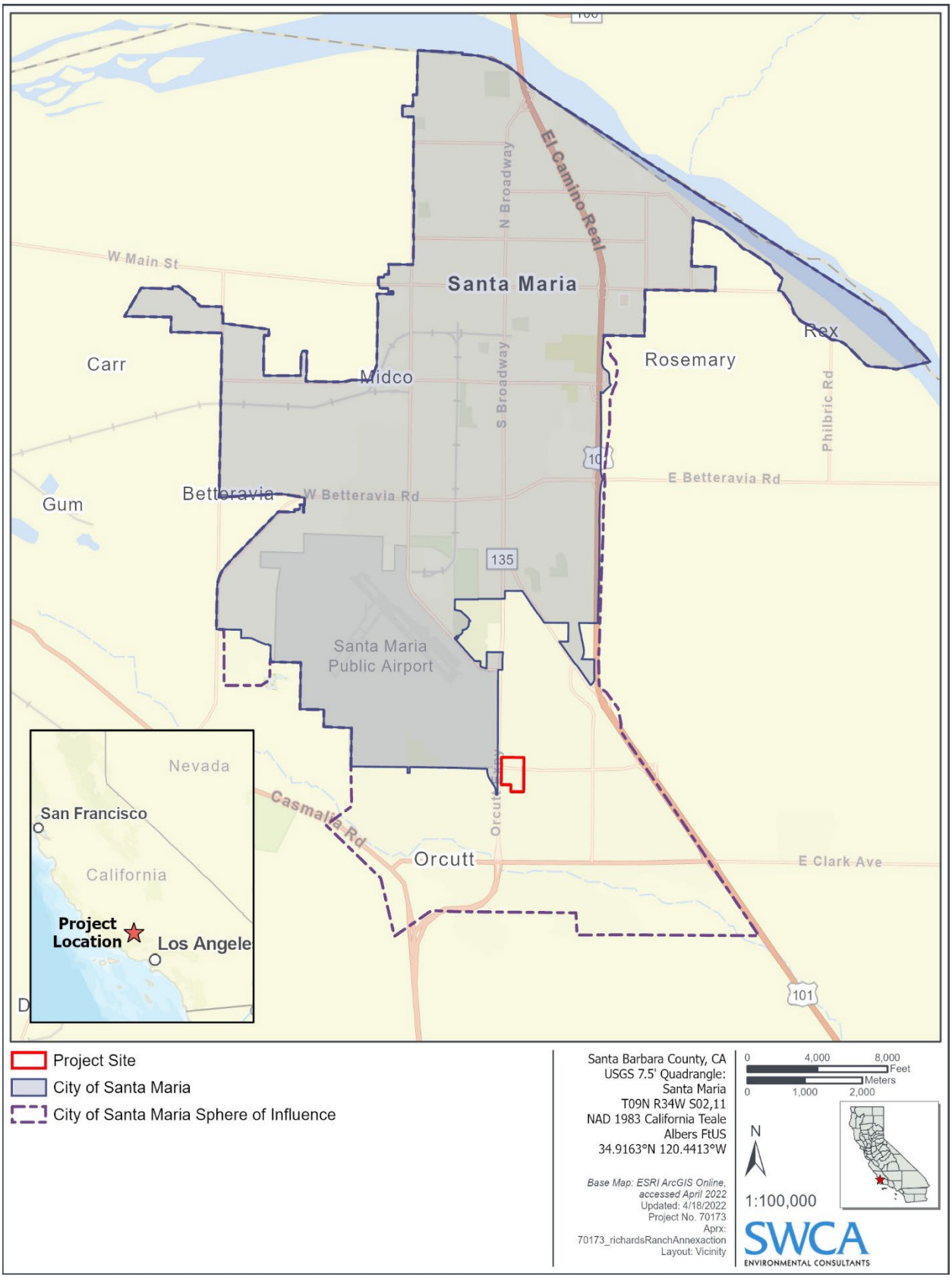

Figure 1. Project vicinity map.

The eucalyptus trees at the project site are mostly along the north and south sides of the UVP frontage and along the eastern border of the project site north of UVP. In total, there are around 100 individual eucalyptus trees in this area. There is an understory of nonnative grassland amongst the typical accumulated eucalyptus leaf litter and bark debris. The nonnative eucalyptus tree stand encompasses approximately 7.6 acres of the project site (SWCA 2024).

The monarch butterfly is a candidate for listing under the federal Endangered Species Act (FESA) and on the California Department of Fish and Wildlife's (CDFW) Special Animals list (CDFW 2022). It uses coastal woodlands and eucalyptus/pine tree stands for fall and winter roosts, typically from October through January. The 7.6-acre stand of trees at the project site has been observed with a small aggregation of fall/winter roosting monarch butterflies dating back to 1998. The Xerces Society community science program recorded 28 monarchs in November 2021, and 34 during the "Thanksgiving" counts (Xerces Society 2022). The Biological Resources Assessment prepared for the project (David Wolff Environmental, LLC [DWE] 2022) provides a detailed breakdown of the results of survey data over multiple years. Based on this, there appears to have been a sizable overwintering population in 1998, then a sharp decline to five individuals in 1999. Subsequent surveys between 2015 and 2022 yielded between 0 and 34 butterflies (DWE 2022). Based on the results of these surveys, the Xerces Society has identified the stand of eucalyptus trees along the southern side of UVP as a Western Monarch Overwintering Site (mapped as #2688).

The primary trees within the 7.6-acre grove have been previously cut down and have resprouted resulting in multi-trunk trees. In these eucalyptus trees, these trunk sprouting forms have branches with a weak attachment that can fail in high winds and are hazards to public safety. The existing grove is not maintained. Because of these hazardous conditions and the lack of existing maintenance or enhancement of the grove at the site, it is not sustainable.

Regardless of the small survey counts and the condition of the grove, CDFW has identified the grove as an inland overwintering site for monarch butterflies. The CDFW has designated the area of the project site to the south of UVP as an area of high conservation value for monarch butterflies (Area of Conservation Concern HEX ID 50049) (CDFW 2023).

According to CDFW, inland winter roosts in the Santa Maria area contain lower numbers of monarch butterflies than coastal roosts but are still biologically significant resources for this species. The inland Santa Maria overwintering sites have always been aggregations of smaller numbers of individuals but provide a valuable ecological niche to the species. Removal of smaller overwintering roosts could force the congregation of monarchs into larger colonies where stochastic events (disease, fire, grove removal, climate change) could significantly impact the species. Multiple overwintering sites that are widely distributed buffers the species against catastrophic loss and extinction. For these reasons, despite the hazardous conditions of the grove for people and/or future residents, the existing 7.6-acre overwintering site that is within the project site is currently considered significant habitat for monarch butterflies (CDFW 2023).

Development of the site under the envisioned project or any project of a similar density would necessitate the removal of the 7.6-acre monarch overwintering site that exists on the project site. The City has identified that removal of this habitat would create a significant and unavoidable impact that cannot be fully mitigated (SWCA 2024). However, to meet CEQA requirements, the City must identify and detail "rough proportionality" feasible mitigation measures to minimize the significant impact that would occur if the proposed Richards Ranch project were to be developed.

As of January 2024, and as reflected in the PRDEIR, several mitigation measures have been identified for the loss of the monarch butterfly habitat. The CDFW has expressed that they are comfortable with the current measures, except for the level of detail that is provided in the last measure, which requires the

Richards Ranch project developer to donate funding to assist with the overwintering monarch butterfly conservation goals of conservation entities; the measure does not currently identify which entities. The donation is currently envisioned as providing funding for 5 years of conservation research and/or maintenance and management activities for an area equivalent to that impacted on the project site. The CDFW requests additional details be developed for this measure (CDFW 2024).

In addition, the CDFW requests that the City further explore the potential for conservation of off-site habitat that is not on the Richards Ranch property (i.e., an off-site habitat) and that is not currently managed by a conservation organization (CDFW 2024).

PURPOSE OF THIS MEMORANDUM

The City is seeking to identify opportunities for 7.6 acres of conservation activities to support the further development of a mitigation measure to be included in the EIR, which would ultimately be the responsibility of the Richards Ranch project developer; 7.6 acres is a 1:1 ratio for the loss of the grove in the project area. SWCA believes this is an appropriate ratio as the primary trees on-site are eucalyptus and most of these have been previously cut down and have resprouted resulting in multi-trunk trees. In eucalyptus, these trunk sprouting forms have branches with a weak attachment that can fail in high winds and are hazards to public safety.

The existing grove at the project site supports an overwintering population of up to 30 monarch butterflies (0–30 based on Western Monarch Count Viewer between 2015 and 2021), average of 13.9 per year. The existing grove is not maintained and would not be maintained in the absence of the project. The grove is not sustainable and will likely, ultimately, be lost. For these reasons, funding the conservation and maintenance of an equivalent managed grove in the region at 1:1 would provide appropriate mitigation for its loss.

In summary, the purpose of this memorandum is to provide the following information to further expand the mitigation requirements included in the EIR:

- Identify the organization(s) that could be considered as recipients of conservation funding to offset impacts to the monarch butterfly habitat that would be caused by the project, including information about qualifications relative to management of lands for the benefit of monarch butterfly.
- Based on outreach to conservation organizations, quantify the amount of funding that would be required and, if possible, how the amount was calculated.
- Provide an evaluation of the feasibility of conservation of off-site habitat that is not on the Richards Ranch property (i.e., an off-site habitat) and that is not currently managed by a conservation organization. Off-site conservation opportunities should provide a "roughly equivalent" habitat value as the existing monarch grove at the Richards Ranch site. This effort includes conducting research to determine if off-site groves can be identified that can feasibly be acquired or conserved based on publicly available information.

ASSESSMENT PREPARATION

This evaluation has been conducted by SWCA biologists Robert MacAller and Sharif Durzi.

R. MacAller, a Senior Natural Resources Director at SWCA, is an accomplished restoration biologist and has been providing expertise in natural resources–related issues for over 30 years. He has spent the past two decades guiding his clients through the complexities of federal, state, and local environmental regulations to successfully complete their projects. He has managed large teams to complete challenging

projects for private developers, city and county governments, and federal agencies. As a habitat restoration expert, R. MacAller has effectively negotiated, planned, implemented, and managed mitigation projects for a variety of habitats throughout California and the Southwest. He has successfully restored habitat for numerous endangered species, including butterfly species such as the federally endangered Quino checkerspot, Palos Verdes blue, and Hermes copper butterflies and enhancement of habitats for the benefit of monarch butterfly. Additionally, R. MacAller planned and implemented the U.S. Army Corps of Engineers-funded Santa Maria River Levee ecosystem restoration project in Santa Maria.

S. Durzi is a Pollinator Ecologist specializing in conducting habitat assessments, focused foraging surveys, population studies, and development and implementation of habitat restoration for rare and sensitive pollinators and other terrestrial invertebrates. His 9 years of experience includes the management of complex projects for public and private clients across the western United States with a geographic focus in California's southern coast to the Central Valley. He regularly manages pollinator biologists and restoration ecologists to successfully implement restoration strategies for pollinator and other native species recovery. S. Durzi has experience with FESA and CESA compliance and has extensive experience managing projects at the nexus of sensitive invertebrate federal and state recovery needs.

EXPANDED CONSIDERATION OF SUPPORTING AN EXISTING CONSERVATION PRESERVE

In consultation with the City, SWCA identified several local conservation organizations looking for funding for the purchase of existing groves, assisting with current grove conservation efforts, and/or implementing up to 5 years of maintenance and monitoring for an equivalent area of approximately 7.6 acres.

SWCA reached out to conservation entities with current efforts in Santa Barbara County. Entities were chosen for outreach that are well known in the region, actively manage lands or resources for conservation, and have specific experience and/or land holdings with monarch butterfly and their habitats. Prior to any outreach, SWCA and the City discussed this approach with the CDFW for their concurrence.

SWCA gathered information from selected organizations on their ability to accept a donation from a private party, how funding could be accepted, and if funding could be applied to specific monarch butterfly conservation efforts. Specifically, these efforts would need to focus on enhancing or restoring habitats of at least 7.6 acres over a 5-year period (as this is a typical applicant funded habitat restoration success period). Funding would focus on maintenance of existing grove trees, exotic species control, native grove tree planting and/or replacement of eucalyptus trees with native tree species, planting of understories with native plant communities, general grove habitat maintenance, and/or qualitative and quantitative monitoring efforts. These efforts may otherwise contribute to improving scientific studies on monarch butterflies and their conservation in the city and/or Santa Barbara County. SWCA also inquired what amount of funding the organization would require in order to undertake these efforts for 7.6 acres over 5 years.

SWCA conducted outreach to the Xerces Society, the Land Trust for Santa Barbara County, the Rancho Maria Golf Club, and The Nature Conservancy (TNC). Table 1 lists the outreach efforts to these groups and their qualifications as appropriate conservation entities and/or land managers for monarch butterfly and general management of sensitive natural resources.

Table 1. Conservation and Local Entities Outreach Log

Entity	Contact	Date(s)	Method	Qualifications	Results
California Department of Fish and Wildlife	Kelly Fisher	5/1/2024	Teams Meeting	The CDFW provided comments on mitigation efforts for monarch butterfly on Richards Ranch and is the authority of fish, wildlife, and plant regulation in California. The CDFW is an active participant in the Western Association of Fish and Wildlife Agencies effort to enhance western monarch conservation.	There are no specific funding efforts for the applicant with the CDFW. The CDFW encouraged identifying opportunities with conservation organizations as potential mitigation, particularly the Xerces Society, Santa Barbara Land Trust, and TNC.
The Xerces Society	Emma Pelton, Sara Cuadra	5/10/2024, 5/14/2024, 5/20/2024	Phone	The Xerces Society for Invertebrate Conservation is a non-profit organization committed to the preservation of invertebrates, such as butterflies, and their natural habitats. To achieve its conservation objectives, the Xerces Society engages in partnerships with a diverse array of entities, including government agencies, academic institutions, non-profits, and private landowners. They Xerces Society provides data on overwintering monarch populations within the city.	No response as of 6/7/2024
Land Trust for Santa Barbara County	Susan (administrative contact)	5/14/2024, 5/20/2024, 6/11/2024, 6/27/2024	Phone, email	The Land Trust for Santa Barbara County is a nonprofit dedicated to conserving natural resources, agricultural land, and open spaces for future generations. It has protected nearly 30,000 acres within the county. Additionally, the Trust manages the Coronado Butterfly Preserve, which serves as a critical habitat for monarch butterflies, including during their overwintering season. This 9.3-acre preserve, featuring coastal sage scrub, eucalyptus groves, and meadows, lies adjacent to one of California's largest monarch groves.	Phone call with Alison Petro (Land Stewardship Director) on 5/20/2024. Follow-up emails sent on 5/21/2024 and 6/3/2024, and received on 6/11/2024, and 6/27/2024. A. Petro confirmed the Land Trust for Santa Barbara County has previously accepted off-site mitigation funds for overwintering monarch conservation and indicated the 9-acre Coronado Butterfly Preserve in Goleta has upcoming planned projects that may benefit from funding and expressed interest in using mitigation funds for lands acquisition. A. Petro is following up with her broader team to discuss the receiving of funds from the City of Santa Maria and was asked to provide costs associated with long-term stewardship for the Coronado Butterfly Preserve overwintering site. SWCA will connect contacts at the Dangermond Preserve with the City to further discuss opportunities to accept mitigation funding.

Entity	Contact	Date(s)	Method	Qualifications	Results
The Nature Conservancy Dangermond Preserve	Moses Katkowski	5/10/2024, 5/14/2024, 5/20/2024, 6/3/2024, 6/7/2024	Phone	TNC's Dangermond Preserve is a significant natural area located in Santa Barbara County. The preserve encompasses a diverse range of ecosystems, including coastal dunes, oak woodlands, chaparral, and wetlands, each of which supports a wide array of wildlife and plant species, including overwintering monarch butterfly populations. A primary objective of the TNC is to protect these vital habitats and maintenance of winter roost sites for monarch butterflies.	Phone call with Moses Katkowski (Stewardship Manager) on 6/3/2024. Follow-up email sent on 6/4/2024. M. Katkowski confirmed the Dangermond Preserve has only used mitigation funds from California Coastal Commission mandate resulting from violations of the previous landowner. However, M. Katkowski indicated the preserve would be interested in further mitigation funds that would come with few conditions on how to spend. Moses is following up with his broader team to discuss the receiving of funds from the City of Santa Maria and was asked to provide costs associated with long term stewardship for Dangermond overwintering site. SWCA will connect contacts at the Dangermond Preserve with the City to further discuss opportunities to accept mitigation funding.
Rancho Maria Golf Club	Mike O'Keefe	5/14/2024, 5/15/2024,	Phone	The Rancho Maria Golf Club is a privately held full-service golf club area located in the city of Santa Maria. A Xerces Society-described western monarch overwintering site occurs within the property.	Phone call with Mike O'Keefe (General Manager) on 5/14/2024 and follow-up email on 5/15/2024. Over the phone, M. O'Keefe indicated very little interest in investing in a conservation mechanism for long-term preservation of the existing eucalyptus groves on the Rancho Maria Golf Club. M. O'Keefe did not respond to follow-up email, and it was presumed the Rancho Maria Golf Club would not be a viable opportunity for investment of mitigation funds.

Based on responses from these organizations, the Land Trust for Santa Barbara County and TNC have been identified as potential recipients of funding. Both organizations currently maintain Xerces Society-described monarch overwintering sites accounting for more than 7.6 acres of contiguous overwintering groves and responded favorably to initial outreach efforts. Costs associated with funding local conservation organizations have yet to be determined, but both organizations have been asked to provide cost estimates for annual maintenance for their existing overwintering groves. Once cost estimates have been collected, SWCA will assist the City with identification of an appropriate mitigation fee to account for maintenance on at least 7.6 acres over a 5-year period.

ESTIMATING ENHANCEMENT AND RESTORATION COST

The cost to enhance or restore habitat for the monarch butterfly in the region is highly variable, depending on the condition of the property, existing resources, required planning and permits, proximity of water sources, and cost of qualified enhancement or restoration professionals to conduct planning, installation, and long-term monitoring. A general description of anticipated cost, without permitting or cost to purchase land, and assuming no earth work or extensive exotic species removal with a water source available on-site, is provided below and a per acre basis at rates typical for a private sector restoration or native landscaping company.

Estimates of Habitat Enhancement Costs

Enhancement activities would need to be conducted on properties with existing groves that could currently support monarch butterflies. Enhancement tasks for an equivalent-sized off-site property may include the following:

- minor weed removal up to four times per year;
- installation of up to twenty 15-gallon native or suitable naturalized trees per year to replace preferred overwintering eucalyptus trees, up to one hundred 1-gallon native understory species, and up to 7 acres of application of pure live seed of native understory, forb, and herbaceous species;
- hand watering;
- quarterly trash removal;
- monthly site monitoring;
- annual quantitative monitoring of grove health and monarch butterfly populations;
- annual reporting of site conditions; and
- limited public outreach.

Enhancement costs would need to also include funds for adaptive management if monitoring identifies issues (such as new weed infestation) that may impact the sustainability of the grove. Cost to conduct the above activities and to purchase trees, shrubs, and a 10% contingency would range from $70,700 to $91,500 per acre per year during the first 1 to 2 years of enhancement activities, with effort and cost reducing in years 3 through 5, reducing thereafter.

Estimates of Restoration Costs

Restoration activities would need to be conducted on properties with limited existing groves, with significant areas (at least 1 acre in size) requiring creation of groves. Restoration tasks may include the following:

- site preparation (access creation, weed removal, trash and debris removal)
- monthly weed removal for 2 years, and up to four times per year in subsequent years;
- installation of up to one hundred 1-gallon native or suitable naturalized trees to create preferred overwintering trees, up to one hundred 1-gallon native understory and tree species, and up to 7 acres of application of pure live seed of native understory, forb, and herbaceous species;
- installation of an irrigation system;
- quarterly trash removal;
- monthly site monitoring;
- annual quantitative monitoring of grove health and monarch butterfly populations;
- annual reporting of site conditions; and
- limited public outreach.

Restoration costs would also need to include funds for adaptive management if monitoring identifies issues (such as new weed infestation) that may impact the sustainability of the grove. Cost to conduct the above activities per acre and to purchase trees, purchase shrubs, install irrigation, and a 10% contingency would range from $125,000 per year to $150,000 to implement the first year, and 86,000 to 100,000 in year 2 prior to integrating into existing enhancement measures with the existing grove.

Conclusion and Limitations

The enhancement and restoration costs outlined above provide the higher end limits to implement enhancement or restoration activities for a private entity in a currently unmanaged 7.6-acre parcel. It is anticipated that conservation or government organizations with existing groves, conservation efforts, and management activities in current operation can provide these services at a reduced rate, while significantly enhancing their managed resources. The needs and subsequent costs required by these organizations will vary depending on existing conditions, stewardship priorities, and funding mechanisms.

Based on estimated costs for private entities, and available information from conservation and governmental organizations that are currently managing monarch butterfly groves, it is anticipated that appropriate and meaningful conservation funds for a five-year program would range between $76,000 and $275,000 for an equivalent 7.6-acre effort. However, while inquiries have been made, direct funding requirements from these organizations has not yet been received and the organizations generally indicated that it was premature to identify a funding amount at this stage of the planning process.

EXPANDED CONSIDERATION OF ESTABLISHING A NEW CONSERVATION SITE

The City conducted research to identify potential off-site groves that may be available for purchase or conservation, or restoration efforts for an equivalent of 7.6 acres. The research included identifying groves in the region currently identified as an Overwintering Site in the Xerces Society Western Monarch Count Viewer (Xerces Society 2024), calculating acreage of the groves, determining the ownership of listed groves using parcel maps in publicly available geographic information system (GIS) data, and emailing and calling owners to determine their interest in enhancing their groves for the benefit of monarch butterfly and interest in establishing conservation easements on their property.

In addition, publicly available websites, including Santa Maria Association of Realtors, Zillow, and Realtor, in conjunction with the CDFW California Natural Diversity Database (CNDDB), were used to

identify currently available listings for vacant land with identifiable eucalyptus or other monarch supporting trees, or areas that may be suitable for habitat restoration. Sites were evaluated within 3 miles of the Richards Ranch property between 3 and 15 acres in size. Each site was evaluated for potential to meet the mitigation needs of the projects and for current listing price. The projects were not evaluated for any potential zoning issues related to grove enhancement of restoration.

Potential estimated cost ranges for enhancement or restoration measures were determined at a per-acre value. The cost for establishment of a conservation easement or non-wasting endowment for long-term conservation requirements have not been calculated as these will vary considerably from project to project; however, these may be additional costs.

The City conducted research to identify potential off-site groves that may be available for purchase or conservation, or restoration efforts for an equivalent of 7.6 acres. The research included identifying groves in the region currently identified as an Overwintering Site in the Xerces Society Western Monarch Count Viewer (Xerces Society 2024). Eight Xerces Monarch Butterfly Overwintering sites were identified for analysis to provide off-site conservation opportunities within or immediately adjacent to the city of Santa Maria were identified (Table 2 and Figure 2).

Table 2. Xerces Society Western Monarch Overwintering Sites

Xerces Site ID	Owner	Decision/Action
2824	West Bay Company/Private	**Eliminated from consideration.** Most of this site is under active agriculture with a small eucalyptus grove on the edge. Would require substantial restoration. Private ownership
2680, 2690	Santa Maria Public Airport District/Public	**Good potential for conservation efforts.** Nearly 100 acres of existing trees and groves in public ownership. Surrounding open spaces. Within a Santa Barbara County facility complex. No public counts of exiting monarch butterflies provided. The City contacted Martin Pehl, General Manager of the Santa Maria Airport about the potential for future conservation and enhancement at the site on June 13, 2024; conversations are ongoing.
2691	County of Santa Barbara	**Low potential for conservation efforts.** Over 10 acres of existing trees and groves in public ownership. The Santa Maria Airport grove less than 0.5 to the west. Surrounding open spaces. Count of two monarchs recorded.
2819	Two private entities	**Eliminated from consideration.** Within a large open space, but limited grove present and large-scale restoration would be required. Private ownership.
2816	Santa Maria Country Club	**Eliminated from consideration.** Record immediately adjacent to structures within a golf course surrounded by urban uses. Would not be sustainable for long term. Private ownership.
2692	Rancho Maria Golf Club	**Eliminated from consideration.** Over 7 acres of existing trees and groves and surrounding open spaces. In private ownership.
2677	Santa Maria Valley Railroad ROW	**Eliminated from consideration.** Site has relatively high counts of monarch butterflies (up to 26), but the site is very narrow, less than 5 acres, and surrounded by urban land uses. Not sustainable over the long term for conservation.

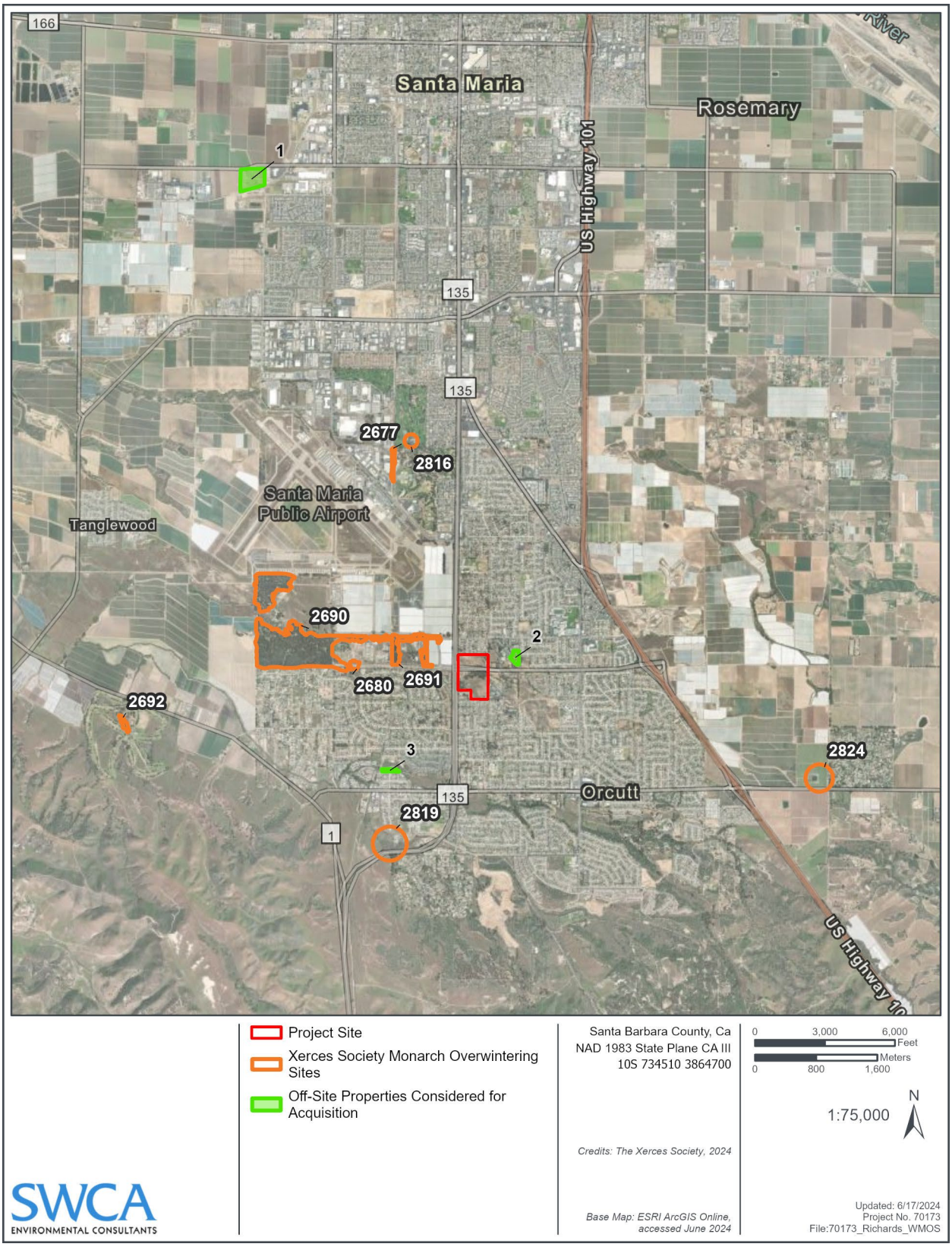

Figure 2. Nearby properties considered for enhancement, acquisition, and conservation.

Each of these sites were screened to determine if they may be appropriate for conservation efforts or should be eliminated from further consideration. A site was eliminated if it did not provide at least 6 acres of existing overwintering habitat, if it was surrounded by urban uses, or otherwise not a sustainable conservation effort. Three of the sites (Xerces Site ID 2690/2680 – Airport Complex, 2691 – California Boulevard, and 2692 – Rancho Maria Golf Course) were determined to provide good opportunities for conservation efforts with at least 7 acres of potential overwintering groves, adjacent open areas, and appropriate adjacent land uses. Each of the landowners (or their agents) of these target parcels was then contacted by phone to discuss interest in establishing conservation or enhancement efforts on their properties for monarch butterfly. The remaining four Xerces Monarch Butterfly Overwintering sites were eliminated from further consideration due to lack of existing groves, requirements for habitat restoration, small project size, and/or surrounding land uses.

In addition, publicly available websites were used to identify currently available listings for vacant land with identifiable eucalyptus or other monarch-supporting trees, or areas that may be suitable for habitat restoration when analyzed with the CNDDB. These sites are identified in Figure 2. Each available vacant property was screened to determine if it may be appropriate for conservation efforts or should be eliminated from further consideration. A site was eliminated if it did not provide at least 6 acres of existing overwintering habitat, if it did not provide at least 3.5 acres of existing overwintering habitat and did not have potential for restoration of an additional 3.5 acres, if it was surrounded by urban uses, or if an otherwise not a sustainable conservation site. Three potential properties are currently listed in the immediate regions and considered for off-site acquisition for conservation or restoration or a combination. All properties were eliminated from consideration as outlined in Table 3.

Table 3. Properties Considered for Off-site Acquisition

No. on Figure 2	Property	Description	Listing Price Total / Price per Acre	Decision/Action
1	1550 West Stonewall Road, #18	6.14-acre property in what appears to be active agriculture adjacent to development to the east and other active agriculture otherwise surrounding the property. There are no trees on the property and full restoration would be required.	$2,400,000 / $390,879	**Eliminated from consideration.** This site has no eucalyptus habitat on the property or within the vicinity. This provides over 6 acres of land that could be restored, but would be completely isolated. The price per acre Is over $390,000.
2	Union Valley Parkway	3.14-acre property with an existing eucalyptus grove that could be enhanced, located less than 0.2 mile northeast of the Richards Ranch Grove.	$2,500,000 / $796,178	**Eliminated from consideration.** This site has existing eucalyptus habitat that could be enhanced with limited restoration. The overall health and quality of the existing trees is unknown. However, this only provides 3.14 acres and the price per acre is over $796,000.
3	North Avenue #98	1.57 acres within a narrow corridor that appears to be an existing eucalyptus Wind Break. The trees could potentially provide a grove-like habitat, but it is constrained by a road to the south with a vacant unrelated canyon parcel to the north further surrounded by development or future development. Site is located 0.5 mile north of Xerces Site 2819 (no counts recorded).	$250,000 / $159,236	**Eliminated from consideration.** This site has existing eucalyptus habitat that has potential for enhancement and open area to the north. The overall health and quality of the existing trees is unknown. This only provides 1.57 acres and the price per acre is over $159,000.

CONCLUSION

Conservation Funding for an Existing Preserve

Of the conservation organizations operating preserves with existing monarch overwintering groves, within the vicinity of the proposed project, two organizations were identified as potential recipients of funding for the purchase of existing groves, assisting with current grove conservation efforts, and/or implementing up to 5 years of maintenance and monitoring for an equivalent area of approximately 7.6 acres. Both organizations currently maintain monarch overwintering groves accounting for more than 7.6 acres of contiguous overwintering habitat and responded favorably to initial outreach efforts. Those two organizations and associated overwintering sites are:

- Land Trust for Santa Barbara County, manager of the Coronado Butterfly Preserve in Goleta; and
- TNC, managers of the Jack and Laura Dangermond Preserve in Lompoc.

Stewardship coordinators for both organizations discussed existing precedent for receipt of off-site mitigation funding, but when asked if they were open to receiving additional funding they indicated they would require input from larger organizational decision-making teams and would prefer to have funding without stringent conditional agreements.

The cost associated with funding local conservation organizations has yet to be determined, but both organizations have been asked to provide cost estimates for annual maintenance for their existing overwintering groves.

Overwintering Sites Not Under Existing Preservation

The City has established contact with the General Manager of the Santa Maria Airport to discuss the potential for future conservation and enhancement at the site. Currently the almost 100 acres of documented monarch butterfly overwintering habitat, denoted as Xerces Society Monarch Overwintering Groves 2680 and 2690, are not under an existing conservation preservation mechanism. Close proximity to the Richards Ranch site and large continuous acres available at the Santa Maria Airport groves provide a comparably high conservation value for mitigation funds usage then funding existing preserves located outside the city boundaries. Discussions between the City and the property owner are ongoing.

Establishing a New Off-Site Conservation Site

The costs associated with acquisition of known monarch butterfly overwintering site, enhancement and/or restoration of available lands, and long-term maintenance under a durable conservation mechanism for an equivalent acreage to the projected impact area is likely cost prohibitive based on the following findings.

Land Acquisition

Initial estimate for land acquisition ranges from $159,236 to $796,178 per acre. None of the sites analyzed contained enough contiguous habitat to account for all 7.6 acres of proposed disturbance and thus acquisition of lands would have to be discontinuous, presenting a possibility for agency challenges.

Enhancement/Restoration

Initial estimates for enhancement or restoration costs on lands acquired ranges from $70,700 to $150,000 per year depending on the condition of the property, existing resources, required planning and permits, proximity of water sources, and cost of qualified enhancement or restoration professionals to conduct planning, installation, and long-term monitoring. The costs associated with enhancement or restoration would likely persist for a minimum of 5 years.

Other Possible Conservation Opportunities

Given the location of the project, approximately 8 miles south of the Santa Barbara/San Luis Obispo County line, additional possible conservation opportunities exist in evaluation of existing preserves or acquisition of viable preservable, restorable, and/or lands with potential for enhancement in San Luis Obispo County. For properties to be considered viable candidates for project mitigation funding, a geographically restriction of approximately 30 to 40 miles should be applied to best approximate the geographic overwintering niche provided by the Richards Ranch project site. Any new sites considered for conservation opportunities would also need to meet the conditions set forth in this memo for supporting existing conservation sites or establishing new conservation sites.

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May 6, 2024

Michael D. Stoltey, MBA
Managing Member
Richards Ranch LLC
via email

SUBJECT: MONARCH BUTTERFLY (*DANAUS PLEXIPPUS*) IMPACT AND MITIGATION ANALYSIS FOR THE RICHARDS RANCH ANNEXATION PROJECT, CITY OF SANTA MARIA, CA

Dear Mr. Stoltey:

David Wolff Environmental (DWE) is pleased to submit this response to comments on the January 2024 *Richards Ranch Annexation Partially Recirculated Draft Environmental Impact Report* (PRDEIR) prepared for the City of Santa Maria. The focus of this DWE response is the analysis of the further evaluation of the monarch butterfly (*Danaus Plexippus*) impact and mitigation as presented in the PRDEIR and comments received from the California Department of Fish and Wildlife (CDFW). DWE has prepared this analysis based mostly on information from:

- The July 8, 2022 DWE *Biological Resources Assessment* prepared for the subject project (DWE BRA).
- U.S. Fish and Wildlife Service December 17, 2020, Notice of 12-month finding for listing the monarch butterfly as threatened or endangered (USFWS Notice) (FR Vol. 85, No 243, pp. 81813-81822).
- *Richards Ranch Annexation Partially Recirculated Draft Environmental Impact Report*. SWCA Consultants, January 2024, prepared for the City of Santa Maria.
- California Department of Fish and Wildlife March 15, 2024 comment letter on the PRDEIR (CDFW 2024 letter).
- Xerces Society Western Monarch Count 2024 (www.westernmonarchcount.org)

MONARCH BUTTERFLY EXISTING CONDITIONS

The PRDEIR has adequately established existing conditions of the monarch butterfly both onsite and with a regional perspective. Table PDEIR-1 below summarizes the Western Monarch Count observation data from nine Xerces Society identified inland sites in the vicinity of the project site. No other inland sites within many miles have been identified by Xerces Society with Nipomo to the north and Lompoc to the south the nearest inland sites with observed and counted overwintering monarch butterflies. The rest of the Xerces Society counted sites are near the well-established life history of overwintering sites being near the

immediate coast supporting substantial numbers of monarch butterflies in the 100's, 1,000's, upwards of 20,000 at a single site in recent years.

The project site (Xerces Union Valley Parkway site #2688) has been observed recently over an 11-year period to support a small highly variable overwintering aggregation of 11 to 34 monarch butterflies in six of the 11 years, with 5 years with no observations of monarch butterflies. Four of the nine Xerces sites have no survey data associated with what is presumed to be mapped polygons around eucalyptus trees on private lands or in restricted areas of the Santa Maria Airport. As shown in Table PDEIR-1, four sites have recent survey data observations of 0 to 6 monarch butterflies.

TABLE PDEIR-1
WESTERN MONARCH COUNT OBSERVATION SUMMARY
IN THE VICINITY OF THE RICHARDS RANCH SITE

SITE ID	NAME/OWNERSHIP	YEARS COUNTED	MAXIMUM	MINIMUM
2677	Waller Park (public)	9	0	0
2688	Union Valley Pkwy (private; project site)	11	34	0
2689	Pioneer Park (public)	9	0	0
2690	Airport Complex (public)	0	--	--
2691	California Blvd. (public)	10	2	0
2692	Rancho Maria Golf Course (private)	9	6	0
2816	Santa Maria County Club (private)	0	--	--
2819	Orcutt (unknown)	0	--	--
2824	Lake Marie Estates (private)	0	--	--

IMPACT ANALYSIS

The PRDEIR adequately detailed that the proposed project removal of eucalyptus trees would result in significant and unavoidable impacts on the small number of overwintering monarch butterflies. This significant and unavoidable finding is based largely on the CDFW comments of the regional importance and conservation value of the inland site to the monarch butterfly. The existing conditions have adequately established that the continued conservation of the overwintering western monarch butterfly population rests with the sites supporting substantially significant greater numbers of monarch butterflies over multiple widely spaced sites over multiple years despite annual fluctuations (both up and down). While the PRDEIR made findings of significant and unavoidable impacts that cannot be fully mitigated, it should be placed in the context of nearby available overwintering eucalyptus groves identified by the Xerces Society. Table PRDEIR-1 provides the Xerces Society data of both observations and non-use of identified suitable overwintering habitat within close proximity to the project site. It is not implausible to suggest that displaced monarch

butterflies (or their progeny) would find suitable nearby overwintering habitat after the project site eucalyptus stand is removed outside of the overwintering period as provided for as mitigation for project impacts. While the appropriate seasonal timing of eucalyptus removal avoids direct impacts on individual monarch butterflies substantially minimizing the impacts, the PRDEIR findings remain significant and unavoidable and offers additional mitigation measures to further reduce and compensate for the loss of monarch butterfly overwintering habitat.

MITIGATION MEASURE ANALYSIS

The PRDEIR provides for series of mitigation measures to avoid, minimize, and compensate for the significant and unavoidable impacts on overwintering monarch butterflies, recognizing that it is not feasible to fully mitigate impacts to a less than significant level.

CEQA has long-established practice supported by case law when imposing mitigation (Nolan/Dolan). Lead agencies must ensure there is a "nexus" and "rough proportionality" between the mitigation measure and the significant impacts of a project. (CEQA Guidelines § 15126.4, subd. (a)(4)(A)–(B), citing *Nollan v. Ca. Coastal Commission* (1987) 483 U.S. 825, *Dolan v. City of Tigard* (1994) 512 U.S. 374.) All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies (CEQA Guidelines, § 15041). But, if any suggested mitigation is found to be infeasible the lead agency must explain why and support that determination with substantial evidence presented in their findings, and a statement of overriding considerations (CEQA Guidelines, §§ 15091 and 15093).

In summary, the PRDEIR provides a five-part mitigation measure (BIO/mm-2.1 (a-e)) to avoid direct impacts, restrict milkweed plantings (all species) as recommended by the Xerces Society to avoid disturbance to migratory patterns, onsite landscaping that favors monarch overwintering roost and nectar opportunities, and an undefined contribution to a monarch butterfly conservation effort/organization. These measures provide for a direct nexus to the impact, are feasible and enforceable by the lead agency, and meet the test of rough proportionality to the project impacts on the comparatively small aggregation of overwintering monarch butterflies.

The CDFW 2024 letter suggests that further unexplored mitigation options should be considered and imposed in the form of offsite purchase (at the very least a 2:1 ratio) and management in perpetuity of suitable habitat, or complete project redesign for onsite conservation and management of the eucalyptus grove. These mitigation recommendations are not in line with the fundamental CEQA principles and practices established in Nolan/Dolan. Specifically, CEQA Guidelines 15126.4(a)(4)(B) states in part, "Where the mitigation measure is an *ad hoc* exaction, it must be "roughly proportional" to the impacts of the project." The following establishes why the CDFW recommendations are infeasible, and thus not be imposed on the project.

- The monarch butterfly overwintering sites identified by the Xerces Society in the vicinity of the proposed project (a reasonable range of opportunities) summarized above in Table PRDEIR-1 are already in public ownership or on private lands with established commercial uses (golf courses) with minimal evidence of monarch butterfly overwintering (source: Xerces Society Western Monarch Count 2024). The lack of availability of an inland site property to purchase within reasonable proximity to the project site, in addition to the infeasible costs of such a land purchase, and typically required endowment to cover for long-term management costs, do not reflect a rough proportionality to the project impacts as described in the PRDEIR.
- Project redesign to protect in place or replace the eucalyptus grove onsite, with exhaustive management and setback requirements and use restrictions, is also infeasible and costly beyond any rough proportionality to project impacts on a small number of overwintering monarch butterflies. In addition to the economic loss of developable land on the infill project site, the general incompatibility for any additional landscaping under eucalyptus trees, and potentially hazardous conditions to development around eucalyptus trees (constant leaf, bark, seed pod, and falling branch debris) renders this measure infeasible and unadvisable.

Thank you very much for continuing with DWE for your biological resources consulting services.

Very truly yours,

David K. Wolff
Principal Ecologist