MEMORANDUM

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Subject: Green Valley III Apartments Property - Biological Due Diligence Assessment

This memorandum evaluates potential biological constraints for development of the Green Valley III Apartments property (Study Area; APN 148-540-350) located in the City of Fairfield (City), Solano County, California (Figure 1, Attachment A). The Study Area lies within a mixed urban and exurban/rural setting, bounded by a residential neighborhood and undeveloped land to the northwest; a corporate office development to the northeast; Business Center Drive and an active construction site to the southeast; and undeveloped land to the southwest. The Study Area is approximately 5.8 acres in size and comprised primarily of undeveloped open land.

The conclusions and recommendations of this report are based on conditions observed at the time of the field assessments and regulatory policies and practices in place at the time of the report was prepared; changes that may occur in the future with regard to conditions, policies, or practices could affect the conclusions presented in this assessment.

Methods

On March 30, 2021, WRA biologists Steven Cognac and Molly Matson traversed the Study Area on foot to evaluate the potential presence of sensitive vegetation communities and aquatic features, and the potential for the Study Area to support special-status plant and wildlife species. A second site visit to survey for special-status plants was performed by WRA plant biologist Amy May on June 10, 2021, and on-site aquatic features were further assessed by WRA plant and wetland biologist Scott Batiuk on December 9, 2021. Study Area conditions were noted as they relate to habitat requirements of special-status plant and wildlife species known to occur in the vicinity, as determined by background literature research. A list of plant and wildlife species observed during the site visit is included as Attachment C.

Prior to respective site visits, background literature was reviewed to determine the potential presence of sensitive vegetation communities, aquatic communities, and special-status plant and wildlife species. Resources reviewed for sensitive vegetation and aquatic features include aerial photography, mapped soil types, the California Native Plant Society (CNPS) Online Databases (2022) and the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; CDFW 2022). For databases queries the Cordelia, Mt. George, Fairfield North, Fairfield South, Napa, Cuttings Wharf, Mare Island,

Benicia, and Vine Hill U.S. Geological (USGS) 7.5-minute quadrangles were included as the focal search area.

The Study Area is located within the draft Solano Multispecies Habitat Conservation Plan (hereafter HCP) area. The draft HCP establishes a framework for complying with state and federal endangered species regulations while accommodating future urban growth, development of infrastructure, and ongoing operations and maintenance activities undertaken by or under the plan for participants within Solano County over the next 30 years (LSA 2012). As it is mandatory for projects located within the Solano HCP to comply with its conservation measures, these projects will also be eligible for take coverage for impacts to listed species once the plan is finalized. Coverage under the HCP may require submitting a pre-application package, implementing avoidance and minimization measures, and mitigating for impacts to special-status species or habitat as described in the HCP.

Existing Conditions and Land Cover Types

An overview of land cover types within the Study Area is provided in Table 1 below and Figure 2 (Attachment A). The Study Area consists mostly of undeveloped land dominated by herbaceous and ruderal vegetation. The majority of the Study Area is composed of non-native, annual grassland dominated by ruderal species including wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), Harding grass (*Phalaris aquatica*), ripgut brome (*Bromus diandrus*), hairy vetch (*Vicia villosa* ssp. *villosa*), black mustard (*Brassica nigra*), and salsify (*Tragopogon porrifolius*). Small portions of developed, paved surfaces are present along the northeast boundary of the Study Area. A narrow strip of landscaping vegetated with ornamental shrubs and mulching is present in the east corner of the Study Area by the Fairfield Business Center entrance.

Historical imagery shows past mixed agriculture on the Study Area since at least 1968, and a history of semi-regular discing (Google Earth 2022, NETR 2022, Solano GIS 2022). Additionally, significant disturbance, grading, and excavation activates occurred from 2002 to 2004 during construction of the Business Center Drive roadway and adjacent Fairfield Business Center to the northeast, and again in 2007 during the business center's expansion. Since 2008, the Study Area appears to have been maintained through regular discing and mowing activities. As a result of past disturbance and grading, the Study Area is mostly flat and open; however, long, slightly raised mounds and shallow depressions are present. In one of the linear depressions, a seasonal wetland has formed.

The Study Area includes an unnamed (manmade) stream and associated riparian corridor along the western boundary. The riparian corridor within the Study Area is dominated by a mixed oak/willow overstory and mixed scrub understory or a dense thicket of Himalayan blackberry (*Rubus armeniacus*). Dominant overstory vegetation in the mixed riparian areas include arroyo willow (*Salix lasiolepis*), coast live oak (*Quercus agrifolia*), and valley oak (*Q. lobata*). Dominant understory vegetation includes Himalayan blackberry, poison oak (*Toxicodendron diversilobum*), and valley sedge (*Carex barbarae*).

Table 1. Land Cover Types within the Study Area

Land Cover Types	Area (acre / linear feet)
Non-native Annual Grassland	4.62 / n/a
Developed	0.43 / n/a
Landscaped	0.09 /n/a
Seasonal Wetland	0.11 / n/a
Stream	0.13 / 431
Riparian	0.38 / n/a
Total	**5.77* / 431**

*the total acreage differs slightly from the sum of the acreages due to rounding

Aquatic Features within the Study Area

The Study Area contains a single, 0.11-acre seasonal wetland that is located in a depression that is the result of past anthropogenic disturbance (e.g., discing, grading, excavation) in the southern portion of the Project Area. Dominant vegetation within the seasonal wetland includes Italian ryegrass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), and bird's-foot trefoil (*Lotus corniculatus*), all of which are facultative species. The biotic crust wetland hydrology indicator was observed. Only trace amounts of redoximorphic concentrations were present and no hydric soil indicators were met. However, following the procedures for determining problematic hydric soils in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Corps 2008), because hydrophytic vegetation and wetland hydrology indicators were met, and because the feature is in a landscape position (a closed depression) where water concentrates, it was determined that problematic hydric soils were present.

The Study Area includes an unnamed 0.13-acre (431 linear feet) intermittent stream along the western boundary. The stream is a manmade, earthen channel that appears to drain the adjacent off-site feature to the northwest, which itself was constructed at the same time as the adjacent residential development (circa 2004). The stream terminates at a culvert that drains under Business Center Drive. During site visits in March and June 2021, the stream was saturated only and completely dry, respectively, indicating that while the stream is not perennial, it appears to contain water for a duration longer than during or immediately after storm events. At the time of the December 2021 site visit (following heavy precipitation events in October), the stream was inundated but not flowing, suggesting that the downstream culvert at Business Center Drive may have been blocked. Based on these observations, the stream is classified as intermittent. The channel was primarily unvegetated at the time of WRA's 2021 site visits.

The stream is potentially subject to Corps, RWQCB, and CDFW jurisdictions. Corps and RWQCB jurisdictions would typically extend to the ordinary high-water mark (OHWM) elevation, while CDFW jurisdiction would extend up to the top of bank (TOB) elevation and also encompass any associated riparian vegetation.

Special-Status Plant Species

WRA assessed the potential for habitat within the Study Area to support the occurrence of special-status plants. Sixty-seven special status plant species are known to occur in the vicinity of the Study Area (Appendix B; CDFW 2022, CNPS 2022). One special-status plant species has moderate potential to occur in the Study Area:

- **Pappose tarplant** (*Centromadia parryi* ssp. *parryi*); Rank 1B.2

Pappose tarplant blooms between May to November, and a survey was conducted for this species during the June 2021 site visit by a WRA plant biologist. No pappose tarplant (or any candidate for this species) was observed, and thus this species is considered absent from the Study Area.

Special-Status Wildlife Species

WRA assessed the potential habitat within the Study Area to support the occurrence of special-status wildlife (Appendix B). Special-status wildlife species determined to have the potential to occur in the Study Area are discussed below.

Swainson's hawk (*Buteo swainsoni*). State Threatened; Solano HCP focal species. Swainson's hawk nesting has been documented approximately 1 mile from the Study Area, in 2004 (CDFW 2021; CNDDB Occurrence #1372). The Study Area is disturbed and at least semi-regularly disked, reducing potential prey base for the species. The site is immediately surrounded by hardscaped commercial and residential development, and is within a greater area of development with several undeveloped parcels interspersed, reducing the potential for regular occupation of the vicinity. However, to ensure that no impacts to nesting Swainson's hawks occur, a pre-construction survey effort is recommended if vegetation removal and/or ground disturbance are initiated during the nesting season (generally March through August). The survey effort should cover the Study Area and surrounding areas (as accessible) within approximately 0.25 mile.

Additionally, the Study Area contains undeveloped grassland (at least at times). For the reasons outlined above, foraging by Swainson's hawk within the Study Area is unlikely overall but cannot be completely ruled out. Impacts that result in a loss of habitat may require compensatory mitigation of some form, particularly if CDFW is involved in the project (via the permitting process and/or CEQA). In the HCP, the Study Area is mapped within the Valley Floor Grassland Conservation Area. If the project seeks coverage under the HCP, the applicant will need to comply with specified avoidance and minimization measures and mitigation measures. This may include mitigation for loss of foraging habitat through the preservation and management of suitable habitat at a ratio of 1:1 (mitigation-to-impact), as well as a pre-construction survey similar to that described above. Other mitigation measures may be necessary if Swainson's hawk is observed nesting within the Study Area, including protection of the nesting tree.

White-tailed kite (*Elanus leucurus*). State Fully Protected Species. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. The Study Area contains trees and open grassland, providing suitable year-round habitat for this species. Although no kites were observed during the site visits, nesting territories often vary in location across years and thus nesting on or adjacent to the Study Area could occur in the future.

California Fish and Game Code Protected Nesting Birds. Within the Study Area, native birds may nest in trees, shrubbery, and on the ground. Most native birds have baseline protections under the federal Migratory Bird Treaty Act and California Fish and Game Code. Under these laws/codes, the intentional killing, collecting or trapping of covered species, including their active nests (those with eggs or young), is prohibited. Measures for special-status (including white-tailed kite) and non-status nesting birds typically require a pre-construction survey by a qualified biologist during the nesting season (February 1-August 31). If nests are located, a no disturbance buffer is placed around the nest and work within the buffer resumes once the nest has either fledged or failed.

Special-status Species Unlikely to Occur

Burrowing owl (*Athene cunicularia*). CDFW Species of Special Concern; Solano HCP focal species. Burrowing owls occupy open areas and are dependent on burrowing mammals to provide burrows for shelter and nesting. The Study Area is highly disturbed and is regularly disked. No ground squirrels or suitable burrows were observed in the Study Area during the 2021 site visits. No burrowing owls have been documented within 3 miles of the Study Area (CDFW 2022, eBird 2022). As such, burrowing owl is assessed as unlikely to occur within the Study Area. As described for Swainson's hawk, the Study Area is mapped within the Valley Floor Grassland Conservation Area in the Solano HCP. If the project seeks coverage under the HCP, the applicant may need to mitigate for loss of foraging habitat, and conduct preconstruction surveys in known or suitable habitat. Similar measures may be required if CDFW is involved in the project (via the permitting process and/or CEQA).

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Federal Threatened Species. Solano HCP focal species. This beetle is found throughout the Central Valley in elderberry (*Sambucus* sp.) shrubs, on which it is completely dependent for larval development, and to a lesser degree, adult feeding. Typical habitat is characterized as large stands of mature elderberry shrubs in riparian or floodplain areas. As field surveys to determine presence/absence of the beetle may be difficult to perform effectively, a common approach is to simply avoid any elderberry shrubs present, or to transplant and/or mitigate for shrubs that cannot be avoided. Elderberry was searched for within the Study Area during both 2021 site visits; one elderberry plant was observed within riparian habitat south of the Study Area, but none was found within the Study Area. As such, valley elderberry longhorn beetle is considered absent within the Study Area.

Aquatic Species

California red-legged frog (CRLF; *Rana draytonii*; Federal Threatened, State Species of Special Concern) and western pond turtle (*Actinemys marmorata*; State Species of Special Concern). These species are typically associated with perennial slow-moving or stagnant waters, including ponds, streams pools, and deeper wetlands; intermittent (seasonal) aquatic features that otherwise provide suitable habitat characteristics may also be used. Both species are also capable of overland (terrestrial) movement when environmental conditions necessitate such. The nearest CNDDB occurrence for both species is a vegetated pond located approximately 1 mile west of the Study Area (CDFW 2022). As per LSA (pers. comm.), western pond turtle has also been observed in Green Valley Creek, a perennial stream located approximately [illegible] south of the Study Area at its nearest point.

The Study Area is disturbed and nearly surrounded by development. It is separated from the nearest documented CRLF occurrences by urban (hardscape) residential and commercial development as well as

busy 3-4 lane roads (Business Center Drive and Green Valley Road), all of which presumably serve as movement barriers. The intermittent, manmade stream within and adjacent to the Study Area appears to have marginal (if any) hydrologic connectivity to nearby Green Valley Creek. A large manmade (wholly artificial) lagoon that was constructed around 2003 following extensive development to the west (Google Earth 2022, NETR 2022) is surrounded entirely by dense residential development. Given the historic disturbance within and adjacent to the Study Area, the marginal aquatic habitat present there, and dispersal barriers resulting from development, these species are unlikely to occur.

Steelhead (*Oncorhynchus mykiss irideus*) – central California coast DPS, Federal Threatened. Steelhead are essentially native anadromous rainbow trout that migrate from marine waters to spawn in freshwater streams with suitable characteristics (e.g., cool, oxygenated water; cobble and gravel substrates). As per Leidy et al. (2005), Green Valley Creek supports a steelhead population. As stated above, the intermittent (manmade) stream within the Study Area appears to have marginal (if any) hydrologic connectivity to Green Valley Creek, and does not provide any suitable movement, spawning or rearing habitat for steelhead. However, federal protections to steelhead include protection of aquatic habitat, and, depending on project specifics, there is some potential for activities within the Study Area to incidentally impact the greater Green Valley Creek watershed (see recommendations below).

Local Tree Protection Ordinance

The City of Fairfield maintains a tree conservation ordinance for the protection of trees on public and private property. Existing trees within the Study Area may be protected under the Tree Conservation Ordinance of the City of Fairfield (Section 25.36). The City's Ordinance outlines maintenance and encroachment requirements for all existing trees and planting requirements for all newly proposed street trees associated with new development. A street tree is defined by the Fairfield Municipal Code as the following:

- All trees on public property.
- Trees planted or preserved on private property or within the public right of way as required by a City condition of approval or shown on a landscape drawing for a project approved by the City.
- The following species located on undeveloped private property which exceed 6 inches in caliper or diameter at breast height: native oaks (*Quercus* sp.), bay laurel (*Umbellularia californica*), madrone (*Arbutus menziesii*), and buckeye (*Aesculus californica*).

Under the Ordinance, any removal, unnatural pruning, or disfigurement of any protected trees requires a Tree Removal Permit from the City. Mitigation for tree removal activities may be required as a condition of approval when applying for a Tree Removal Permit; as discussed below.

Conclusions and Recommendations Summary

Based on results of the site visit, the Study Area contains three sensitive biological communities: a potentially jurisdictional seasonal wetland, a potentially jurisdictional (manmade) stream, and riparian. Additionally, the Study Area contains habitat which could support special status wildlife species.

Any impacts to the wetland or stream may require authorization from the Corps and RWQCB, as well as from CDFW in the case of the stream. As such, it is recommended that proposed land alterations (development) at the Study Area completely avoid the stream. If avoidance is not feasible, a re-evaluation of the stream's status (e.g., during the forthcoming rainy season) is recommended. Additionally, to avoid

any adverse impacts resulting from construction-related runoff (including potential downstream impacts to the Green Valley Creek watershed), appropriate erosion control measures and general BMPs should be designed and implemented during construction activities/ground disturbance within the Study Area. Such measures are typically required as part of a SWPPP and/or stormwater management plan.

Impacts to the seasonal wetland are presumably unavoidable, and therefore the preparation of a Nationwide Permit application for Corps review and a Water Quality Certification application for RWQCB review would be recommended. If the Corps or RWQCB determine the wetland or stream to be subject to its jurisdiction, authorization to impact these features may require payment of an *in lieu* fee, or compensatory mitigation for loss (e.g., by purchasing appropriate credits at a mitigation bank). Additionally, the riparian habitat is subject to CDFW jurisdiction via its Lake and Streambed Alteration Program, and therefore avoidance of riparian habitat to the fullest extent feasible is recommended.

The Study Area contains native oak trees as defined by the Fairfield Municipal Code. A Tree Removal Permit from the City is recommended if any street tree as defined by the City is removed in the Study Area. The Study Area has some potential to support special-status (burrowing owl, Swainson's hawk, white-tailed kite) and non-status nesting birds with baseline legal protections. Potential avoidance and mitigation measures include pre-construction surveys, establishment of no disturbance buffers, and agency authorization for loss of sensitive habitats and potential mitigation for such loss of habitat if warranted.

Attachments:

- Attachment A: Figures
- Attachment B: List of Observed Plant and Wildlife Species
- Attachment C: Potential for Special-status Species to Occur in the Study Area
- Attachment D: Site Photographs

References

[CDFW] California Department of Fish and Wildlife. 2021. California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch, Sacramento, CA. Accessed March 2021.

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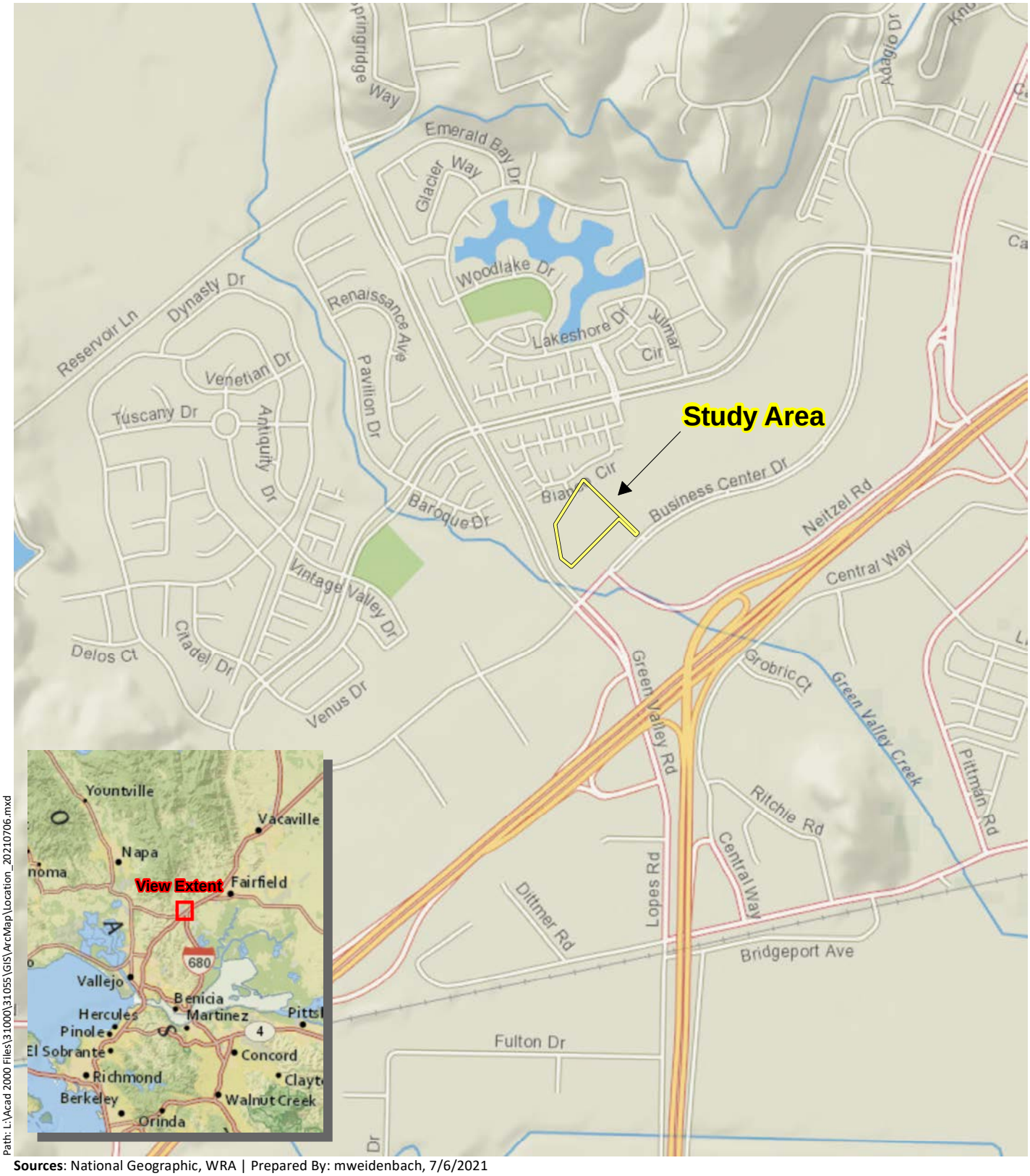
[USGS] U.S. Geological Survey. 2018. Cordelia, Mt. George, Fairfield North, Fairfield South, Napa, Cuttings Wharf, Mare Island, Benecia, and Vine Hill 7.5-minute topographic quadrangles.



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Sources: National Geographic, WRA | Prepared By: mweidenbach, 7/6/2021

Figure 1. Study Area Location

Green Valley III Apartments Property
Fairfield, Solano County, California

0 0.25 0.5 Miles

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wra ENVIRONMENTAL CONSULTANTS

Figure 2. Land Cover Types

Green Valley III Apartments Property
Fairfield, Solano County, California

Study Area (5.77 ac)

Sewer Manhole/Grate

Sensitive Land Cover Types

Intermittent Stream (0.13 ac, 431 ln ft)

Riparian (0.38 ac)

Seasonal Wetland (0.11 ac)

Non-Sensitive Land Cover Types

Non-Native Annual Grasslands (4.62 ac)

Developed (0.43 ac)

Landscaped (0.09 ac)

N

0 100 200

Feet

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Sources: Solano County Aerial 2017, WRA | Prepared By: pkobylarz, 3/11/2022

Table B. List of Plant and Wildlife Species Observed within the Study Area on March 30, 2021.

Scientific Name	Common Name	Origin	Form
Avena fatua	Wildoats	non-native (invasive)	annual grass
Brassica nigra	Black mustard	non-native (invasive)	annual herb
Bromus diandrus	Ripgut brome	non-native (invasive)	annual grass
Bromus hordeaceus	Soft chess	non-native (invasive)	annual grass
Carduus pycnocephalus ssp. pycnocephalus	Italian thistle	non-native (invasive)	annual herb
Carex barbarae	Valley sedge	native	perennial grasslike herb
Cirsium vulgare	Bullthistle	non-native (invasive)	perennial herb
Convolvulus arvensis	Field bindweed	non-native	perennial herb, vine
Cynodon dactylon	Bermuda grass	non-native (invasive)	perennial grass
Erodium botrys	Big heron bill	non-native	annual herb
Erodium cicutarium	Red stemmed filaree	non-native (invasive)	annual herb
Eschscholzia californica	California poppy	native	annual, perennial herb
Festuca myuros	Rattail sixweeks grass	non-native (invasive)	annual grass
Festuca perennis	Italian rye grass	non-native (invasive)	annual, perennial grass
Festuca rubra	Red fescue	native	perennial grass
Galium aparine	Cleavers	native	annual herb
Geranium dissectum	Wild geranium	non-native (invasive)	annual herb
Geranium molle	Crane's bill geranium	non-native	annual, perennial herb
Helminthotheca echioides	Bristly ox-tongue	non-native (invasive)	annual, perennial herb
Hordeum brachyantherum	Meadow barley	native	perennial grass

Scientific Name	Common Name	Origin	Form
Hordeum marinum ssp. gussoneanum	Mediterranean barley	non-native (invasive)	annual grass
Juncus balticus ssp. ater	Baltic rush	native	perennial grasslike herb
Juncus xiphioides	Iris leaved rush	native	perennial grasslike herb
Lepidium latifolium	Perennial pepperweed	non-native (invasive)	perennial herb
Lotus corniculatus	Bird's foot trefoil	non-native	perennial herb
Malva nicaeensis	Bull mallow	non-native	annual herb
Phalaris aquatica	Harding grass	non-native (invasive)	perennial grass
Quercus agrifolia	Coast live oak	native	tree
Quercus lobata	Valley oak	native	tree
Raphanus raphanistrum	Jointed charlock	non-native	annual, perennial herb
Rubus armeniacus	Himalayan blackberry	non-native (invasive)	shrub
Rumex crispus	Curly dock	non-native (invasive)	perennial herb
Rumex pulcher	Fiddleleaf dock	non-native	perennial herb
Salix laevigata	Red willow	native	tree
Salix lasiolepis	Arroyo willow	native	tree, shrub
Stipa miliacea var. miliacea	Smilo grass	non-native (invasive)	perennial grass
Toxicodendron diversilobum	Poison oak	native	vine, shrub
Tragopogon porrifolius	Salsify	non-native	perennial herb
Vicia sativa	Spring vetch	non-native	annual herb, vine
Vicia villosa ssp. villosa	Hairy vetch	non-native	annual herb, vine

- All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2021]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2021]

Scientific Name	Common Name	Conservation Status
Birds		
*Anas platyrhynchos**	mallard	
*Ardea herodias**	great blue heron	none
Aphelocoma californica	California scrub jay	none
Baeolophus inornatus	oak titmouse	none
Buteo jamaicensis	red-tailed hawk	none
Buteo lineatus	Red-shouldered hawk	none
Calypte anna	Anna's hummingbird	none
*Cathartes aura**	turkey vulture	none
Columba livia	rock pigeon	none
Corvus brachyrhynchos	American crow	none
Haemorhous mexicanus	house finch	none
Mimus polyglottos	northern mockingbird	none
Psaltriparus minimus	American bushtit	none
Sturnus vulgaris	European starling	none
Zenaida macroura	mourning dove	none
Zonotrichia leucophrys	white-crowned sparrow	none
Amphibians		
Pseudacris regilla	Pacific tree frog	none
Mammals		
Procyon lotor	raccoon	none

*observed flying over

Table C. Potential for Special-status Species to Occur in the Study Area. List compiled from the CDFW BIOS database (CDFW 2022) and CNPS Electronic Inventory (CNPS 2022) searches. For database queries, the Napa, Mt. George, Fairfield North, Cuttings Wharf, Cordelia, Fairfield South, Mare Island, Benicia, and Vine Hill USGS 7.5' quadrangles were included in the search.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Plants				
Agrostis hendersonii Henderson's bent grass	Rank 3.2	Valley and foothill grassland (mesic), vernal pools. Elevation ranges from 225 to 1000 feet (70 to 305 meters). Blooms Apr-Jun.	**Unlikely.** The Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Allium peninsulare var. franciscanum Franciscan onion	Rank 1B.2	Cismontane woodland, valley and foothill grassland. Elevation ranges from 170 to 1000 feet (52 to 305 meters). Blooms (Apr)May-Jun.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Arabis modesta modest rockcress	Rank 4.3	Chaparral, lower montane coniferous forest. Elevation ranges from 395 to 2625 feet (120 to 800 meters). Blooms Mar-Jul.	**No Potential.** The Study Area does not contain chaparral or coniferous forest habitats.	No further actions are recommended for this species.
Astragalus tener var. tener alkali milk-vetch	Rank 1B.2	Playas, valley and foothill grassland (adobe clay), vernal pools. Elevation ranges from 0 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	**Unlikely.** The Study Area does not contain playa, adobe, or vernal pool habitat. The Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Atriplex coronata var. coronata crownscale	Rank 4.2	Chenopod scrub, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1935 feet (1 to 590 meters). Blooms Mar-Oct.	**Unlikely.** Chenopod scrub and vernal pool habitats and alkaline substrate are absent from the Study Area.	No further actions are recommended for this species.
Atriplex persistens vernal pool smallscale	Rank 1B.2	Vernal pools (alkaline). Elevation ranges from 30 to 375 feet (10 to 115 meters). Blooms Jun, Aug, Sep, Oct.	**No Potential.** Vernal pool habitat is not present throughout the Study Area.	No further actions are recommended for this species.
Balsamorhiza macrolepis big-scale balsamroot	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 145 to 5100 feet (45 to 1555 meters). Blooms Mar-Jun.	**Unlikely.** Species is known to occur on serpentine or volcanic substrate (CDFW 2022), which is not found throughout the Study Area. The Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Blepharizonia plumosa big tarplant	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 100 to 1655 feet (30 to 505 meters). Blooms Jul-Oct.	**No Potential.** This species is known from vertic clay soils, which are absent from the Study Area.	No further actions are recommended for this species.
Brodiaea leptandra narrow-anthered brodiaea	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 360 to 3000 feet (110 to 915 meters). Blooms May-Jul.	**No Potential.** This species is only known from volcanic substrates (CDFW 2022), which are not present in the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Calandrinia breweri Brewer's calandrinia	Rank 4.2	Chaparral, coastal scrub. Elevation ranges from 35 to 4005 feet (10 to 1220 meters). Blooms (Jan)Mar-Jun.	**No Potential.** The Study Area does not contain chaparral or coastal scrub habitats.	No further actions are recommended for this species.
Calochortus pulchellus Mt. Diablo fairy-lantern	Rank 1B.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevation ranges from 95 to 2755 feet (30 to 840 meters). Blooms Apr-Jun.	**Unlikely.** Species is found on woody or brushy slopes (CDFW 2022), which are not present in Study Area. In addition, the Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Carex lyngbyei Lyngbye's sedge	Rank 2B.2	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Aug.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Castilleja affinis var. neglecta Tiburon paintbrush	FE, ST, Rank 1B.2	Valley and foothill grassland (serpentine). Elevation ranges from 195 to 1310 feet (60 to 400 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain serpentine substrate.	No further actions are recommended for this species.
Castilleja ambigua var. ambigua johnny-nip	Rank 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Ceanothus purpureus holly-leaved ceanothus	Rank 1B.2	Chaparral, cismontane woodland. Elevation ranges from 390 to 2100 feet (120 to 640 meters). Blooms Feb-Jun.	**No Potential.** The Study Area does not contain rocky volcanic slopes, chaparral, or woodland habitats.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Centromadia parryi ssp. congdonii Congdon's tarplant	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 0 to 755 feet (0 to 230 meters). Blooms May-Oct(Nov).	**Unlikely.** Although this species is tolerant of disturbance, the Study Area lacks alkaline substrate.	No further actions are recommended for this species.
Centromadia parryi ssp. parryi pappose tarplant	Rank 1B.2	Chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), valley and foothill grassland (vernally mesic). Elevation ranges from 0 to 1380 feet (0 to 420 meters). Blooms May-Nov.	**Moderate Potential.** This species is known to occur in highly disturbed areas such as those present within the Study Area.	Appropriately timed surveys are recommended for this species.
Centromadia parryi ssp. rudis Parry's rough tarplant	Rank 4.2	Valley and foothill grassland, vernal pools. Elevation ranges from 0 to 330 feet (0 to 100 meters). Blooms May-Oct.	**Unlikely.** Although this species is tolerant of disturbance, the Study Area lacks alkaline substrate.	No further actions are recommended for this species.
Chloropyron molle ssp. molle soft bird's-beak	FE, SR, Rank 1B.2	Marshes and swamps (coastal salt). Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms Jun-Nov.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Cicuta maculata var. bolanderi Bolander's water-hemlock	Rank 2B.1	Marshes and swamps coastal, fresh or brackish water. Elevation ranges from 0 to 655 feet (0 to 200 meters). Blooms Jul-Sep.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Cirsium hydrophilum var. hydrophilum Suisun thistle	FE, Rank 1B.1	Marshes and swamps (salt). Elevation ranges from 0 to 5 feet (0 to 1 meters). Blooms Jun-Sep.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Clarkia gracilis ssp. tracyi Tracy's clarkia	Rank 4.2	Chaparral. Elevation ranges from 215 to 2135 feet (65 to 650 meters). Blooms Apr-Jul.	**No Potential.** The Study Area does not contain chaparral habitat.	No further actions are recommended for this species.
Dirca occidentalis western leatherwood	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar(Apr).	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Downingia pusilla dwarf downingia	Rank 2B.2	Valley and foothill grassland (mesic), vernal pools. Elevation ranges from 0 to 1460 feet (1 to 445 meters). Blooms Mar-May.	**No Potential.** The Study Area does not contain vernal pool or seasonal wetland habitat.	No further actions are recommended for this species.
Eleocharis parvula small spikerush	Rank 4.3	Marshes and swamps. Elevation ranges from 5 to 9910 feet (1 to 3020 meters). Blooms (Apr)Jun-Aug(Sep).	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Erigeron biolettii streamside daisy	Rank 3	Broad-leafed upland forest, cismontane woodland, north coast coniferous forest. Elevation ranges from 95 to 3610 feet (30 to 1100 meters). Blooms Jun-Oct.	**No Potential**. The Study Area does not contain broad-leafed forest, cistmontane woodland, or coniferous forest habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Erigeron greenei Greene's narrow-leaved daisy	Rank 1B.2	Chaparral (serpentine or volcanic). Elevation ranges from 260 to 3295 feet (80 to 1005 meters). Blooms May-Sep.	**No Potential.** The Study Area does not contain serpentine or volcanic substrate.	No further actions are recommended for this species.
Eriogonum truncatum Mt. Diablo buckwheat	Rank 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Elevation ranges from 5 to 1150 feet (3 to 350 meters). Blooms Apr-Sep(Nov-Dec).	**Unlikely.** The Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Eryngium jepsonii Jepson's coyote thistle	Rank 1B.2	Valley and foothill grassland, vernal pools. Elevation ranges from 5 to 985 feet (3 to 300 meters). Blooms Apr-Aug.	**No Potential.** The Study Area does not contain vernal pool or seasonal wetland habitat.	No further actions are recommended for this species.
Erythronium helenae St. Helena fawn lily	Rank 4.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 1150 to 4005 feet (350 to 1220 meters). Blooms Mar-May.	**No Potential.** The Study Area lacks serpentine and volcanic substrates.	No further actions are recommended for this species.
Extriplex joaquinana San Joaquin spearscale	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. Elevation ranges from 0 to 2740 feet (1 to 835 meters). Blooms Apr-Oct.	**Unlikely.** The Study Area is highly disturbed by discing and mowing. In addition, typically associated species, including *Distichalis spicata* and *Frankenia salina,* are not present.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Fritillaria liliacea fragrant fritillary	Rank 1B.2	cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Harmonia nutans nodding harmonia	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 245 to 3200 feet (75 to 975 meters). Blooms Mar-May.	**No Potential.** Volcanic substrate is absent from the Study Area.	No further actions are recommended for this species.
Helianthella castanea Mt. Diablo helianthella	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4265 feet (60 to 1300 meters). Blooms Mar-Jun.	**Unlikely.** This species typically occurs in chaparral and oak woodland interface on rocky, azonal soils (CDFW 2022), which are not present in the Study Area. In addition, the Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Hesperevax caulescens hogwallow starfish	Rank 4.2	Valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1655 feet (0 to 505 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain vernal pool habitat.	No further actions are recommended for this species.
Hesperolinon bicarpellatum two-carpellate western flax	Rank 1B.2	Chaparral. Elevation ranges from 195 to 3295 feet (60 to 1005 meters). Blooms (Apr)May-Jul.	**No Potential.** The Study Area does not contain chaparral habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Hesperolinon breweri Brewer's western flax	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 95 to 3100 feet (30 to 945 meters). Blooms May-Jul.	**No Potential.** This species is found in rocky serpentine soil in serpentine chaparral and serpentine grassland habitats (CDFW 2022), none of which are present in the Study Area.	No further actions are recommended for this species.
Iris longipetala coast iris	Rank 4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May(Jun).	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Isocoma arguta Carquinez goldenbush	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 5 to 65 feet (1 to 20 meters). Blooms Aug-Dec.	**No Potential.** The Study Area does not contain alkaline substrate.	No further actions are recommended for this species.
Lasthenia conjugens Contra Costa goldfields	FE, Rank 1B.1	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain vernal pool habitat or clay soils. In addition, the Study Area is highly disturbed by discing and mowing, and this species is not known to occur in habitats regularly disturbed by such activities.	No further actions are recommended for this species.
Lasthenia ferrisiae Ferris' goldfields	Rank 4.2	Vernal pools. Elevation ranges from 65 to 2295 feet (20 to 700 meters). Blooms Feb-May.	**No Potential.** The Study Area does not contain vernal pool habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Lathyrus jepsonii var. jepsonii delta tule pea	Rank 1B.2	Marshes and swamps (freshwater and brackish). Elevation ranges from 0 to 15 feet (0 to 5 meters). Blooms May-Jul (Aug-Sep).	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Legenere limosa legenere	Rank 1B.1	Vernal pools. Elevation ranges from 0 to 2885 feet (1 to 880 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain vernal pool habitat.	No further actions are recommended for this species.
Leptosiphon acicularis bristly leptosiphon	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Leptosiphon jepsonii Jepson's leptosiphon	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 330 to 1640 feet (100 to 500 meters). Blooms Mar-May.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Lessingia hololeuca woolly-headed lessingia	Rank 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 50 to 1000 feet (15 to 305 meters). Blooms Jun-Oct.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality. In addition, this species often occurs on clay, serpentine soils, which are absent from the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Lilaeopsis masonii Mason's lilaeopsis	SR, Rank 1B.1	Marshes and swamps (brackish or freshwater), riparian scrub. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Nov.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Lilium rubescens redwood lily	Rank 4.2	broadleafed upland forest, chaparral, lower montane coniferous forest, north coast coniferous forest, upper montane coniferous forest. Elevation ranges from 100 to 6265 feet (30 to 1910 meters). Blooms Apr-Aug(Sep).	**No Potential.** The Study Area does not contain adequate coniferous or broadleaf forest habitat.	No further actions are recommended for this species.
Limosella australis Delta mudwort	Rank 2B.1	marshes and swamps, riparian scrub. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms May-Aug.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Lomatium repostum Napa lomatium	Rank 1B.2	Chaparral, cismontane woodland. Elevation ranges from 295 to 3380 feet (90 to 1030 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain volcanic substrate.	No further actions are recommended for this species.
Monardella antonina ssp. antonina San Antonio Hills monardella	Rank 3	Chaparral, cismontane woodland. Elevation ranges from 1050 to 3280 feet (320 to 1000 meters). Blooms Jun-Aug.	**No Potential.** The Study Area does not contain chaparral or cismontane habitat nor is at a high enough elevation to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Monardella viridis green monardella	Rank 4.3	Broadleafed upland forest, chaparral, cismontane woodland. Elevation ranges from 330 to 3315 feet (100 to 1010 meters). Blooms Jun-Sep.	**No Potential.** The Study Area does not contain volcanic substrate.	No further actions are recommended for this species.
Navarretia leucocephala ssp. bakeri Baker's navarretia	Rank 1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 15 to 5710 feet (5 to 1740 meters). Blooms Apr-Jul.	**No Potential.** The Study Area does not contain vernal pool habitat.	No further actions are recommended for this species.
Polygonum marinense Marin knotweed	Rank 3.1	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms (Apr)May-Aug(Oct).	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Puccinellia simplex California alkali grass	Rank 1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 3050 feet (2 to 930 meters). Blooms Mar-May.	**Unlikely.** This species is associated with vernally mesic sinks, flats, and lake margins (CDFW 2022), which are not present in the Study Area.	No further actions are recommended for this species.
Ranunculus lobbii Lobb's aquatic buttercup	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality. In addition, the nearest occurrence of this species is approximately 7 miles northwest of the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Rhynchospora californica California beaked-rush	Rank 1B.1	Bogs and fens, lower montane coniferous forest, meadows and seeps (seeps), marshes and swamps (freshwater). Elevation ranges from 145 to 3315 feet (45 to 1010 meters). Blooms May-Jul.	**No Potential.** The Study Area does not contain marsh, seep, or swamp habitat.	No further actions are recommended for this species.
Senecio aphanactis chaparral ragwort	Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 50 to 2625 feet (15 to 800 meters). Blooms Jan-Apr(May).	**No Potential.** The Study Area does not contain alkaline flats.	No further actions are recommended for this species.
Sidalcea hickmanii ssp. napensis Napa checkerbloom	Rank 1B.1	Chaparral. Elevation ranges from 1360 to 2000 feet (415 to 610 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain chaparral habitat.	No further actions are recommended for this species.
Spergularia macrotheca var. longistyla long-styled sand-spurrey	Rank 1B.2	Marshes and swamps, meadows and seeps. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May.	**No Potential.** The Study Area does not contain alkaline substrate.	No further actions are recommended for this species.
Stuckenia filiformis ssp. alpina slender-leaved pondweed	Rank 2B.2	Marshes and swamps (assorted shallow freshwater). Elevation ranges from 980 to 7055 feet (300 to 2150 meters). Blooms May-Jul.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.
Symphyotrichum lentum Suisun Marsh aster	Rank 1B.2	Marshes and swamps (brackish and freshwater). Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms Apr/May-Nov.	**No Potential.** The Study Area does not contain marsh or swamp habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Trichostema ruygtii Napa bluecurls	Rank 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 95 to 2230 feet (30 to 680 meters). Blooms Jun-Oct.	**Unlikely.** This species is generally found on thin clay soils on dry rocky slopes and flats that are often adjacent to exposed volcanic bedrock (Lewis 2006), none of which is present in the Study Area.	No further actions are recommended for this species.
Trifolium amoenum two-fork clover	FE, Rank 1B.1	Coastal bluff scrub, valley and foothill grassland. Elevation ranges from 15 to 1360 feet (5 to 415 meters). Blooms Apr-Jun.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality.	No further actions are recommended for this species.
Trifolium hydrophilum saline clover	Rank 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation ranges from 0 to 985 feet (0 to 300 meters). Blooms Apr-Jun.	**Unlikely.** This species is typically associated with vernal pool habitat, which is not present in Study Area. Additionally, the Study Area is highly disturbed from annual discing and mowing, which provides poor quality habitat for this species.	No further actions are recommended for this species.
Triteleia lugens dark-mouthed triteleia	Rank 4.3	Broadleafed upland forest, chaparral, coastal scrub, lower montane coniferous forest. Elevation ranges from 330 to 3280 feet (100 to 1000 meters). Blooms Apr-Jun.	**Unlikely.** The Study Area has experienced through historic and modern disturbance, which greatly reduces the habitat quality. The nearest occurrence of this species is approximately 10 miles north of the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Viburnum ellipticum oval-leaved viburnum	Rank 2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 705 to 4595 feet (215 to 1400 meters). Blooms May-Jun.	**No Potential.** The Study Area does not contain broad-leafed upland forest, chaparral, or lower montane coniferous forest habitat.	No further actions are recommended for this species.
Wildlife				
Mammals				
Antrozous pallidus pallid bat	SSC, WBWG High	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and hollow trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Unlikely.** The Study Area and adjacent areas do not contain rocky foraging habitat or suitable roosting habitat for the species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Corynorhinus townsendii Townsend's big-eared bat	SSC, WBWG High	This species is associated with a wide variety of habitats from deserts to mid-elevation mixed coniferous-deciduous forest. Females form maternity colonies in buildings, caves, and mines. Males roost singly or in small groups. Foraging occurs in open forested areas where moths are gleaned from vegetation.	**No Potential.** The Study Area and adjacent areas do not contain open forest foraging habitat or suitable roosting habitat for the species.	No further actions are recommended for this species.
Reithrodontomys raviventris salt marsh harvest mouse	FE, SE, SFP	Found only in saline emergent wetlands of San Francisco Bay and its tributaries. Primary habitat is dominated by pickleweed (*Salicornia sp.*). Requires adjacent, upland areas as refuge during high tides.	**No Potential.** Salt or brackish marsh habitat is not present within the Study Area.	No further actions are recommended for this species.
Sorex ornatus sinuosus Suisun shrew	SSC	Tidal marshes of the northern shores of San Pablo and Suisun Bays. Requires dense low-lying cover, driftweed, and other litter above the mean high tide line for nesting and foraging.	**No Potential.** Tidal marsh habitat is not present, and the Study Area is outside the known range.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Taxidea taxus American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**Unlikely.** The Study Area is highly disturbed (disked semi-regularly) and surrounded by development; no potential burrows of this species were observed during site visits.	No further actions are recommended for this species.
Birds				
Agelaius tricolor tricolored blackbird	ST, SSC	Resident, though disperses somewhat when not breeding. Typically nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs. Highly colonial; breeding aggregations tend to be large.	**Unlikely.** The Study Area does not contain any suitable breeding habitat such as: marsh or thickets of willow. Foraging unlikely as no breeding sites known from immediate vicinity.	No further actions are recommended for this species.
Aquila chrysaetos golden eagle	BGEPA, SFP	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees and on taller, manmade structures, usually within otherwise open areas. Rodents and rabbits are primary prey items.	**Unlikely.** The Study Area is nearly surrounded by development does not contain any typical nesting substrates.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Ardea herodias great blue heron	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially or semi-colonially in tall trees and cliffs, also sequested terrestrial substrates. Breeding sites usually in close proximity to foraging areas: marshes, lake margins, tidal flats, and rivers. Forages primarily on fishes and other aquatic prey, also smaller terrestrial vertebrates.	**Unlikely.** The Study Area does not provide suitable aquatic features for foraging; no indication of presence observed during site visits.	No further actions are recommended for this species.
Asio flammeus short-eared owl	SSC	Occurs year-round, but primarily as a winter visitor; breeding very restricted in most of California. Found in open, treeless areas (e.g., marshes, grasslands) with elevated sites for foraging perches and dense herbaceous vegetation for roosting and nesting. Preys mostly on small mammals, particularly voles.	**Unlikely.** The Study Area is located west of the current breeding range of the species (Shuford and Gardali 2008) and wetlands within the Study Area are too small to support the demands of nesting. This species may occasionally forage in the area. The nearest documented nest occurrence is from 1987 at Grizzly Island, approximately 10 miles southeast of the Study Area (CDFW 2022).	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Athene cunicularia burrowing owl	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**Unlikely.** While the Study Area consists of open grassland, it is disturbed including being subject to semi-regular disking. No ground squirrels, ground squirrel burrows or burrow facsimiles capable of supporting owl nesting or wintering have been observed during site visits. The nearest documented observations are located greater than 3 miles away (CDFW 2022, eBird 2022).	Not observed to date. If HCP coverage is applicable, a pre-construction survey and potentially compensatory mitigation for loss of foraging habitat may be required.
Buteo swainsoni Swainson's Hawk	ST	Summer resident in the region. Forages in grasslands and nests in the immediate vicinity, often in relatively isolated trees or tree groves. Most of the California population breeds in the Central Valley. Forages on insects and rodents, also other vertebrates.	**Moderate Potential.** While the band of trees within and adjacent to the Study Area is suitable for nesting, the site is disturbed and nearly surrounded by development, reducing such potential. The nearest nesting occurrence in CNDDB is approximately 1.1 mile to the south (last documented use in 2004; CDFW 2022). As per LSA (pers. comm. 2022), there are additional recent nesting occurrences respectively located approximately 1.8 and 2.5 miles to the east.	Not observed to date. Pre-construction survey effort recommended prior to ground disturbance. If HCP coverage is applicable, compensatory mitigation for loss of foraging habitat may be required.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Charadrius alexandrines nivosus western snowy plover	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No Potential.** The Study Area does not contain open sandy or similar (alkaline) substrates.	No further actions are recommended for this species.
Charadrius montanus mountain plover	SSC	Winter visitor to the Central Valley and some interior portions of southern California. Wintering habitats consist of areas with very short vegetation and/or bare ground, and flat topography; agricultural fields are used most frequently. Does not breed in California.	**Unlikely.** The Study Area is nearly surrounded by development and outside of the species' local wintering range as per Shuford and Gardali (2008).	No further actions are recommended for this species.
Circus cyaneus northern harrier	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	**Unlikely.** The Study Area is disturbed and nearly surrounded by development.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Coccyzus americanus occidentalis yellow-billed cuckoo	FT, SE	Summer resident, breeding in dense riparian forests and jungles, typically with early successional vegetation present. Utilizes densely-foliaged deciduous trees and shrubs. Eats mostly caterpillars. Current breeding distribution within California very restricted.	**Unlikely.** The Study Area is outside of the species' known breeding range and contains/abuts only marginal habitat.	No further actions are recommended for this species.
Coturnicops noveboracensis yellow rail	SSC	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state. Extremely cryptic.	**No Potential.** The Study Area does not contain dense emergent dense wetland vegetation suitable for use by this species.	No further actions are recommended for this species.
Egretta thula snowy egret	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially, usually in trees, at times in sequestered beds of dense emergent vegetation (e.g., tules). Rookery sites usually situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	**Unlikely.** The Study Area does not provide suitable aquatic features for foraging; no indication of presence observed during site visits.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Elanus leucurus white-tailed kite	SFP	Year-long resident of coastal and valley lowlands. Preys on small diurnal mammals and occasional birds, insects, reptiles, and amphibians. Can be abundant where habitat remains free of disturbance.	**Moderate Potential.** The Study Area only contains one tree suitable for nesting. The species may forage in the open grassland present within the Study Area.	See section 5.2 for further recommendations for this species.
Falco peregrinus anatum American peregrine falcon	SE, SFP	Year-round resident and winter visitor. Occurs near water, including coastal areas, wetlands, lakes and rivers. Usually nests on sheltered cliffs or tall man-made structures. Preys primarily on waterbirds.	**Unlikely.** The Study Area does not contain large cliffs or suitable man-made structures for nesting.	No further actions are recommended for this species.
Geothlypis trichas sinuosa saltmarsh (San Francisco) common yellowthroat	SSC	Breeding habitat is marshes or similar wet areas with low, dense vegetation. Requires continuous, thick cover down to water for foraging. Less common in dry areas.	**Unlikely.** The Study Area does not contain emergent dense wetland vegetation suitable for foraging and nesting by this species.	No further actions are recommended for this species.
Lanius ludovicianus loggerhead shrike	SSC	Year-round resident in open woodland, grassland, savannah and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	**Unlikely.** The Study Area is disturbed and nearly surrounded by development, reducing potential for occurrence. Not observed during site visits.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Laterallus jamaicensis coturniculus California black rail	ST, SFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	**No Potential.** The Study Area does not contain any suitable marsh habitat.	No further actions are recommended for this species.
Melospiza melodia maxillaris Suisun song sparrow	SSC	Resident of brackish-water marshes surrounding Suisun Bay. Inhabits cattails, tules and other sedges, and Salicornia; also known to frequent tangles bordering sloughs.	**No Potential.** The Study Area is outside of this subspecies' known range (Shuford and Gardali 2008).	No further actions are recommended for this species.
Melospiza melodia samuelis San Pablo song sparrow	SSC	Year-round resident of tidal marshes along the north side of San Francisco and San Pablo Bays. Typical habitat is dominated by pickleweed, with gumplant and other shrubs present in the upper zone for nesting. May forage in areas adjacent to marshes.	**No Potential.** No marsh habitat is within or nearby to the Study Area. The nearest known occurrence is over 8 miles from the Study Area (CDFW 2022).	No further actions are recommended for this species.
Nycticorax nycticorax black-crowned night heron	no status (breeding sites protected by CDFW)	Year-round resident. Nests colonially, usually in trees but also in patches of emergent vegetation or shrubbery. Rookery sites are often on islands and usually located adjacent to foraging areas: margins of lakes and bays.	**Unlikely.** The Study Area does not provide suitable aquatic features for foraging; no indication of presence observed during site visits.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Rallus obsoletus obsoletus California Ridgway's (clapper) rail	FE, SE, SFP	Resident in tidal marshes of the San Francisco Bay Estuary. Requires tidal sloughs and mud flats for foraging, and dense vegetation for nesting. Associated with abundant growth of cordgrass and pickleweed. Largest populations in south San Francisco Bay.	**No Potential.** The Study Area does not contain tidal marsh habitat for the species.	No further actions are recommended for this species.
Sternula antillarum browni California least tern	FE, ST, SFP	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	**No Potential.** No suitable breeding habitat is present in the Study Area to support this species.	No further actions are recommended for this species.
Xanthocephalus xanthocephalus yellow-headed blackbird	SSC	Summer resident. Breeds colonially in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Requires abundant large insects such as dragonflies; nesting is timed for maximum emergence of insect prey.	**No Potential.** The Study Area's pond lacks dense marsh vegetation.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Reptiles and Amphibians				
Emys marmorata western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**Unlikely.** The Study Area is nearly surrounded by development and lacks perennial or otherwise suitable aquatic habitat to support this species. The nearest CNDDB occurrence is located approximately 1.0 mile to the west in open space, and separated from the Study Area by commercial and residential development (CDFW 2022).	No further actions are recommended for this species.
Dicamptodon ensatus California giant salamander	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	**No Potential.** The Study Area does not contain perennial or near-perennial streams with suitable habitat characteristics, and it outside of this species known range.	No further actions are recommended for this species.
Masticophis lateralis euryxanthus Alameda whipsnake	FT, ST	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	**No Potential.** The Study Area does not contain chaparral and rocky outcrops, and is outside of this species local range.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Rana boylii foothill yellow-legged frog	SSC	Found in or near rocky streams in a variety of habitats; highly aquatic. Prefers partially-sunlit, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on invertebrates (aquatic and terrestrial).	**No Potential.** The Study Area does not contain rocky perennial or near-perennial streams. The nearest occurrence in CNDDB is in Suisun Creek, approximately 5.2 miles to the northeast (CDFW 2022).	No further actions are recommended for this species.
Rana draytonii California red-legged frog	FT, SSC	Associated with quiet perennial to intermittent ponds, stream pools, and wetlands. Prefers shorelines with extensive vegetation. Documented to disperse through upland habitats after rains.	**Unlikely.** The Study Area is nearly surrounded by development and lacks perennial or near-perennial aquatic features of the type typically used for breeding. The nearest CNDDB occurrences are located greater than 1.1 miles to the west, and are separated from the Study Area by freeways and hardscape development (CDFW 2022).	No further actions are recommended for this species.
Fishes				
Hypomesus transpacificus Delta smelt	FT, SE	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	**No Potential.** No estuarine or other suitable aquatic habitat is present in the Study Area for this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Oncorhynchus mykiss irideus steelhead - central CA coast DPS	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	**Unlikely.** Green Valley Creek, located approximately 140 feet south of the Study Area, support a steelhead population (Leidy et al. 2005). The intermittent stream within the Study Area appears to have only marginal (if any) hydrologic connectivity with Green Valley Creek and does provide movement or breeding habitat.	No further actions are recommended for this species.
Pogonichthys macrolepidotus Sacramento splittail	SSC	Endemic to California's Central Valley. Primarily freshwater fish but are tolerant of moderate salinity and can survive in water with salinities of 10-18 parts per thousand. Spawn on submerged vegetation in temporarily flooded upland and riparian habitat. Spawning occurs in the lower reaches of rivers, dead-end sloughs and in the larger sloughs. Found in Sacramento-San Joaquin Delta.	**No Potential.** No estuarine or other suitable aquatic habitat is present in the Study Area for this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Spirinchus thaleichthys longfin smelt	FC, ST	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt but can be found in completely freshwater to almost pure seawater.	**No Potential.** No estuarine or other suitable aquatic habitat is present in the Study Area for this species.	No further actions are recommended for this species.
Invertebrates				
Branchinecta lynchi vernal pool fairy shrimp	FT	Occurs mostly in vernal pools; but is also found in other natural and artificial wetland habitats, such as alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools.	**Unlikely.** The Study Area is highly disturbed (disked semi-regularly); the on-site seasonal wetland, apparently an artifact of previous nearby development, appears to lack sufficient hydrology.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Danaus plexippus monarch butterfly	FC, winter roosts protected by CDFW	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	**Unlikely.** While a stand of trees is present within and adjacent to the Study Area, a row or grove of typical monarch roost trees (eucalyptus, Monterey pine Monterey cypress) is not present. The site is also further inland than is typical for monarch roosting. The nearest documented roost site is approximately 4.5 miles to the east, where use was last observed in 1979 (CDFW 2022). Individual monarchs may use the Study Area during local movements.	No further actions are recommended for this species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	Occurs only in the central valley of California, in association with blue elderberry (*Sambucus spp*.). Prefers to lay eggs in elderberry 2 to 8 inches in diameter; some preference shown for "stressed" elderberry.	**Unlikely.** There are CNDDB occurrences in the vicinity, the nearest approximately 0.9 mile to the northeast (CDFW 2022). However, elderberry is not present within the Study Area and thus this species is presumed absent.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE STUDY AREA**	RESULTS AND RECOMMENDATIONS
Speyeria callippe callippe callippe silverspot butterfly	FE	Two extant populations are recognized, on San Bruno Mountain and in the Cordelia Hills. Host plant is Johnny jump-up (*Viola pedunculata*), which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**No Potential.** Although an extant population is present approximately 5 miles to the southwest, the Study Area is disturbed and provides no suitable habitat.	No further actions are recommended for this species.
Syncaris pacifica California freshwater shrimp	FE, SE	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main stream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**No Potential.** The Study Area lacks perennial or near-perennial streams with suitable habitat characteristics. The nearest occurrence is located greater than 12 miles to the northwest in Huichica Creek (CDFW 2022).	No further actions are recommended for this species.

*** Key to status codes:**

BGEPA	Bald and Golden Eagle Protection Act
FC	Federal Candidate Threatened
FE	Federal Endangered
FT	Federal Threatened
SC	State Candidate Threatened
SE	State Endangered
SFP	State Fully Protected Animal
SSC	CDFW Species of Special Concern
ST	State Threatened
Rank 1A	California Native Plant Society (CNPS) Rank 1A: Plants presumed extirpated in California and rare or extinct elsewhere
Rank 1B.1	California Native Plant Society (CNPS) Rank 1B.1: Plants rare, threatened or endangered in California and elsewhere (seriously threatened in California)
Rank 1B.2	California Native Plant Society (CNPS) Rank 1B.2: Plants rare, threatened, or endangered in California and elsewhere (moderately threatened in California)
Rank 2B.2	California Native Plant Society (CNPS) Rank 2B.2: Plants rare, threatened, or endangered in California, but more common elsewhere (moderately threatened in California)
Rank 3	California Native Plant Society (CNPS) Rank 3: Plants about which more information is needed (a review list).
Rank 4.3	California Rare Plant Rank 4.3: Plants of Limited Distribution - A Watch List (not very threatened in California)
WBWG	Western Bat Working Group Priority Species

****Potential species occurrence definitions:**

Present. Species was observed on the site during site visits or has been recorded (i.e. CNDDB, other reports) on the site recently.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species has a low probability of being found on the site.

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

Photo 1. View of annual grassland and paved area within the Study Area, looking north. (March 30, 2021)

Photo 2. View of annual grassland and riparian habitat within the Study Area. (March 30, 2021)

Photo 3. View of seasonal wetland within the Study Area. (March 30, 2021)

Photo 4. View of the stream (channel) and Himalayan blackberry riparian habitat within the Study Area. (March 30, 2021)