SARA STREET PROPERTIES, LLC VESTING TENTATIVE TRACT MAP TRACT 3138 (APN: 040-311-014)

BIOLOGICAL RESOURCES ASSESSMENT

July 22, 2020

Prepared for:

SARA STREET PROPERTIES, LLC
ABOVE GRADE ENGINEERING

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1320 VAN BEURDEN DRIVE, #202-D4
LOS OSOS, CA 93401

JULY 22, 2020

As a County-approved biologist and lead investigator, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of San Luis Obispo Department of Planning and Building and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visits described in this report associated with this study.

July 22, 2020

David K. Wolff, Principal Ecologist, Sage Institute, Inc. dwolff@sageii.com (805) 434-2804

Date



TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION AND PURPOSE	2
3.0	Existing Conditions	3
4.0	METHODS	3
5.0	RESULTS	4
5.1	HABITAT TYPES AND PLANT COMMUNITIES	4
5.1.1	DISTURBED ANNUAL GRASSLAND	4
5.2	WILDLIFE	5
5.3	WATERS OF THE U.S., WETLANDS, AND WATERS OF THE STATE	5
5.4	SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN	6
5.4.1	SPECIAL-STATUS BOTANICAL RESOURCES	6
5.4.2	SPECIAL-STATUS WILDLIFE	7
5.4.3	CALIFORNIA RED-LEGGED FROG HABITAT SUITABILITY ANALYSIS	8
6.0	IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES	9
6.1	SUFFICIENCY OF BIOLOGICAL DATA	9
6.2	IMPACT ASSESSMENT	10
6.3	RECOMMENDED MITIGATION MEASURES	10
7.0	CONCLUSIONS	11
8.0	References	11

APPENDIX A - FIGURES

FIGURE 1: REGIONAL LOCATION MAP

FIGURE 2: HABITAT MAP

FIGURE 3: CNDDB 10-MILE SEARCH OCCURRENCES MAP (PLANTS)
FIGURE 4: CNDDB 10-MILE SEARCH OCCURRENCES MAP (WILDLIFE)

FIGURE 5: REPRESENTATIVE PHOTOGRAPHS

APPENDIX B — TABLES

TABLE B-1: FLORISTIC INVENTORY AND RARE PLANT SURVEY SPECIES OBSERVED

TABLE B-2: CNDDB SPECIAL-STATUS SPECIES OCCURRENCE LIST

APPENDIX C - USFWS CALIFORNIA RED-LEGGED FROG ASSESSMENT



VESTING TENTATIVE TRACT MAP – TRACT 3138 BIOLOGICAL RESOURCES ASSESSMENT

1.0 EXECUTIVE SUMMARY

The Sara Properties, LLC, Vesting Tentative Tract Map, Tract 3138 project, proposes 15 residential lots of approximately 0.50 acre on a 10.88-acre site on Bennett Way north of Vineyard Drive in the community of Templeton, San Luis Obispo County, California, (APN: 040-311-014). The site currently supports nonnative annual grassland habitat, seven valley oak trees onsite in the northeast corner, and a valley oak and live oak in the southeast corner of the site. A low-lying swale runs south to north towards Toad Creek in the northeast corner of the site did have a bed, bank or channel, and did not meet the three-parameter jurisdictional wetland criteria. The swale will be graded and incorporated into a detention basin that will include preservation of seven valley oak trees, three of which will have grading impacts. Site development would remove one 11-inch dbh valley tree and one 10-inch dbh live oak tree in the southeast corner of the property.

The search and review of the CNDDB revealed, 20 special-status wildlife species and 30 special-status plant species with recorded occurrences within the approximately ten-mile search radius of the proposed project site. Field surveys conducted in November 2019, and January and May 2020, established existing conditions of the proposed project site and confirmed that no special-status wildlife species occur or have the potential to occur within the onsite habitats. An appropriately timed floristic inventory and rare plant survey determined the site does not support any special-status plant species. The conversion of non-native annual grassland and removal of one valley oak and one coast live oak would result in the displacement of common local wildlife within essentially an infill parcel and is considered to be a less than significant impact. Retention of seven oak trees would continue to provide foraging, roosting, and nesting habitat for birds. Locally common resident and migratory birds could use the site for breeding, foraging, and roosting that could be impacted by project construction. Mitigation to avoid potentially significant impacts on nesting birds and replacement oak tree removals with onsite oak tree plantings are recommended.

Based on the findings described in this biological resources assessment establishing the existing conditions setting of the proposed project site, and incorporation of the recommended mitigation measures, implementation of the proposed project would not result in any substantial adverse effects on biological, botanical, 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.

1.1 EXECUTIVE SUMMARY – COUNTY REVIEW REVISIONS

The County of San Luis Obispo and contract biologist Terra Verde Environmental Consulting reviewed the Sage Institute, Inc. (SII) January 27, 2020 Biological Resources Assessment (BRA) for the Sara Properties, LLC, Vesting Tentative Tract Map, Tract 3138 project and provide six comments to address in a revised BRA. The following summarizes the comments and SII responses that are fully addressed in the relevant sections of the BRA report.

1. Botanical Surveys – SII conducted an appropriately timed floristic inventory and rare plant survey of the project site in May 2020 at peak expression of the onsite flora. No rare, threatened, or endangered plant species were observed during SII field surveys. As such, the BRA findings stand as there would be not impact on any special-status plant species. The mitigation measure for special-status plant species has been removed based on these findings. See Section 4.0 Methods, Section 5.4.1, and Figure 5 for details.



- 2. California Red-Legged Frog (CRLF) Assessment SII has prepared and submitted a separate CRLF site assessment to the USFWS for concurrence included in this revised BRA as Appendix C. SII field surveys in November 2019, and January and May 2020 were sufficient to determine that the onsite non-wetland swale does not support any suitable aquatic habitat for the CRLF. Given the distances to known CRLF locations in creeks, and intervening mosaic of development creating barriers to movement to the known occurrences, there is no basis to presume the site is dispersal or foraging habitat for the CRLF. As such, SII does not recommend any conditions or mitigation measures, but does not take exception to the standard rain and nighttime avoidance measures. See Section 5.4.3 for details.
- 3. Waters of the U.S./State and Wetlands SII initial BRA field surveys and May 2020 field survey confirms the findings in the BRA that the onsite swale is a non-wetland non-jurisdictional swale. The January BRA clearly stated there was no evidence of a bed, bank, or channel only head cut erosion. Further, the three-parameter wetland procedure was used to determine the swale is not a jurisdictional wetland lacking hydric soils. As established in the BRA, the swale contains several small head cut erosion scours with no evidence of an Ordinary High Water Mark (OHWM; bed, bank, channel) onsite or continuing to Toad Creek. The County's review of Google Earth imagery does not provide sufficient evidence to change the SII findings established by appropriate field observation evaluation and data collection. SII does not recommend any agency concurrence with these clearly established findings. See Section 5.3 and Figure 5 for details.
- 4. Vernal Pool Fairy Shrimp/Western Spadefoot Toad Seasonal ponds/vernal pools can be clearly distinguished in a grassland setting at any time of year. David Wolff who conducted the field surveys for this site holds a Recovery Permit issued by the USFWS to survey for fairy shrimp and has exceptional knowledge and experience in identifying fairy shrimp habitat. The SII field survey in January 2020 was after sufficient rainfall to observe any seasonal ponding should it be present. Further, the SII May 2020 surveys followed abundant spring rainfall. The SII findings stand that there is no seasonal ponding habitat for either species on the project site. See Section 5.4.2 for details.
- 5. Legless Lizard The fundamental basis of legless lizard habitat niche is sandy soil where it spends most of its life underground. Suitable legless lizard habitat with loose sandy soils may have a shrub or tree cover creating debris for surface activity and to moderate temperatures. The BRA established the onsite soils as fine sandy loam and loam that would be impenetrable to the legless lizard regardless of oak duff. The SII findings stand that legless lizards would not be present but does not take exception to any standard County measures.
- 6. Oak Tree Impacts The BRA identified oak tree impacts and recommended onsite planting mitigation. Project revisions will avoid the four valley oak trees originally slated for removal for detention basin construction resulting in retention of the seven valley oak trees onsite. SII recommends including the oak tree planting locations and planting stock size on the landscaping plans for County approval, or indication of payment of the oak tree removal mitigation fee. See Section 6.3 and MM BIO-2 for details.

2.0 Introduction and Purpose

The Sara Properties, LLC, Vesting Tentative Tract Map – Tract 3138 project (project) proposes residential development on a 10.88-acre parcel on the west side of Bennett Way north of Vineyard Drive between Casper Court and Turkey Ranch in the community of Templeton (APN: 040-311-014). The project would



include the development of 15 lots of approximately 0.5 acre each with roadways and drainage easements. Access to the residential lots will be from a cul de sac off Bennett Way. The property is currently vacant land supporting almost entirely grassland habitat with a cluster of seven onsite valley oak trees in the northeast corner of the property, and a single valley oak and coast live oak in the southeast corner. Figures 1 and 2 in Appendix A provide a regional location map and existing conditions habitat map respectively. The proposed project would develop all the grassland habitat and removal of one valley oak tree and one coast live oak tree, while retaining seven valley oak trees and grassland habitat in a detention basin drainage easement in the northeast corner of the parcel.

Sage Institute, Inc. (SII) conducted the review of available background data, and biological and botanical field surveys on the Tract 3138 project site on November 14, 2019, January 20, 2020, and May 5, 2020. The purpose of this biological resources assessment is to document existing conditions of the proposed project site and to evaluate the potential for any direct or indirect significant impacts on biological or wetland resources, or adverse effects on any rare, threatened, or endangered plant or wildlife species (special-status species).

3.0 Existing Conditions

The proposed project site is somewhat an infill parcel in the midst of blocks of large lot residential development in the Vineyard Drive and Las Tablas Road area of Templeton west of Highway 101. The project site supports entirely a disturbed non-native annual grassland habitat that is mowed annually for fire suppression weed control. The grassland habitat is dominated by mostly non-native annual grasses and non-native herbaceous broadleaf plant species (forbs). A cluster of seven large onsite valley oak trees occurs on the northeast corner of the parcel with a single valley oak and coast live oak in a patch of coyote brush in the southeast corner. The site is a small hill with topography sloping down to the north with a low-lying grassy swale running south to north through the cluster of valley oaks in the northeast corner. Toad Creek riparian corridor runs west to east offsite just to the north of the adjacent residential property. No riparian habitat occurs on the upland project site.

The USDA Natural Resources Conservation Service (NRCS; Soil Conservation Service, 1983) has identified one soil series mapping unit within the project site. On-site soils are mapped as Arbuckle-San Ysidro complex, 2 to 9 percent slopes (map unit 106). The Arbuckle soil is a very deep, well-drained soil with moderately slow permeability that formed in alluvium derived from mixed rocks. The surface layer is typically a pale brown fine sandy loam about 10 inches thick with areas of gravel throughout the soil profile. The San Ysidro soil is a very deep, moderately well drained soil with very slow permeability that formed in alluvium derived from mixed rocks. The surface layer is typically a pale brown loam about 20 inches thick. Field observations of the surface soils affirm loamy soils with some areas containing gravel throughout the project site that is also an inclusion in the NRCS soils description.

4.0 METHODS

Prior to field surveys SII biologists conducted a review of available background information including aerial photography of the project area (Google Earth), the Natural Resources Conservation Service soil survey), and the ten-mile radius query results 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 potential special-status



species potentially occurring onsite or in the region, but rather only those that have been recorded by the CNDDB.

SII Principal Ecologist David Wolff conducted field reconnaissance surveys on November 14, 2019, January 20, 2020 and May 5, 2020. 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 to establish existing conditions. The purpose of the field surveys was to document existing conditions in terms of habitat for plant and wildlife species, suitability for special-status species, the potential to support wetland and/or riparian habitats, and/or waters of the U.S./State, and conduct a habitat suitability assessment for the California red-legged frog (*Rana draytonii*). The field surveys were conducted to include a complete floristic inventory and rare plant survey as the May 5, 2020 survey was conducted during the peak growing season and full expression of the onsite flora. 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.

SII Principal Ecologist David Wolff reviewed the available background information and available aerial photography, conducted the field survey, and is primary author and principal in charge of report preparation. The survey data collected on plant and wildlife species and conclusions presented in this biological and wetland 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. Community alliance and alliance codes used in this report follow *A manual of California vegetation, 2nd edition* (Sawyer et al. 2009). 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 only one plant community, disturbed non-native annual grassland habitat, with a few common native plant species within the botanical resources composition on the property. Figure 2 in Appendix A provides a habitat map showing the location and extent of habitat types on the proposed project site. Figure 5 includes a set of representative photographs of the site.

5.1.1 DISTURBED ANNUAL GRASSLAND

The disturbed non-native annual grassland habitat, or semi-natural annual brome grassland alliance (CNPS: 42.026.00), is typically dominated by non-native annual grasses and herbaceous broadleaf plant species, along with native forbs and wildflowers. Annual grassland habitat occurs as the only habitat type over the 10.88-acre project site. The non-native annual grassland within the project was observed during the floristic inventory and rare plant survey to be relatively low in native species diversity and dominated by mixed stands of slender wild oats (*Avena barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), vetch (*Vicia sativa*), and rattail fescue (*Festuca myuros*). Other common non-native forbs observed include mustards (*Hirschfeldia*; *Brassica*), fillarees (*Erodium cicutarium*, *E. botrys*), prickly lettuce (*Lactuca serriola*), yellow-star thistle (*Centaurea solstitialis*), and morning glory (*Convolvulus arvensis*). The few native herbaceous species observed in low abundance include sky lupine (*Lupinus nanus*), California poppy (Eschscholzia californica), narrow leaf milkweed (*Asclepia fascicularis*), and clustered tarweed (*Deinandra fasciculata*).



A cluster of seven large valley oaks (*Quercus lobata*) with grassland understory occurs on the northeast corner of the parcel. A small patch of coyote brush shrubs (*Baccharis pilularis*) with a small coast live oak and a single valley oak are in the southeast corner of the site. These oak occurrences do not constitute an oak woodland habitat type but are elements of the predominating annual grassland habitat. The site slopes to the north and northeast with a low-lying swale with head cut erosion running through the cluster of valley oaks in an unconsolidated drainage pattern towards Toad Creek. The swale contained perennial ryegrass (*Lolium perenne*) and Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*) that are typically found in mesic (moist) areas (see Section 5.3 below). A complete list of plant species observed during the floristic inventory and rare plant survey is included as Table B-1 in Appendix B.

5.2 WILDLIFE

The annual grassland habitat within the surrounding mosaic of urbanized residential blocks around the project site provides minimal quality habitat for wildlife species that have become adapted to the urban environment. Evidence of California ground squirrels, meadow mice, gophers, brush rabbit, and deer were observed on the project site. Acorn woodpeckers, Pacific slope flycatchers, house finch, and a northern flicker were also observed. Given that the site is surrounded by urban development, other wildlife use is likely limited with generally low wildlife values attributed to this site. The habitat on the project area does not support a significant amount of grassland habitat in the context of the great expanse of the interconnected and diverse habitat mosaic available to wildlife in the undeveloped areas in this region of northern San Luis Obispo County. As such, the project site does not represent a movement corridor for wildlife given adjacent residential development and Highway 101 just to the east of the site.

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

The thorough field surveys affording 100 percent visual inspection of the entire project site resulted in no observations of wetlands or riparian habitat on or adjacent to the project site. No seasonal ponded areas (vernal pools) were observed during any of the wet or dry season SII field surveys. The unconsolidated swale with no bed, bank or channel onsite or connection to Toad creek (only head cut erosion scours), was evaluated for the three parameter jurisdictional wetland criteria (plants, hydrology, soils). As noted above, perennial ryegrass and Mediterranean barley were observed in the swale that are facultative wetland species (FAC) that occurs equally in wetland and non-wetland areas. As would be expected the low-lying swale does collect moisture with puddles observed in the head cut erosion scours of the swale during the January field survey. Absent continued rainfall these areas would become dry and not stay ponded sufficient to meet the wetland criteria. There was no evidence of surface flow such as drift lines of debris or movement of leaf litter. Close examination of the soils for hydric soils characteristics (wetland soils) both in and outside of the swale did not reveal any soil features to be determined a hydric soil. In fact, the soil color field indicator for hydric soils was the same in both the swale and non-swale soils test pits. The swale soils test pits showed no field indicators of hydric soil like redoximorphic features (e.g. mottles) that are caused by sufficient wetland hydrology. The coarse sandy loam soils observed lacking hydric soil indicators are not expected to retain soil moisture sufficient to satisfy a three-parameter jurisdictional wetland determination. While the swale supported a FAC plant species, and by virtue of topography is moister than the surrounding uplands, the lack of evidence of surface flow and lack of hydric soil indicators supports a non-wetland swale determination. As such, it does not represent a jurisdictional waters of the U.S./State or wetland. See Figure 5 representative photographs.



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 on lists 1B, 2, and 4 of the 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 revealed 50 special-status species composed of 30 special-status plants and 20 special-status wildlife species, with one natural communities of special concern with recorded occurrences in the ten-mile search radius of the proposed project site. The cluster of five valley oak trees do not constitute a Valley Oak Woodland natural community of special concern. The following briefly describes or summarizes the special-status species issues and potential for occurrence on the project site. Table B-2 in Appendix B provides a list of special-status species recorded in the CNDDB and includes scientific and common name and listing status. Figure 3 and 4 in Appendix A provides maps of CNDDB special-status plant and wildlife species respectively with recorded occurrences within approximately ten miles of the project site.

5.4.1 Special-Status Botanical Resources

The CNDDB revealed the recorded occurrences of 30 special-status plant species within a ten-mile radius of the project site. Only one of these species, the Chorro Creek bog thistle (*Cirsium fontinales* var. *obispoense*), is a FESA/CESA listed endangered species, with the remainder being CNPS rank 1.B species suggesting rarity. The special-status plant species occurrences recorded in the CNDDB are commonly associated with a specific soil type, moisture regime, habitat, and/or elevation range that dictates the range or microhabitat of the species. No rare, threatened, or endangered plant species or remnants thereof were observed within the project area during SII floristic inventory and rare plant field surveys conducted at the peak expression of the onsite flora during the springtime blooming season. The following provides a suitability analysis for special-status plant species with CNDDB recorded occurrences in the region.

The Chorro Creek bog thistle occurs only in serpentine seeps that were not observed during SII field survey and, therefore, is this species is not expected to occur on the project site. The perennial species bristlecone fir (*Abies bracteata*), mouse-gray dudleya and Blochman's dudleya (*Dudleya abramsii ssp. suina; D. blochmaniae* ssp. *blochmaniae*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Santa Margarita manzanita (*Arctostaphylos pilosula*), Santa Lucia bush-mallow (*Malacothamnus palmeri* var. *palmeri*), and San Luis Obispo sedge (*Carex obispoensis*) would have been noticeable and identifiable throughout the year and were not observed during any SII field surveys.

Special-status plants recorded in the CNDDB associated with serpentine soils or clay soils that do not occur on the project site include Mile's milk-vetch (*Astragalus didymocarpus* var. *milesianus*), San Luis and La Panza mariposa lilies (*Calochortus obispoensis; C. simulans*), Lemmon's jewelflower (*Caulanthus lemmonii*), *Brewer's spineflower (Chorizanthe rectispina*), Cuesta Ridge thistle (*Cirsium occidentale* var. *lucianum*), Eastwood's larkspur (*Delphinium parryi ssp. Eastwoodiae*), Ojai and San Benito fritillaries (*Fritillaria ojaiensis; F. viridea*), Jone's layia (*Layia jonesii*), Palmer's monardella (*Monardella palmeri*),



woodland wollythreads (*Monolopia gracilens*), and the most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*). No serpentine or clay soils are mapped or observed within the project area, therefore, the site does not represent suitable habitat for these plant species and were not observed during the rare plant survey.

The special-status plant species recorded in the CNDDB known from mesic/moist/wetland type habitats occurring in the region are the Chorro Creek bog thistle, San Luis Obispo sedge, shining navarretia (*Navarretia nigeliformis*), Santa Lucia dwarf rush (*Juncus luciensis*), and shining navarretia (*Navarretia nigeliformis* ssp. *radians*). There is only the mesic swale onsite with rye grass and Mediterannian barley with no true wetland habitats on the project site, therefore these species are not expected to occur and were not observed during the rare plant survey.

The remaining special-status plant species associated simply with grassland habitats occurring in the region are the Hoover's bent grass (*Agrostis hooveri*), dwarf calycadenia (*Calcadenia villosa*), San Luis Obispo owl's-clover (*Castilleja densifllora* var. *obispoensis*), straight-awned spinefloer (*Chorizante rectispina*), yellow flowered eriastrum (*Eriastrum luteum*), and Oregon meconella (*Meconella oregana*). These species were not observed during the rare plant survey.

5.4.2 Special-Status Wildlife

The CNDDB search revealed the recorded occurrences of 12 special-status wildlife species within the five-mile search radius 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.

Aquatic Species – The CNDDB has recorded occurrences for the western pond turtle (*Emys marmorata*) and western spadefoot toad (*Spea hammondii*), California red-legged frog (*Rana draytonii;* CRLF), the vernal pool fairy shrimp (*Branchinecta lynchi*), steelhead (*Oncorhynchus mykiss irideus*), and the San Luis Obispo pyrg (snail; *Pyrgulopsis taylori*) within the ten-mile search range.

The CRLF and western pond turtle are highly aquatic species found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, emergent or riparian vegetation, none of which occur on the upland grassland project site. The steelhead and San Luis Obispo pyrg (an aquatic snail) are perennial stream species. No streams or aquatic habitats of any kind were observed during SII field surveys of the project site. As such, the project site does not support suitable aquatic habitat for these species. At the County's request, a habitat suitability assessment for the CRLF is provided in Section 5.4.3 below, with the USFWS submittal letter included in Appendix C.

The vernal pool fairy shrimp and western spadefoot are closely associated with vernal pool or temporary pond/puddle habitats that are not subject to flowing water. Seasonal ponds/vernal pools can be clearly distinguished in a grassland setting at any time of year. SII Principal Ecologist David Wolff, who conducted all the field surveys for this site, holds a Recovery Permit issued by the USFWS to survey for fairy shrimp and has exceptional knowledge and experience in identifying fairy shrimp habitat. The SII field survey in January 2020 was after sufficient rainfall to observe any seasonal ponding should it be present. Further, the SII May 2020 surveys followed abundant spring rainfall. No evidence of vernal pool or seasonal pond/puddle habitats were observed during any of the wet and dry season SII field surveys. As such, the project site does not support suitable seasonal aquatic habitat for these two species.

Birds – The CNDDB includes occurrences for wide-ranging resident and migratory bird species known from the region of the project site. The tricolored blackbird (*Agelaius tricolor*) is locally nomadic but



requires bulrush and cattail marsh or ponds for breeding that are not present on the project site. The golden eagle (*Aquila chrysaetos*) is a wide-ranging species with nests in the region that could on rare occasions forage over the site. The purple martin (*Progne subis*) is a colonial nesting species in trees or human-made structures not likely to occur on the project site. The least Bell's vireo (*Vireo bellii pusillus*) is a breeding season migrant known from the Salinas River that requires dense riparian habitat that does not occur on the project site. As such, the project site does not support suitable habitat for these species.

Invertebrates – The Lompoc grasshopper (*Trimerotropis occulens*) is mostly associated with sandy soils in grassland, coastal scrub or chaparral habitats. No such habitat occurs on site and the study area is well outside the known range of this species. The Atascadero June beetle (*Polyphylla nubila*) is known only from inland sand dunes that are not present on the project site (only gravelly loam soils) and would not occur. The Crotch bumble bee and obscure bumblebee (*Bombus crotchii; B. caliginosus*) range throughout California to Baja typically found in wildflower rich grasslands and shrublands foraging on many families and genera of flowering plants. The local CNDDB records are unspecified locations around Atascadero from 1968 and 1959 collection records with no current observations or information. The project site does not appear to be wildflower rich and does not represent suitable habitat for these species. No bumble bees were observed during SII field surveys.

Reptiles/Amphibians (Uplands) – The northern California legless lizard (*Anniella puchra*) is associated with sandy soils in grassland, coastal scrub or chaparral habitats. The project site does not support suitable sandy soils or shrub cover for the northern California legless lizard. Sandy loam and loam soils mapped onsite would be impenetrable to the legless lizard and would preclude its occurrence. The lesser slender salamander (*Batrachoseps minor*) is known from wooded shaded slopes with an abundance of leaf litter. No such habitat occurs on the project site. The coast range newt (*Taricha torosa*), breeds in streams and uses woodland upland habitats with abundant moist refuge (logs and debris) during non-breeding season. As such, the project site does not support suitable moist woodland or downed debris refuge habitat for these two species.

Mammals – The Townsend's big-eared bat (*Corynorhinus townsendii*) requires caves or structures for roost sites that do not occur on the project site. The American badger (*Taxidea taxus*) is typically found in grasslands and requires friable soils for digging burrows. While there is suitable grassland habitat for this species within the project area, the American badger can be easily detected by their distinctive burrows and digging activities. No badger dens or potential badger dens were observed within the project site during the SII field surveys. The project site is outside of the range of the San Joaquin kit fox (*Vulpes macrotis mutica*).

5.4.3 <u>California Red-Legged Frog Habitat Suitability Analysis</u>

The currently accepted USFWS August 2005, Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog," provides three questions to guide the project site suitability analysis for California red-legged frog.

1.) Is the site within the current or historic range of the CRF?

Yes. The listing of the CRLF and additional USFWS data collection indicates the range of the CRLF is from Mendocino County south to Baja California through all the coastal counties, as well as many inland counties and the Sierra Nevada foothills. As such, the project site is within the range of the CRLF.



2.) Are there known records of the CRF at the site or within a 1.6-kilometer (1-mile) radius of the site?

No. There are no known records for the CRLF on the project site and there is no aquatic habitat on the parcel. Toad Creek that runs to the north and in proximity of the project site does not have any recorded CRLF occurrences either. SII is aware of several CRLF protocol surveys in Toad Creek east of Highway 101 with negative results. The nearest recorded CRLF occurrence is the CNDDB 6/30/2000 record #617 approximately 1.24 miles (2.0 kilometers) to the south of the project site in the floodplain at the confluence of Paso Robles Creek and the Salinas River (see Figure 4). No CRLF were observed in a follow up survey in 2003 survey with only bullfrogs and bullfrog tadpoles observed at that time. The closest Paso Robles Creek gets to the project site is approximately 0.6 mile (1 kilometer) to the southwest at a point 1.66 stream miles (2.66 kilometers) upstream of the recorded occurrence. CNDDB CRLF occurrence #618 is just upstream (south) of occurrence #617 at the confluence of Graves Creek and the Salinas River 1.42 miles (2.28 kilometers) south of the project site. CRLF were observed at the Graves Creek location in 2000, 2003 and 2016.

3.) What are the habitats within the project site and within 1.6 kilometers (1-mile) of the project boundary?

The project site is a 100 percent upland site of non-native annual grassland habitat completely lacking in any aquatic stream or pond habitat. Habitats within a 1.6-kilometer radius are a mosaic of grassland, woodland, and abundant blocks of high-density residential developments that are likely barriers to CRLF upland movement (see Figure 1). The only aquatic habitat in this radius appears to be Toad Creek that runs offsite nearby to the north, that point of CRLF occurrences on Paso Robles Creek and Graves Creek to the south described in 2.) above, and the Salinas River to the east.

CRLF Suitability Analysis Conclusion – Based on the USFWS habitat assessment procedure described above, the project site does not support suitable habitat for the CRLF as it is a completely upland site lacking any aquatic habitat. There are no CRLF records in the nearby Toad Creek, and the surrounding land use mosaic dominated by blocks of residential subdivision development may restrict the movement of CRLF across the landscape between the project site and aquatic habitats of Paso Robles Creek, Graves Creek, and the Salinas River. The project will have no impact or adverse effect on the CRLF.

6.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

6.1 SUFFICIENCY OF BIOLOGICAL DATA

The SII field surveys on November 14, 2019, January 20, 2020, and May 5, 2020, are sufficient to; 1) adequately establish existing conditions of the project site and context in the landscape and land use mosaic; 2) determine the lack of special-status plant or wildlife species occurrence or suitable habitat; 3) determine the lack of waters of the U.S./State or wetlands onsite, and 4) adequately evaluate proposed project impacts. 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

Plants and Wildlife – The proposed Tract 3138 project would convert the approximately 10.88 acres of non-native grassland habitat to urban residential development. The project site supporting exclusively non-native annual grassland habitat with low native plant species diversity provides minimal habitat for locally common wildlife accustomed to the urban environment. Seven onsite valley oak trees will remain around the constructed detention basin that will incorporate the non-wetland swale. Three of the valley oak trees will have grading impacts in the critical root zone. The single 11-inch dbh valley oak and 10-inch dbh live oak in the southeast corner would be removed for site development. The project site is essentially an infill location for habitat surrounded by existing blocks of residential urban development, therefore, does not offer any connectivity to other habitat areas or represent a substantial movement corridor for local wildlife. The retention of the seven large valley oak trees on the southeast corner, and grassland habitat around the detention basin would continue to provide nesting, foraging, and roosting habitat for resident and migratory birds, and locally common wildlife.

Construction of the proposed project and conversion to urban development could result in the mortality and/or displacement of locally common wildlife such as the ground squirrels, gophers, and meadow mice observed. No special-status plants were observed and are not expected to occur, therefore there is no impact on special-status plant species. Further, no special-status wildlife species were observed, or expected to occur on the project site as there is no suitable habitat for the CRLF or any other special-status wildlife. Given the small project size, urbanized blocks of residential development surrounding the site, no special-status plants and no special-status wildlife species, or any species listed under FESA or CESA to occur, impacts on biological resources from conversion of grassland habitat to residential development could be considered to be less than significant.

Vegetation and tree removal (clearing and grubbing) during the nesting season for birds could result in the destruction of active bird's nests. Destruction of active nests is prohibited by the Fish and Game Code of California Sections 3503 and 3503.1 (raptors specifically). As such, this could be considered a potentially significant impact.

Given the habitat values of the three impacted valley oak trees around the detention basin, ad the removed valley oak and coast live oak tree in the southwest corner of the site, is also a potentially significant impact. The following recommended mitigation measures would avoid take or destruction of active nests, and replace/mitigate for oak trees impacted/removed, thereby reducing the potentially significant impacts to a less than significant level.

6.3 RECOMMENDED MITIGATION MEASURES

The following mitigation measures are recommended to avoid, minimize for potentially significant impacts on nesting birds.

To reduce any potentially significant impact on nesting birds from vegetation and tree removals, 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.

The following mitigation measure is recommended to replace the oak trees impacted/removed.

To reduce any potentially significant impact from oak tree impact/removals, the following mitigation measures are recommended.

MM BIO-2:

Oak tree removal shall be mitigated in accordance with the arborist report with the onsite planting of one-gallon valley oak and coast live oak trees at a 4:1 ratio of trees planted to those removed. Similarly, the three impacted valley oak trees shall be mitigated in accordance with the arborist report with the onsite planting of one-gallon valley oak tree at a 2:1 ratio of trees planted to those impacted. The landscape plans for the project shall include the size and location of mitigation oak tree plantings. Alternatively, an oak tree removal mitigation fee tree can be paid to offset oak tree impacts/removals.

7.0 CONCLUSIONS

Based on the findings described above establishing the existing conditions of biological resources within the infill project site, 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.

8.0 REFERENCES

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APPENDIX A

FIGURES

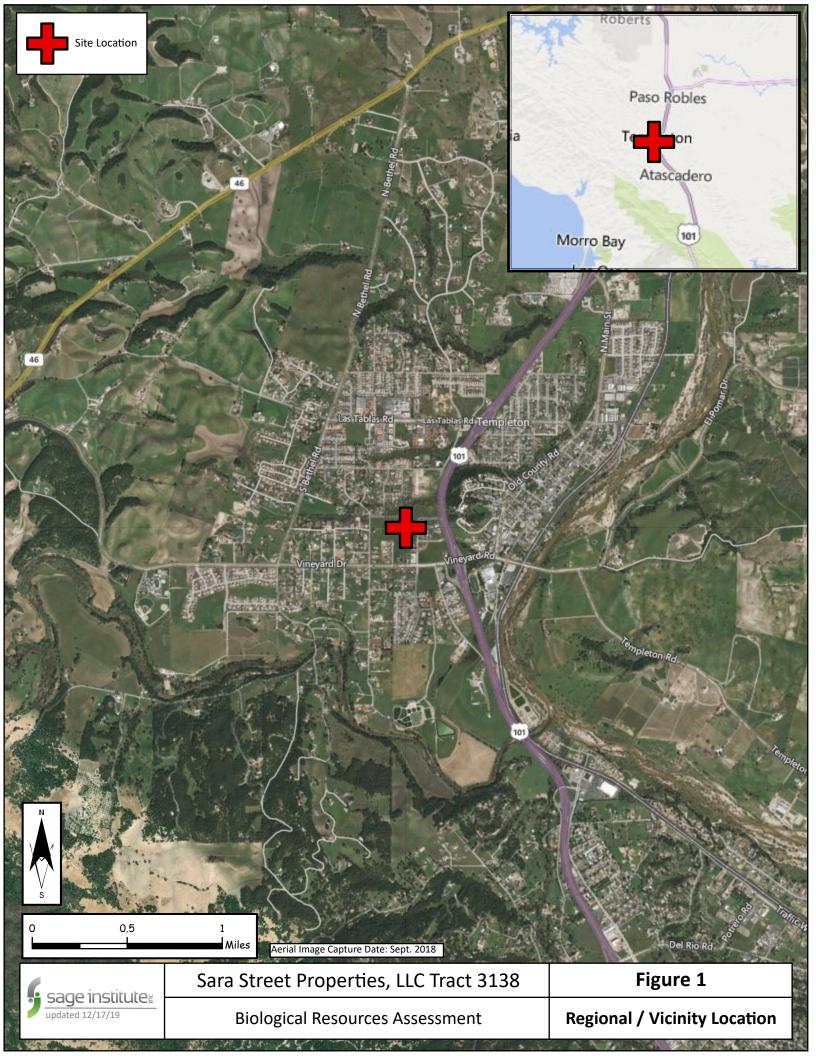
FIGURE 1: REGIONAL LOCATION MAP

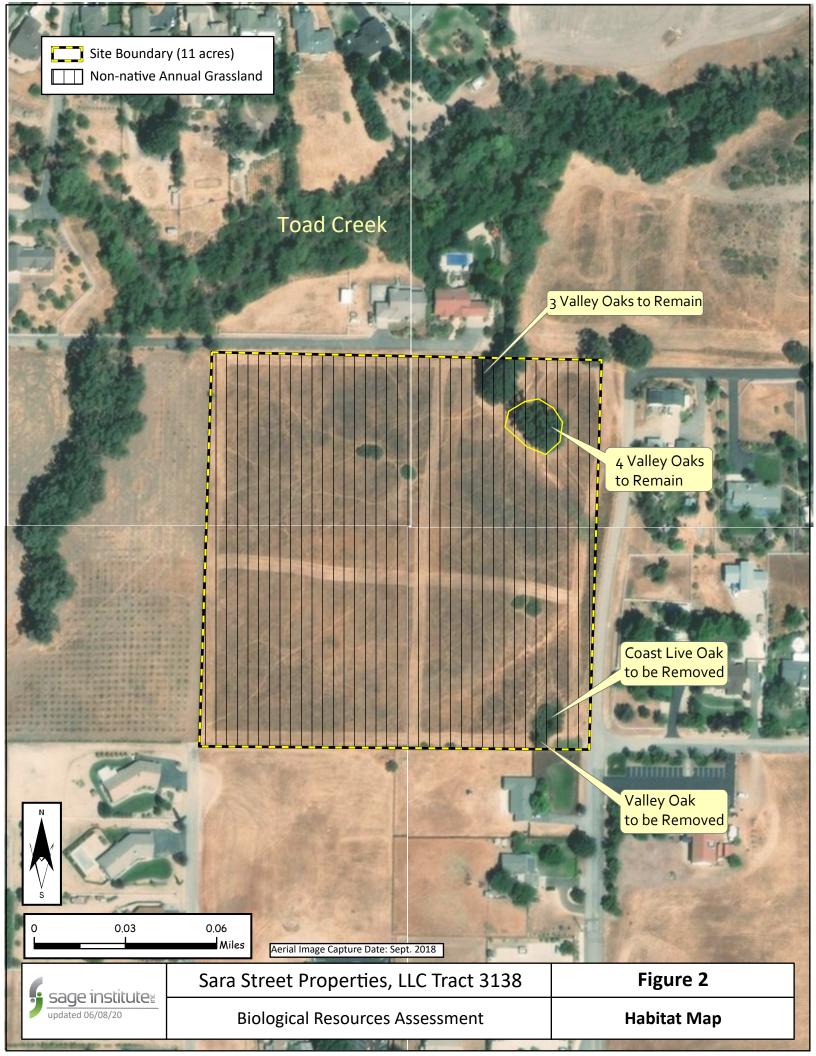
FIGURE 2: HABITAT MAP

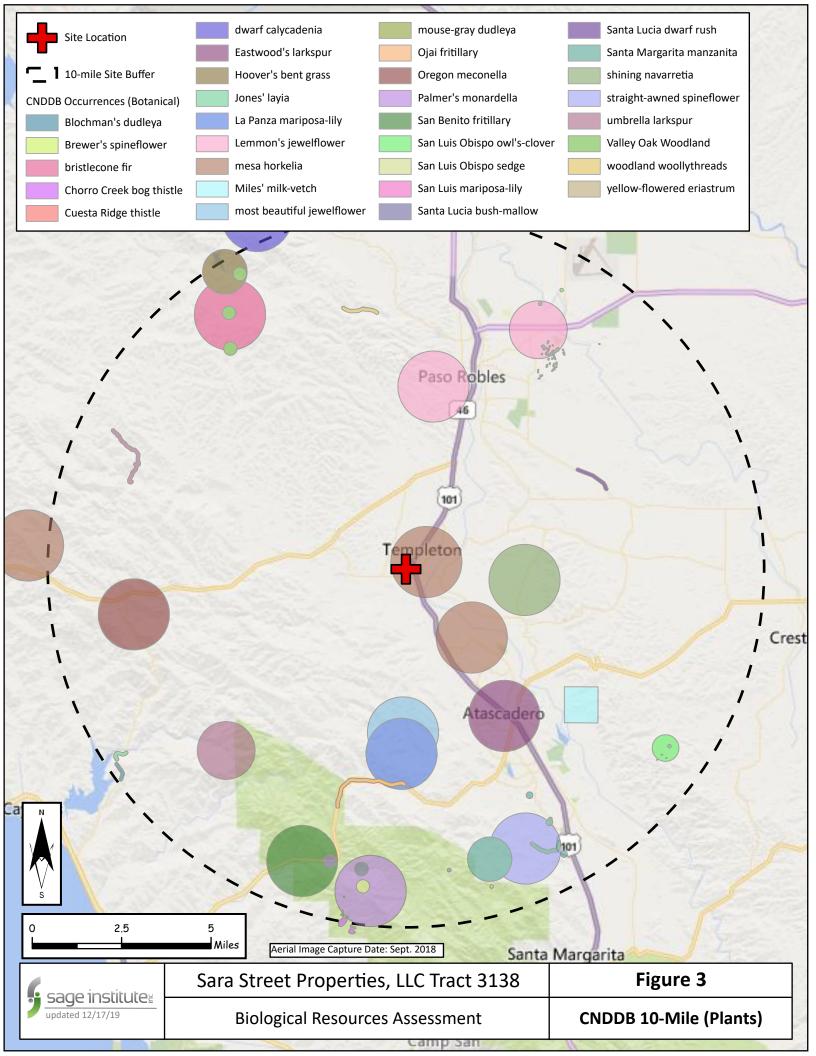
FIGURE 3: CNDDB PLANT SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)

FIGURE 4: CNDDB WILDLIFE SPECIES OCCURRENCES MAP (10-MILE SEARCH RADIUS)

FIGURE 5: REPRESENTATIVE PHOTOGRAPHS







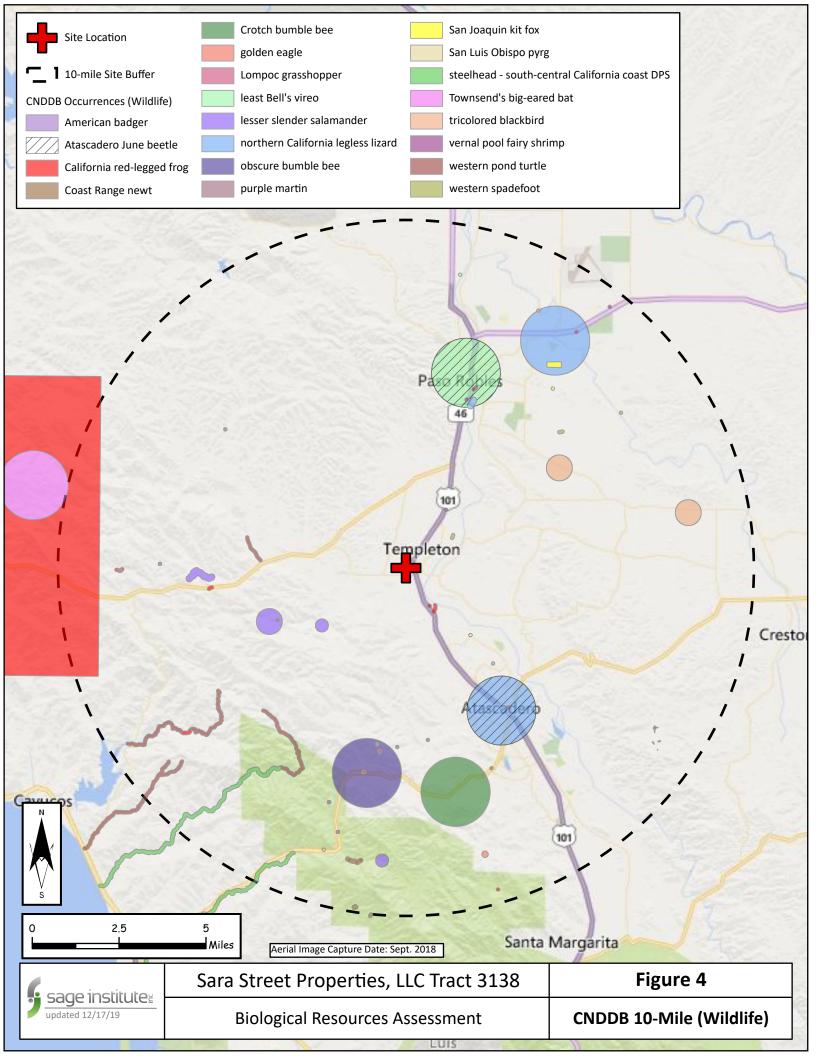






Photo 1: View north along west property line at annual grassland habitat and hilltop topography sloping down to the north. 11/14/2019



Photo 3: View north at grassland habitat and Toad Creek riparian corridor offsite (arrow) to the north past adjacent residence. 11/14/2019



Photo 2: View east along south property line at annual grassland habitat. 11/14/2019



Photo 4: View west at grassland habitat and Toad Creek riparian corridor offsite (arrow) to the north past adjacent residence. 11/14/2019



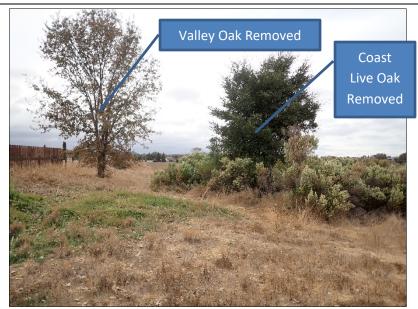


Photo 5: View southwest at single valley oak and coast live oak in coyote brush patch to be removed in the southeast corner of the site. **11/14/2019**



Photo 7: View north at soils wetland determination test pit in non-wetland swale and seven valley oak trees to be remain (arrow) around detention basin grading. **1/20/2020**



Photo 6: View north at non-wetland swale and seven valley oak trees to remain (arrow) around detention basin grading. **1/20/2020**



Photo 8: View south at soils wetland determination test pit in non-wetland swale and four valley oak trees to remain around detention basin grading. **1/20/2020**





Photo 9: View north along west property line at annual grassland habitat dominated by vetch and annual grasses and hilltop topography sloping down to the north. **5/5/2020**



Photo 11: View west along southern property line at small patch of poppies amid the vetch and annual grasses. **5/5/2020**



Photo 10: View east along south property line at annual grassland habitat dominated by vetch and annual grasses.**5/5/2020**



Photo 12: View north at non-wetland swale as it leaves the project site towards Toad Creek and head cut erosion scour in foreground. **5/5/2020**



APPENDIX B

TABLES

TABLE B-1: FLORISTIC INVENTORY AND RARE PLANT SURVEY SPECIES OBSERVED

TABLE B-2: CNDDB SPECIAL-STATUS SPECIES



TABLE B-1 VESTING TENTATIVE TRACT MAP 3138 FLORISTIC INVENTORY AND RARE PLANT SURVEY SPECIES OBSERVED (FIELD SURVEYS: 11/14/2019, 1/20/2020, 5/5/2020)

SCIENTIFIC NAME	COMMON NAME
Asclepia fascicularis	Narrow leaf milkweed
Amsinckia intermedia	Common fiddleneck
Avena sativa	Oats
Baccharis pilularis	Coyote brush
Brassica nigra	Black mustard
Bromus diandrus	Rip gut brome
Bromus hordeaceus	Soft chess
Calandrinia ciliata	Red maids
Carduus pycnocepalus	Italian thistle
Centaurea solstitialis	Yellow-star thistle
Clarkia purpurea	Purple clarkia
Claytonia perfoliata	Miner's lettuce
Convolvulus arvensis	Morning glory
Deinandra fasciculata	Clustered tarweed
Elymus condensatus	Giant wild rye
Erodium botrys	Filaree
Erodium cicutarium	Redstem filaree
Eschscholzia californica	California poppy
Festuca myuros	Rattail fescue
Geranium sp.	Geranium
Hirschfeldia incana	Shortpod mustard
Hordeum marinum ssp. gussoneanum	Mediterranean barley
Hordeum murinum ssp. leporinum	Foxtail barley
Lactuca serriola	Prickly lettuce
Lolium perenne	Rye grass
Lupinus nanus	Sky lupine
Quercus agrifolia	Coast live oak
Quercus lobata	Valley oak
Rumex crispus	Curly dock
Vicia sativa	Vetch

Scientific Name	Common Name	FedList	CalList	SRank	CNPS Rare Plant Rank	General Habitat Description	Micro Habitat Description	# of CNDDB Occurrences w/in 10 miles	Potential to Occur Onsite
BIRDS							Requires open water, protected nesting substrate, and		
Agelaius tricolor	tricolored blackbird	None	Threatened	S1S2		Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	foraging area with insect prey within a few km of the colony.	2	none
Aquila chrysaetos	golden eagle	None	FP	\$3	-	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	2	low-foraging only
						Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and	Nests in old woodpecker cavities mostly; also in human- made structures. Nest often located in tall, isolated		
Progne subis	purple martin	None	SSC	S3		Monterey pine. Summer resident of Southern California in low	tree/snag. Nests placed along margins of bushes or on twigs	1	low
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	S2		riparian in vicinity of water or in dry river bottoms; below 2000 ft.	projecting into pathways, usually willow, Baccharis, mesquite.	2	none
AMPHIBIANS AND REPTILES						Sandy or loose loamy soils under sparse	Soil moisture is essential. They prefer soils with a high		
Anniella pulchra	northern California legless lizard	None	SSC	S3		vegetation. South Santa Lucia Mountains in tanbark oak, coast	moisture content.	4	none
Batrachoseps minor	lesser slender salamander	None	SSC	S1		live oak, blue oak, sycamore & laurel.	Shaded slopes with abundant leaf litter.	7	none
						A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for		
Emys marmorata	western pond turtle	None	SSC	S3		aquatic vegetation, below 6000 ft elevation. Lowlands and foothills in or near permanent	egg-laying.	10	none
Rana draytonii	California red-legged frog	Threatened	SSC	S2S3		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.	10	none
nana araytam	cumornia rea legged riog	THEUCHEU	330	3233		Occurs primarily in grassland habitats, but can be	development was have decess to establish habitat.		Hone
Spea hammondii	western spadefoot	None	SSC	S3		found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	4	none
Taricha torosa	Coast Range newt	None	SSC	S4		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	e	low / upland only
FISH	Coast kange newt	None	SSC	54	-	Federal listing refers to runs in coastal basins from	preed in ponds, reservoirs & slow moving streams.	8	only
						the Pajaro River south to, but not including, the			
Oncorhynchus mykiss irideus pop. 9 MAMMALS	steelhead - south-central California coast DPS	Inreatened	None	S2	-	Santa Maria River.		2	none
Comments and the second	Townson districts as and 7 -		***			Throughout California in a wide variety of	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human		
Corynorhinus townsendii	Townsend's big-eared bat	None	SSC	S2		habitats. Most common in mesic sites.	disturbance. Needs sufficient food, friable soils and open,	1	none
Taxidea taxus	American badger	None	SSC	S3		Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	uncultivated ground. Preys on burrowing rodents. Digs burrows.	1	low
Vulpes macrotis mutica	San Joaquin kit fox	Endangered	Threatened	S2		Annual grasslands or grassy open stages with scattered shrubby vegetation.	Need loose-textured sandy soils for burrowing, and suitable prey base.	2	none
INVERTEBRATES						Coastal areas from Santa Barabara county to	Food plant genera include Baccharis, Cirsium, Lupinus,		
Bombus caliginosus	obscure bumble bee	None	None	S1S2		north to Washington state.	Lotus, Grindelia and Phacelia.	1	low
Bombus crotchii	Crotch bumble bee	None	Candidate Endangered	S1S2		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	2	low
						Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast	Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow		
Branchinecta lynchi	vernal pool fairy shrimp	Threatened	None	S3		mountains, in astatic rain-filled pools. Known only from inland sand dunes in San Luis	depression pools.	3	none
Polyphylla nubila	Atascadero June beetle	None	None	S1		Obispo County.		3	none
Pyrgulopsis taylori	San Luis Obispo pyrg	None	None	S1		Freshwater habitats in San Luis Obispo County. Known only from Santa Barbara and San Luis		1	none
Trimerotropis occulens PLANTS	Lompoc grasshopper	None	None	S1S2		Obispo counties.		1	none
PEARIS						Lower montane coniferous forest, broadleafed	Rocky sites in Monterey and San Luis Obispo counties.		
Abies bracteata	bristlecone fir	None	None	S2S3	1B.3	upland forest, chaparral, riparian woodland.	Sometimes serpentine. 150-1465 m.	1	none
A consider his consider	Us and back area	None	None	62	40.3	Chaparral, cismontane woodland, closed-cone	Countrielles CO TCC		
Agrostis hooveri	Hoover's bent grass	None	None	S2	1B.2	coniferous forest, valley and foothill grassland.	Sandy sites. 60-765 m.		none
Arctostaphylos pilosula	Santa Margarita manzanita	None	None	S2?	1B.2	Closed-cone coniferous forest, chaparral, broadleafed upland forest, cismontane woodland.	Shale outcrops & slopes; reported growing on decomposed granite or sandstone. 60-1220 m.	4	none
Arctostaphylos pilosula Astragalus didymocarpus var. milesianus	Santa Margarita manzanita Miles' milk-vetch	None None	None None	S2? S2	1B.2	broadleafed upland forest, cismontane woodland. Coastal scrub.		4	none
	_					broadleafed upland forest, cismontane woodland.	decomposed granite or sandstone. 60-1220 m.	1	
Astragalus didymocarpus var. milesianus	Miles' milk-vetch	None	None	S2	1B.2	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub,	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m.	1	none
Astragalus didymocarpus var. milesianus	Miles' milk-vetch	None	None	S2	1B.2	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m.	1	none
Astragalus didymocarpus var. milesianus Calochortus obispoensis	Miles' milk-vetch San Luis mariposa-iliy	None	None None	S2	1B.2	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-	1	none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy	None None	None None None	\$2 \$2 \$2	1B.2 1B.2	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane conferous forest. Chaparral, cismontane woodland, valley and	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Open, dry meadows, hillsides, gravelly outwashes. 240-	1 1 1	none
Astragalus didymacarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa	Miles' milk-vetch San Luis mariposa-lily La Panza mariposa-lily dwarf calycadenia	None None None	None None None	\$2 \$2 \$2 \$3	1B.2 1B.2 1B.3 1B.1	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and footbill grassland. Valley and footbill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and footbill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Open, dry meadows, hillsides, gravelly outwashes. 240-1350 m. Usually in transition zone on sand, clay, serpentine, or	1 1 2 2	none none none none
Astragalus didymocarpus var. milesianus Calochortus abispaensis Calochortus simulans Calycadenia villosa Carex obispaensis Castilleja densifiora var. obispaensis	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedige	None None None None None	None None None None None	\$2 \$2 \$2 \$3 \$3 \$3?	18.2 18.3 18.1 18.2	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainte, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Open, dry meadows, hillsides, gravelly outwashes. 240- 1350 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m.	1 1 2 2 2 7	none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densiflora var. obispoensis Caulanthus lemmonii	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower	None None None None None None	None None None None	\$2 \$2 \$2 \$3 \$3?	1B.2 1B.2 1B.3 1B.1	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-come coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Piryon and juriper woodland, valley and foothill grassland. Chaparral, cismontane woodland, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren	1 1 1 2 2	none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densijtora var. obispoensis Caulanthus Iemmonii Chorizanthe breweri	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower	None None None None None None None	None None None None None None None	\$2 \$2 \$2 \$3 \$3? \$2 \$3 \$3 \$3	18.2 18.3 18.1 18.2 18.2 18.2 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-come coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and jumper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m.	1 1 1 2 2 2	none none none none none none none none
Astragalus didymocarpus var. milesianus Calachortus obispoensis Calachortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizonthe breweri Chorizonthe rectispina	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower	None None None None None None None None	None None None None None None None None	\$2 \$2 \$2 \$3 \$3 \$3? \$2 \$3 \$3	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, cismontane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub,	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m.	1 1 1 2 2 2 2	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizanthe breweri Chorizanthe rectispina Cirsium fontinale var. obispoense	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedige San Luis Obispo swi's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle	None None None None None None None None	None None None None None None None Lone None None None None None None	\$2 \$2 \$2 \$3 \$3 \$3? \$2 \$3 \$2 \$2	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainte, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and juniper woodland, valley and foothill Grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Often on granite in chaparral. 45-1040 m.	4 1 1 1 1 2 2 2 5 5	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizanthe breweri Chorizanthe rectispina Cirsium fontinale var. obispoense Cirsium occidentale var. lucianum Delphinium parryi ssp. eastwoodiae	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's larkspur	None None None None None None None None	None None None None None None None None	\$2 \$2 \$2 \$3 \$3? \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$2	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainle, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Often on granite in Coffen on steep rocky slopes and along disturbed roadsides. 485-765 m.	4 1 1 1 1 2 2 2 2 2 2 1	none none none none none none none none
Astragalus didymacarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulianthus lemmonii Chorizanthe breweri Chorizanthe rectispina Crsium fontinale var. obispoense Crsium cocidentale var. lucianum Delphinium parryi ssp. eastwoodiae Delphinium umbraculorum	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's Jarkspur umbrelia larkspur	None None None None None None None None	None None None None None None None None	\$2 \$2 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$3	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3 18.2 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainte, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, chaparral, cismontane woodland, coastal scrub, chaparral, chapa	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Open, dry meadows, hillsides, gravelly outwashes. 240-1350 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Openings; on serpentine. Often on steep rocky slopes and offsturbed roadsides. 485-765 m. Serpentine openings. 60-640 m. Mesic sites. 215-2075 m.	4 1 1 1 2 2 2 2 2 1 1 1 1 3 3	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizanthe breweri Chorizanthe rectispina Cirsium fontinale var. obispoense Cirsium occidentale var. lucianum Delphinium parryi ssp. eastwoodiae	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's larkspur	None None None None None None None None	None None None None None None None None	\$2 \$2 \$2 \$3 \$3? \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$2	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, the property of the proper	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1385 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Openings; on serpentine. Often on steep rocky slopes and along disturbed roadsides. 485-765 m. Serpentine. Openings. 60-640 m. Mesic sites 215-2075 m. Serpentine outcrops. 25-535 m.	4 1 1 1 2 2 2 5 2 1 1 1 1 1 1 2 2 2 2 2 2	none none none none none none none none
Astragalus didymacarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulianthus lemmonii Chorizanthe breweri Chorizanthe rectispina Crsium fontinale var. obispoense Crsium cocidentale var. lucianum Delphinium parryi ssp. eastwoodiae Delphinium umbraculorum	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's Jarkspur umbrelia larkspur	None None None None None None None None	None None None None None None None None	\$2 \$2 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$3	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3 18.2 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainte, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Piryon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, valley and foothill grassland. Chaparral, valley and foothill grassland. Chaparral, cismontane woodland, chaparral. Chaparral, cismontane woodland, valley and foothill grassland. Chaparral, cismontane woodland, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Open, dry meadows, hillsides, gravelly outwashes. 240-1350 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Openings; on serpentine. Often on steep rocky slopes and offsturbed roadsides. 485-765 m. Serpentine openings. 60-640 m. Mesic sites. 215-2075 m.	4 1 1 1 1 2 2 2 5 5 2 1 1 1 1 1 1 2 2 2 2	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifilora var. obispoensis Cautilleja densifilora var. obispoensis Cautanthus lemmonii Chorizonthe breweri Chorizonthe rectispina Cirsium fontinale var. obispoense Cirsium occidentale var. lucianum Delphinium garnyi sap. eastwoodiae Delphinium umbroculorum Dudleya abramsii ssp. murina	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo sedge San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Cuesta Ridge thistle Eastwood's Jarkspur umbrella larkspur mouse-gray dudleya	None None None None None None None None	None None None None None None None None	\$2 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$3 \$3	18.2 18.3 18.1 18.2 18.2 18.2 18.3 18.3 18.3 18.2 18.2 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prainte, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Piryon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, valley and foothill grassland. Chaparral, valley and foothill grassland. Chaparral, cismontane woodland, chaparral. Chaparral, cismontane woodland, valley and foothill grassland. Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Openings: on serpentinite. Often on steep rocky slopes and along disturbed roadsides. 485-765 m. Mesic sites. 215-2075 m. Serpentine. Openings. 60-640 m. Mesic sites. 215-2075 m. Serpentine outcrops. 25-535 m. Open, rocky slopes; often in shallow clays over	4 1 1 1 1 2 2 2 5 5 2 1 1 1 1 1 1 2 2 2 2	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizanthe breweri Chorizanthe rectispina Cirsium fontinale var. obispoense Cirsium occidentale var. lucianum Delphinium umbracularum Dudleya obramsii ssp. murina	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's larkspur umbrella larkspur mouse-gray dudleya Blochman's dudleya	None None None None None None None None	None None None None None None None None	\$2 \$2 \$3 \$3 \$3 \$3 \$3 \$2 \$2 \$2 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	18.2 18.3 18.1 18.2 18.2 18.2 18.2 18.3 18.3 18.3 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Pinyon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Cismontane woodland, valley and foothill grassland. Cismontane woodland, valley and foothill grassland. Coastal scrub, coastal bluff scrub, chaparral, cismontane woodland, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Decomposed granite, or sometimes on serpentine. 150-1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Openings on serpentinite. Often on steep rocky slopes and along disturbed roadsides. 485-765 m. Serpentine Deprings. 60-640 m. Mesic sites. 215-2075 m. Serpentine outcrops. 25-535 m. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-290 m.	4 1 1 1 1 2 2 2 5 5 2 1 1 1 1 1 1 2 2 2 2	none none none none none none none none
Astragalus didymocarpus var. milesianus Calochortus obispoensis Calochortus simulans Calycadenia villosa Carex obispoensis Castilleja densifiora var. obispoensis Caulanthus lemmonii Chorizanthe breweri Chorizanthe rectispina Cirsium fontinale var. obispoense Cirsium occidentale var. lucianum Delphinium umbracularum Dudleya obramsii ssp. murina	Miles' milk-vetch San Luis mariposa-iliy La Panza mariposa-iliy dwarf calycadenia San Luis Obispo sedge San Luis Obispo sedge San Luis Obispo owl's-clover Lemmon's jewelflower Brewer's spineflower straight-awned spineflower Chorro Creek bog thistle Cuesta Ridge thistle Eastwood's larkspur umbrella larkspur mouse-gray dudleya Blochman's dudleya	None None None None None None None None	None None None None None None None None	\$2 \$2 \$3 \$3 \$3 \$3 \$3 \$2 \$2 \$2 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$3 \$3 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	18.2 18.3 18.1 18.2 18.2 18.2 18.2 18.3 18.3 18.3 18.3 18.3	broadleafed upland forest, cismontane woodland. Coastal scrub. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Valley and foothill grassland, cismontane woodland, chaparral, lower montane coniferous forest. Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Valley and foothill grassland, meadows and seeps. Piryon and juniper woodland, valley and foothill grassland. Chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Chaparral. Chaparral. Chaparral. Chaparral. Chaparral. Cismontane woodland, valley and foothill grassland. Coastal scrub, coastal bluff scrub, chaparral, cismontane woodland, signontane woodland, valley and foothill grassland. Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	decomposed granite or sandstone. 60-1220 m. Clay soils. 50-385 m. Often in serpentine grassland. 15-550 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Decomposed granite, or sometimes on serpentine. 150- 1160 m. Usually in transition zone on sand, clay, serpentine, or gabbro. In seeps. 5-845 m. Sometimes on serpentine. 9-485 m. 75-1585 m. Rocky or gravelly serpentine sites; usually in barren areas. 45-765 m. Often on granite in chaparral. 45-1040 m. Serpentine seeps. 5-385 m. Often on granite in chaparral. 45-69 m. Serpentine on granite in chaparral. 48-765 m. Serpentine on granite in Serpentine of the control of	4 1 1 1 1 2 2 2 5 5 2 1 1 1 1 3 3 3 2 2 2 1 1 1 1 1 1 1 1 1	none none none none none none none none
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Sara Street Properties, LLC Tract 3138 Biological Resources Assessment

Table B-1 CNDDB Special-Status Species Recorded Occurrences (10-mile Radius; Nov. 2019)

							On serpentine, often found associated with Sargent		
Monardella palmeri	Palmer's monardella	None	None	S2	1B.2	Cismontane woodland, chaparral.	cypress forests. 90-945 m.	2	none
						Chaparral, valley and foothill grassland,	Grassy sites, in openings; sandy to rocky soils. Often seen		
						cismontane woodland, broadleafed upland forest,	on serpentine after burns, but may have only weak		
Monolopia gracilens	woodland woollythreads	None	None	S3	1B.2	North Coast coniferous forest.	affinity to serpentine. 120-975 m.	1	none
						Cismontane woodland, valley and foothill	Apparently in grassland, and not necessarily in vernal		
Navarretia nigelliformis ssp. radians	shining navarretia	None	None	S2	1B.2	grassland, vernal pools.	pools. 60-975 m.	5	none
						Chaparral, valley and foothill grassland,			
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	None	None	S2	1B.2	cismontane woodland.	Serpentine outcrops, on ridges and slopes. 90-1040 m.	2	none
NATURAL COMMUNITIES	VATURAL COMMUNITIES								
Valley Oak Woodland	Valley Oak Woodland	None	None	S2.1	-	**	**	3	



APPENDIX C

USFWS CALIFORNIA RED-LEGGED FROG ASSESSMENT (LETTER ONLY; FIGURES ARE FROM BRA APPENDIX A)



Central Coast Office 1320 Van Beurden Drive, Suite 202-D4 Los Oso, CA 93402 Tel 805.434.2804 fax 805.980.5886

sage@sageii.com www.sageii.com

June 23, 2020

Christopher Diel Assistant Field Supervisor USFWS Ventura Field Office 2493 Portola Road, Suite B Ventura, CA 93003

SUBJECT: CALIFORNIA RED-LEGGED FROG HABITAT ASSESSMENT CONCURRENCE REQUEST FOR THE SARA

STREET PROPERTIES, LLC, VESTING TENTATIVE TRACT MAP - TRACT 3138 PROJECT, TEMPLETON

COMMUNITY, SAN LUIS OBISPO COUNTY, CALIFORNIA

Dear Chris:

On behalf of Sara Street Propertied, LLC, and at the request of the County of San Luis Obispo Department of Planning and Building, Sage Institute, Inc. (SII) is submitting the following California red-legged frog (*Rana draytonii*; CRLF) habitat assessment for your review and request for written concurrence.

CALIFORNIA RED-LEGGED FROG HABITAT SUITABILITY ANALYSIS

The currently accepted USFWS August 2005, Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog," provides three questions to guide the project site suitability analysis for California red-legged frog.

1.) Is the site within the current or historic range of the CRF?

Yes. The listing of the CRLF and additional USFWS data collection indicates the range of the CRLF is from Mendocino County south to Baja California through all the coastal counties, as well as many inland counties and the Sierra Nevada foothills. As such, the project site is within the range of the CRLF. See Figure 1.

2.) Are there known records of the CRF at the site or within a 1.6-kilometer (1-mile) radius of the site?

No. There are no known records for the CRLF on the project site and there is no aquatic habitat on the parcel. Toad Creek that runs to the north and in proximity of the project site does not have any recorded CRLF occurrences either. See Figure 2 and representative photographs in Figure 4. SII is aware of several CRLF protocol surveys in Toad Creek east of Highway 101 with negative results. The nearest recorded CRLF occurrence is the CNDDB 6/30/2000 record #617 approximately 1.24 miles (2.0 kilometers) to the south of the project site in the floodplain at the confluence of Paso Robles Creek and the Salinas River (see Figure 4). No CRLF were observed in a follow up survey in 2003 survey with only bullfrogs and bullfrog tadpoles observed at that time. The closest Paso Robles Creek gets to the project site is approximately 0.6 mile (1 kilometer) to the southwest at a point 1.66 stream miles (2.66 kilometers) upstream of the recorded occurrence. CNDDB CRLF occurrence #618 is just upstream (south) of occurrence #617 at the confluence of Graves Creek and the Salinas River 1.42 miles (2.28 kilometers) south of the project site. CRLF were observed at the Graves Creek location in 2000, 2003 and 2016. See Figure 2.



3.) What are the habitats within the project site and within 1.6 kilometers (1-mile) of the project boundary?

The project site is a 100 percent upland site of non-native annual grassland habitat completely lacking in any aquatic stream or pond habitat. Habitats within a 1.6-kilometer radius are a mosaic of grassland, woodland, and abundant blocks of high-density residential developments that are likely barriers to CRLF upland movement (see Figure 1). The only aquatic habitat in this radius appears to be Toad Creek that runs offsite nearby to the north, that point of CRLF occurrences on Paso Robles Creek and Graves Creek to the south described in 2.) above, and the Salinas River to the east. See Figure 1 and Figure 3.

CRLF Suitability Analysis Conclusion – Based on the USFWS habitat assessment procedure described above, the project site does not support suitable habitat for the CRLF as it is a completely upland site lacking any aquatic habitat. There are no CRLF records in the nearby Toad Creek, and the surrounding land use mosaic dominated by blocks of residential subdivision development may restrict the movement of CRLF across the landscape between the project site and aquatic habitats of Paso Robles Creek, Graves Creek, and the Salinas River. The project will have no impact or adverse effect on the CRLF.

Thank you very much for your assistance with this request. Please contact me directly if you have any questions or need any additional information.

Sincerely,

David K. Wolff Principal Ecologist

ATTACHMENTS:

FIGURE 1: REGIONAL LOCATION MAP

FIGURE 2: HABITAT MAP

FIGURE 3: CNDDB 10-MILE SEARCH OCCURRENCES MAP (WILDLIFE)

FIGURE 4: REPRESENTATIVE PHOTOGRAPHS

C: Dr. Javad Sani, Owner

Scott Stokes, Above Grade, Project Engineer

Cindy Chambers, County of San Luis Obispo County Department of Planning and Building