

Appendix A
BIOLOGICAL RESOURCES BACKGROUND INFORMATION

**Special-status Species Considered for Potential
to Occur in or near the Project Site**

Special-status Species Considered for Potential to Occur in or near the Project Site**PLANTS**

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-	-	1B.2	-	Playas, valley and foothill grasslands in adobe clay, wetlands, vernal pools. Alkaline soils. 1-60 meters. Blooms March through June.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	-	-	1B.2	-	Chenopod scrub, valley and foothill grassland, meadows and seeps. Alkaline flats and scalds in the Central Valley, sandy soils. 3-275 meters. Blooms April through October.	None. The project site lacks suitable habitat for this species. Nearest CNDDDB occurrence is approximately 2 miles north of the project site.
<i>Atriplex minuscula</i> lesser saltscale	-	-	1B.1	-	Chenopod scrub, playas, valley and foothill grassland. Occasionally occurs in wetlands. Alkaline and sandy soils. 15-200 meters. Blooms May through October.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Atriplex persistens</i> vernal pool smallscale	-	-	1B.2	-	Vernal pools in alkaline soils at the bottom of basins. 10-115 meters. Blooms June through October.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Atriplex subtilis</i> subtle orache	-	-	1B.2	-	Valley and foothill grasslands in alkaline soils, often near vernal pools. 40-100 meters. Blooms June through October.	None. The project site lacks suitable habitat for this species. Nearest CNDDDB occurrence is approximately 2 miles north of the project site.

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Clarkia rostrate</i> Beaked clarkia	-	-	1B.3	-	Cismontane woodlands, valley and foothill grasslands. North facing slopes; sometimes on sandstone. 60-500 meters. Blooms April through May.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Eryngium racemosum</i> Delta button-celery	-	SE	1B.1	-	Seasonally flooded clay depressions in floodplains, riparian scrub. 3-30 meters. Blooms June through October.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Lasthenia chrysantha</i> Alkali-sink goldfields	-	-	1B.1	-	Vernal pools, wet saline flats, valley grassland, foothill woodland. 0-100 meters. Blooms February through April.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Monardella leucocephala</i> Merced monardella	-	-	1A	-	Valley and foothill grassland in sandy and mesic soils. 35-100 meters. Blooms May through August.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Neostapfia colusana</i> Colusa grass	FT	SE	1B.1	-	Vernal pools, wetlands, valley grassland, wetland-riparian. 5-200 meters. Blooms May through August.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	FT	SE	1B.1	-	Vernal pools, alluvial fans, high and low stream terraces, tabletop lava flows. Soils are acidic and vary from clay to sandy loam. 10-755 meters. Blooms April through September.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Puccinellia simplex</i> California alkali grass	-	-	1B.2	-	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernal mesic. Sinks, flats, and lake margins. 1-915 meters. Blooms March through May.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Sphenopholis obtusata</i> prairie wedge grass	-	-	2B.2	-	Cismontane woodland, wet meadows and seeps, streambanks, ponds in mesic soils. 300-2,000 meters. Blooms April through July.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Tuctoria greenei</i> Greene's tuctoria	FE	Rare	1B.1	-	Vernal pools. 30-1,070 meters. Blooms May through September.	None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site.

INVERTEBRATES

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Bombus crotchii</i> Crotch bumble bee</p>	-	Candi- date	-	-	<p>Open grassland and scrub habitats. Nests underground in rodent burrows and bush piles. Forages primarily on plants from the genera <i>Asclepias</i>, <i>Chaenactis</i>, <i>Lupinus</i>, <i>Medicago</i>, <i>Phacelia</i>, and <i>Salvia</i>.</p>	<p>Not expected. The project site lacks suitable native nectar source habitat for this species. Nearest CNDDDB occurrence is approximately 2 miles southeast of the project site. The presence of active agricultural activities in the project site and surrounding area indicates that herbicide and/or pesticide is likely used, which further reduces the possibility for this species to occur.</p>
<p><i>Branchinecta lynchi</i> vernal pool fairy shrimp</p>	FT	-	-	-	<p>Endemic to astatic rain-filled vernal pools within the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains. Inhabit small, clear-water sandstone-depression pools and grassy swales, earth slump, or basalt-flow depression pools.</p>	<p>None. The project site lacks suitable vernal pool habitat for this species. No CNDDDB records are known within 5 miles of the project site.</p>

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	FT	-	-	-	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>) that possess basal stem diameters of 1 inch or greater. Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for “stressed” elderberries.	None. The project site lacks suitable host plant habitat for this species. No CNDDDB records are known within 5 miles of the project site.
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	FE	-	-	-	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	None. The project site lacks suitable vernal pool habitat for this species. No CNDDDB records are known within 5 miles of the project site.

AMPHIBIANS AND REPTILES

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Ambystoma californiense</i> California tiger salamander</p>	<p>FT</p>	<p>ST</p>	<p>-</p>	<p>-</p>	<p>Central Valley distinct population segment (DPS) federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.</p>	<p>None. The project site lacks suitable burrow complexes near breeding habitat and suitable breeding habitat for this species. No CNDDDB records are known within 5 miles of the project site.</p>
<p><i>Anniella pulchra</i> Northern California legless lizard</p>	<p>-</p>	<p>SSC</p>	<p>-</p>	<p>-</p>	<p>Common in several habitats but especially in coastal dune, valley-foothill, chaparral, and coastal scrub types. Feed and seek cover in leaf litter and in loose soil. Will also seek cover under surface objects such as flat boards and rocks, require substrates that are slightly moist.</p>	<p>None. The project site lacks suitable habitat for this species, as most of the project site is actively maintained (disced) agricultural field. Nearest CNDDDB occurrence is approximately 2 miles southeast of the project site and is significantly isolated from the project site by numerous barriers to movement (highways, roads, and extensive patches of development).</p>

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Emys marmorata</i> western pond turtle</p>	-	SSC	-	-	<p>An aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg-laying.</p>	<p>Not Expected. Suitable aquatic and upland habitat are absent from the project site; however, suitable aquatic habitat is present within the detention basin south of the project site. The project site is likely not accessible for species movement traveling from the detention basin to the site due to the steep-walled Turlock Irrigation District (TID) Lateral No. 4 acting as a barrier.</p> <p>This species may occur within the TID Lateral No. 4, but high water velocity during the irrigation season and lack of vegetation reduce this possibility. Were the species to occur within Lateral No. 4, the steep concrete-lined walls would likely prevent movement outside of the canal near the project site. The nearest CNDDDB occurrence is approximately 5 miles southwest of the project site.</p>

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Rana draytonii</i> California red- legged frog</p>	<p>FT</p>	<p>SSC</p>	<p>-</p>	<p>-</p>	<p>Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.</p>	<p>None. The project site lacks suitable habitat for this species. The Turlock Irrigation District Lateral No. 4 conveys high water velocity during the irrigation season and lacks vegetation. The detention basin is not expected to contain water for a duration sufficient to support breeding and larval development. No CNDDDB records are known within 5 miles of the project site.</p>
<p><i>Thamnophis gigas</i> giant gartersnake</p>	<p>FT</p>	<p>ST</p>	<p>-</p>	<p>-</p>	<p>Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. Highly associated with aquatic habitat with occasional seasonal use of immediately adjacent banks.</p>	<p>None. The project site lacks suitable habitat for this species. No CNDDDB records are known within 5 miles of the project site, which is significantly outside of and isolated from the species current population areas.</p>

FISH

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Hypomesus transpacificus</i> Delta smelt	FT	SE	-	-	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 parts per thousand (ppt). Most often at salinities < 2ppt.	None. Suitable aquatic habitat is absent from the project site. No CNDDDB records are known within 5 miles of the project site.
<i>Mylopharodon conocephalus</i> hardhead	-	SSC	-	-	Juveniles are often found in small groups in pools, runs and moving water, while adults tend to school in the deepest part of pools. Found in the Sacramento-San Joaquin drainage.	None. Suitable aquatic habitat is absent from the project site. No CNDDDB records are known within 5 miles of the project site.
<i>Oncorhynchus mykiss irideus</i> steelhead – Central Valley DPS	FT	-	-	-	Populations in the Sacramento and San Joaquin Rivers and their tributaries.	None. Suitable aquatic habitat is absent from the project site. No CNDDDB records are known within 5 miles of the project site.
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	-	SSC	-	-	Largely confined to the Delta, Suisun Bay, Suisun Marsh, Napa River, Petaluma River, and other parts of the San Francisco Estuary, while spawning on upstream floodplains and channel edges. A small population may live or migrate to the Sacramento River.	None. Suitable aquatic habitat is absent from the project site. No CNDDDB records are known within 5 miles of the project site.

BIRDS

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Agelaius tricolor</i> tricolored blackbird	-	ST, SSC	-	-	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Nests in freshwater marshes with tules or cattails, or in other dense thorny vegetation such as thistle, blackberry thickets, etc. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	None. The project site lacks suitable colony nesting habitat for this species. Nearest CNDDDB occurrence is documented approximately 4.5 miles south of the project site.
<i>Ardea herodias</i> Great blue heron	MBTA (nesting colony only)	-	-	-	Usually nests in trees, but also on large bushes, poles, reedbeds, and even on the ground. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	None. The project site lacks suitable rookery habitat for this species. No CNDDDB records are known within 5 miles of the project site.

<p><i>Athene cunicularia</i> Burrowing owl</p>	<p>-</p>	<p>SSC</p>	<p>-</p>	<p>-</p>	<p>Typically breeds in open, treeless areas within grassland but will also utilize agricultural fields, golf courses, airports, vacant urban lots and fairgrounds. Utilize man-made objects for burrows such as road culverts, construction pipes, artificial burrows, and rubble/rock piles.</p>	<p>Possible. Numerous rodent burrows were observed within the berm that separates the project site from the adjacent orchard; however, no evidence of owl occupation was observed (e.g., feathers, bones, pellets, whitewash) was observed. Additionally, burrows were observed directly south of the site in the sandy area between the detention basin and the TID Lateral No. 4 canal. The project site contains an open area which is suitable for burrowing owl foraging. The presence of trees near the project site reduce the possibility for burrowing owl to occur, since these trees represent suitable predatory raptor perches. An e-bird sighting from 1985 at California State University (CSU), Stanislaus was documented in 2020, approximately 2 miles northeast of the project site; the number of individuals observed is not listed (ebird 2020a). No CNDDDB records are known within 5 miles of the project site.</p>
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Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Branta hutchinsii leucopareia</i> Cackling (=Aleutian Canada) goose</p>	<p>MBTA (active nest)</p>	<p>-</p>	<p>-</p>	<p>-</p>	<p>Preferred habitats include lacustrine, fresh emergent wetlands, and moist grasslands, croplands, pastures, and meadows. Feeds mainly on green shoots and seeds of cultivated grains and wild grasses and forbs, and also feeds on aquatic plants. Typically roosts on open water of lakes or ponds.</p>	<p>Not Expected. The project site lacks suitable nesting habitat for this species; however, suitable foraging habitat exists within the detention basin south of the project site. Six individuals were observed at Donnelly Park in 2019, approximately 1.2 miles northeast of the project site (ebird.org 2020b). No CNDDDB records are known within 5 miles of the project site.</p>

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Buteo swainsoni</i> Swainson’s hawk</p>	-	ST	-	-	<p>Breeds in groves or lines of tall trees in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.</p>	<p>Possible. This species is known to occur in the region. Suitable nesting habitat is absent from the project site itself; however, this species could use the project site to forage, and suitable nesting habitat (trees) occur on the west side of Dianne Drive within the nearby vicinity. One individual was observed at CSU Stanislaus in 2020, approximately 2 miles northeast of the project site (ebird 2020a). Two CNDDDB occurrences are located within 5 miles of the project site; one occurrence is approximately 1.5 miles north, and the other occurrence is approximately 5 miles south of the project site.</p>

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Circus hudsonius</i> Northern harrier	-	SSC	-	-	Found throughout lowlands of California in grasslands, meadows, seasonal and agricultural wetlands, and marshes. Species nests within thickets of vegetation on the ground.	Possible. This species is known to occur within the region. Suitable nesting habitat is absent within the project site (since vegetation is routinely maintained for agricultural purposes); however, this species could use the project site to forage. Suitable nesting habitat is present south of the project site within the vegetation surrounding the detention basin. No CNDDDB records are known within 5 miles of the project site, but this species is infrequently tracked by the CNDDDB.
<i>Egretta thula</i> Snowy egret	MBTA (nesting colony only)	-	-	-	Found along the shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. Feeds in shallow waters and nests in dense marshes or low trees on stick nests.	None. Suitable aquatic habitat is absent from the project site, but the species could forage in the detention basin south of the project site. Suitable nesting habitat is absent from the project site. No CNDDDB records are known within 5 miles of the project site, but this species is infrequently tracked in the CNDDDB.

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Elanus leucurus</i> White-tailed kite	-	FP	-	-	Occurs in lowlands west of the Sierra Nevada Mountains from the northern portion of the Sacramento Valley south to the U.S./Mexico border, including coastal valleys and foothills. Nests in trees or shrubs with dense foliage and forages over open grasslands, agricultural fields, and marshes.	Possible. This species is known to occur in the region. Suitable nesting habitat is absent from the project site; however, this species could forage within the project site, and suitable nesting habitat (trees) occur on the west side of Dianne Drive within the nearby vicinity. No CNDDDB records of this species are known within 5 miles of the project site, but this species is infrequently tracked in the CNDDDB.
<i>Falco peregrinus</i> Peregrine falcon	DL	FP	-	-	This raptor is adapted to open habitats in all seasons. Shows preference for breeding sites near water with nearby cliffs or ledges for nesting sites. They do not build nests, but instead make scrapes in various substrates.	Not Expected. Peregrine falcons forage throughout the Central Valley; however, nesting does not typically occur within the Valley floor. No suitable nesting habitat occurs within or around the project site. No CNDDDB records of the species are known within 5 miles of the project site.

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE	SE	-	-	Utilizes dense brush, mesquite, willow-cottonwood forest, streamside thickets, scrub oak, moist woodland, scattered cover and hedgerows in cultivated areas, riparian woodlands. Nests in shrubs or low trees. Historically an abundant breeder throughout Central Valley; however, it is now possibly extirpated from this area.	None. Suitable riparian nesting habitat is absent from the project site and the project site is outside of the species current nesting range. No CNDDDB records are known within 5 miles of the project site.

MAMMALS

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<i>Antrozous pallidus</i> Pallid bat	-	-	-	High priority	Found in arid regions with rocky outcroppings, to open, sparsely vegetated grasslands. Roost in attics, shutters, crevices, buildings, caves, cracks in rocks, trees, bridges, and barns. They have also been found roosting on the ground under burlap sacks, stone piles, rags and baseboards. Forages over grasslands, forests, roads, fruit orchards, and vineyards. Requires water.	Not expected. Suitable roosting habitat is absent from the project site. Suitable roosting habitat is potentially present in trees with cavities in the surrounding vicinity, but these trees would not be affected by the project. No CNDDDB records are known within 5 miles of the project site.

Species Name (Sci./Common)	Federal	State	CNPS	WBWG	Habitat/Characteristics	Potential to Occur in the Project Site
<p><i>Corynorhinus townsendii</i> Townsend’s big-eared bat</p>	-	SSC	-	High priority	<p>Found in coniferous forests, mixed meso-phytic forests, deserts, native prairies, riparian communities, active agricultural areas, and coastal habitat types.</p>	<p>Not expected. Suitable roosting habitat is absent from the project are. Suitable roosting habitat is potentially present in trees in the surrounding vicinity, but these trees would not be affected by the project. No CNDDDB records are known within 5 miles of the project site.</p>
<p><i>Lasiurus blossevilli</i> Western red bat</p>	-	SSC	-	High priority	<p>Roosts primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.</p>	<p>Not expected. Suitable roosting habitat is absent from the project site. Suitable roosting habitat is potentially present in the orchard trees adjacent to the project site, but these trees would not be impacted by the project. No CNDDDB records are known within 5 miles of the project site.</p>
<p><i>Lasiurus cinereus</i> Hoary bat</p>	-	-	-	Medium priority	<p>Found in open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Requires water.</p>	<p>Not expected. Suitable roosting habitat is absent from the project site. Suitable roosting habitat is potentially present within the trees in the project vicinity, but these trees would not be impacted by the project. Nearest CNDDDB record is documented approximately 2 miles southeast of the project site.</p>

U.S. Fish and Wildlife Service (Federal) Listing Categories:

Candidate	Federal Candidate for Listing
DL	Federally Delisted
FE	Federally Listed as Endangered
FT	Federally listed as Threatened
MBTA	Migratory Bird Treaty Act
-	No Listing

California Department of Fish and Wildlife(State) Listing Categories:

Candidate	State Candidate for Listing
SE	State listed as Endangered
FP	State Fully Protected Species
SR	State listed as Rare
SSC	Species of Special Concern
ST	State listed as Threatened
-	No Listing

Special-status Species Potential to Occur Criteria

None	Indicates that the project site completely lacks suitable habitat, the local range for the species is restricted and does not overlap with the project site, and/or the species is extirpated in this region.
Not Expected	Indicates situations where suitable habitat or key habitat elements may be present but are of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, continuity with patches of nearby suitable habitat, and degraded/substantially altered habitats.
Possible	Indicates the presence of suitable habitat or key habitat elements that potentially support the species.
Present	Indicates that either the target species was observed directly, or its presence was confirmed by diagnostic signs during field investigations or in previous studies in the area.

California Native Plant Society (CNPS) Listing Categories

1A	Presumed extirpated or extinct in California
1B.1	Rare, threatened, or endangered in California and elsewhere; seriously threatened in California
1B.2	Rare, threatened, or endangered in California and elsewhere; fairly threatened in California
2B.1	Rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California
2B.2	Rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

Western Bat Working Group (WBWG)

High priority	Imperiled or at high risk of imperilment.
Moderate priority	Level of concern that should warrant closer evaluation, more research, and conservation actions of both the species and possible threats.

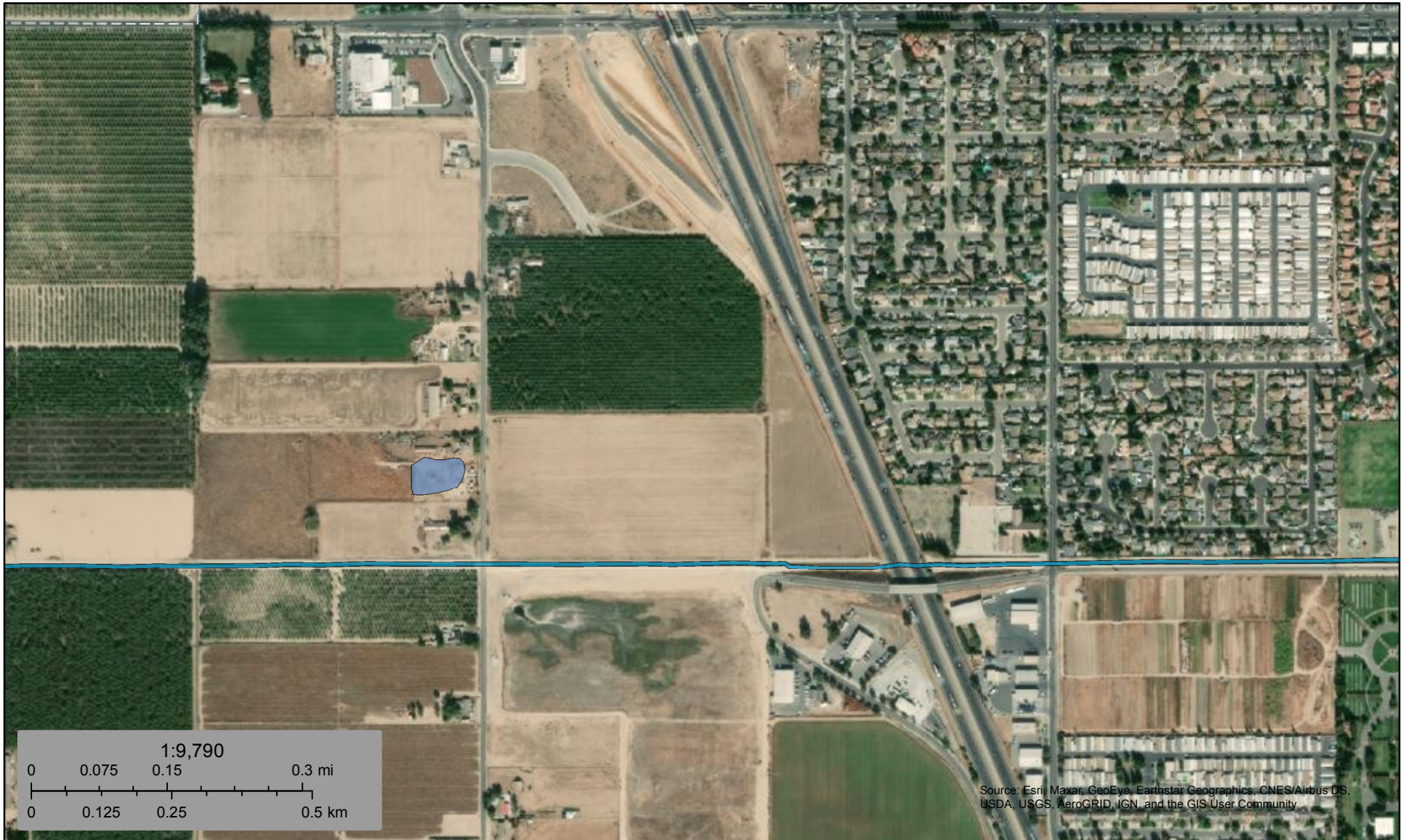
References

- ebird. 2020a. ebird Field Checklist. CSU Stanislaus observations of burrowing owl and Swainson's hawk. Available at: <https://ebird.org/printableList?regionCode=L8325649&yr=all&m=>. Accessed August 12, 2020.
- ebird. 2020b. ebird Field Checklist. Donnelly Park observations of Cackling Goose. Available at: <https://ebird.org/printableList?regionCode=L1352134&yr=all&m=>. Accessed August 12, 2020.

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Supporting Information

This section of the appendix includes complex tables that are not accessible using an assistive device such as a screen reader. For assistance please contact the California Relay Service by dialing 711.



November 5, 2020

Wetlands

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|-------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

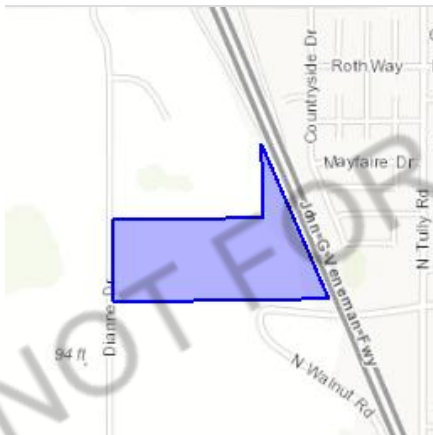
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Stanislaus County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Vernal Pool Tadpole Shrimp *Lepidurus packardii* Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/2246>

Flowering Plants

NAME	STATUS
San Joaquin Orcutt Grass <i>Orcuttia inaequalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5506	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ

[below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Nuttall's Woodpecker *Picoides nuttallii*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9410>

Breeds Apr 1 to Jul 20

Oak Titmouse *Baeolophus inornatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

Yellow-billed Magpie *Pica nuttalli*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9726>

Breeds Apr 1 to Jul 31

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur

and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R4SBCx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this

inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Riverbank (3712068) OR Salida (3712161) OR Waterford (3712067) OR Brush Lake (3712151) OR Ceres (3712058) OR Denair (3712057) OR Crows Landing (3712141) OR Hatch (3712048) OR Turlock (3712047))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Anniella pulchra</i> northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener var. tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atriplex cordulata var. cordulata</i> heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
<i>Atriplex minuscula</i> lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
<i>Atriplex persistens</i> vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
<i>Atriplex subtilis</i> subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branta hutchinsii leucopareia</i> cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Clarkia rostrata</i> beaked clarkia	PDONA050Y0	None	None	G2G3	S2S3	1B.3
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Dipodomys heermanni dixonii</i> Merced kangaroo rat	AMAFD03062	None	None	G3G4T2T3	S2S3	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium racemosum</i> Delta button-celery	PDAP10Z0S0	None	Endangered	G1	S1	1B.1
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lasthenia chrysantha</i> alkali-sink goldfields	PDAST5L030	None	None	GNR	SNR	1B.1
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Lytta moesta</i> moestan blister beetle	IICOL4C020	None	None	G2	S2	
<i>Monardella leucocephala</i> Merced monardella	PDLAM180C0	None	None	GX	SX	1A
<i>Mylopharodon conocephalus</i> hardhead	AFCJB25010	None	None	G3	S3	SSC
<i>Neostapfia colusana</i> Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
<i>Oncorhynchus mykiss irideus pop. 11</i> steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Sphenopholis obtusata</i> prairie wedge grass	PMPOA5T030	None	None	G5	S2	2B.2
<i>Tuctoria greenei</i> Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	

Record Count: 36

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

3 matches found. [Click on scientific name for details](#)

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3, 4], FESA is one of [Endangered, Threatened, Candidate], CESA is one of [Endangered, Threatened, Rare], Found in Quads 3712161, 3712068, 3712067, 3712151, 3712058, 3712057, 3712141, 3712048 and 3712047;
 Lifeform is one of [Tree, Shrub, Leaf succulent, Herb, Vine, Stem succulent, Lichen, Moss, Liverwort],
 Duration is one of [ann, per, ephem],
 Bloom Time is one of [January, February, March, April, May, June, July, August, September, October, November, December]

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Neostapfia colusana	Colusa grass	Poaceae	annual herb	May-Aug	1B.1	S1	G1
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	1B.1	S1	G1
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	1B.1	S1	G1

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Questions and Comments

rareplants@cnps.org

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Appendix B
NOISE MONITORING DATA AND ANALYSIS

Long-Term 24 Hour Continuous Noise Monitoring
Model Input Sheet



Project: 60645875 - CDFA Turlock Lab

Date: Tuesday, December 01, 2020 to Wednesday, December 02, 2020

Site: LT-01

Hour	Leq	Lmax	L50	L90
13:00	60.2	95.8	52.5	48.4
14:00	60.6	96.2	55.4	51.5
15:00	64.8	100.4	58.5	56.0
16:00	62.4	97.9	59.7	57.1
17:00	61.6	97.2	59.1	55.7
18:00	61.7	97.3	59.6	56.1
19:00	59.5	95.1	55.6	52.6
20:00	60.3	95.9	58.2	55.2
21:00	61.4	97.0	59.6	57.0
22:00	59.1	94.7	57.7	54.8
23:00	58.8	94.3	57.6	54.7
0:00	58.0	93.6	56.4	54.2
1:00	56.6	92.1	55.1	52.7
2:00	55.6	91.1	54.7	52.6
3:00	56.5	92.1	54.2	52.3
4:00	61.2	96.7	59.9	57.0
5:00	64.7	100.3	63.6	62.0
6:00	64.6	100.1	63.4	61.6
7:00	65.0	100.6	64.1	61.2
8:00	61.4	96.9	59.9	52.5
9:00	59.0	94.6	50.8	48.2
10:00	58.6	94.2	50.6	47.8
11:00	59.8	95.4	53.9	50.9
12:00	60.8	95.1	54.6	51.5

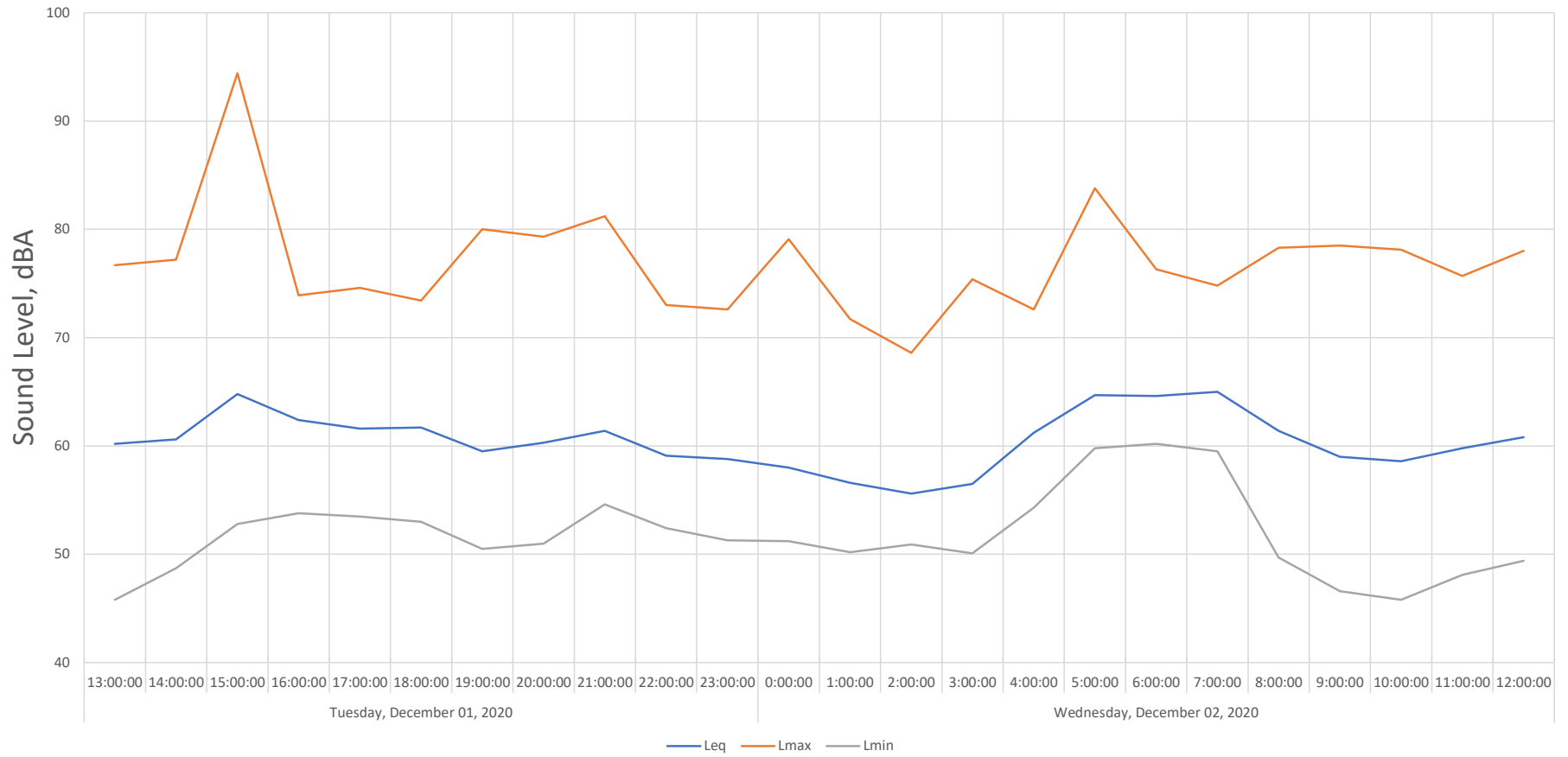
Averages				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	61.8	96.8	56.6	53.1
Evening (7 p.m. - 9 p.m.)	60.5	96.0	57.8	54.9
Nighttime (9 p.m. - 7 a.m.)	60.7	95.0	58.1	55.8

Uppermost-Level				
	Leq	Lmax	L50	L90
Daytime (7 a.m. - 7 p.m.)	65.0	100.6	64.1	61.2
Evening (7 p.m. - 9 p.m.)	61.4	97.0	59.6	57.0
Nighttime (9 p.m. - 7 a.m.)	64.7	100.3	63.6	62.0

Percentage of Energy	
Daytime	56%
Evening	10%
Nighttime	33%

Calculated CNEL, dBA
67.5

LT-01 - Turlock Facility



Project-Generated Construction Source Noise Prediction Model

60645875 - CDFA Turlock Lab



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	591	60	Excavator	85	0.4
	50	87	Dump Truck	84	0.4
			Dozer	85	0.4
			Grader	85	0.4
			Pickup Truck	55	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Excavator	81.0
Dump Truck	80.0
Dozer	81.0
Grader	81.0
Pickup Truck	51.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

86.8

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, Janua

² Based on the following from the Federal Transit Noise and Vibration I

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60645875 - CDFA Turlock Lab



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	585	60	Excavator	85	0.4
	50	87	Dozer	85	0.4
			Flat Bed Truck	84	0.4
			Crane	85	0.16
			Man Lift	85	0.2

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Excavator	81.0
Dozer	81.0
Flat Bed Truck	80.0
Crane	77.0
Man Lift	78.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

86.7

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, Janua

² Based on the following from the Federal Transit Noise and Vibration I

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

Project-Generated Construction Source Noise Prediction Model

60645875 - CDFA Turlock Lab



Location	Distance to Nearest Receiver in feet	Combined Predicted Noise Level (L _{eq} dBA)	Assumptions:	Reference Emission	Usage
				Noise Levels (L _{max}) at 50 feet ¹	Factor ¹
Threshold*	598	60	Paver	85	0.5
	50	87	Concrete Mixer Truck	85	0.4
			Man Lift	85	0.2
			Compactor (ground)	80	0.2
			Concrete Mixer Truck	85	0.4

Ground Type Soft
Ground Factor 0.50

Predicted Noise Level ²	L _{eq} dBA at 50 feet ²
Paver	82.0
Concrete Mixer Truck	81.0
Man Lift	78.0
Compactor (ground)	73.0
Concrete Mixer Truck	81.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)

86.9

Sources:

¹ Obtained from the FHWA Roadway Construction Noise Model, Janua

² Based on the following from the Federal Transit Noise and Vibration I

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects; and

D = Distance from source to receiver.

*Project specific threshold

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Appendix C
NATIVE AMERICAN CORRESPONDENCE

Local Government Tribal Consultation List Request

Native American Heritage Commission

1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Type of List Requested

CEQA Tribal Consultation List (AB 52) – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

General Plan (SB 18) - *Per Government Code § 65352.3.*

Local Action Type:

General Plan

General Plan Element

General Plan Amendment

Specific Plan

Specific Plan Amendment

Pre-planning Outreach Activity

Required Information

Project Title: Turlock North Valley Animal Health Laboratory Replacement Project

Local Government/Lead Agency: Department of General Services

Contact Person: Dakota Smith, Sr. Environmental Planner

Street Address: 707 Third Street, Suite 4-430

City: West Sacramento, CA

Zip: 95605

Phone: (916) 376-1609

Fax: _____

Email: Dakota.Smith@dgs.ca.gov

Specific Area Subject to Proposed Action

County: Stanislaus

City/Community: Turlock

Project Description:

The Department of General Services is assisting the California Department of Food and Agriculture with a project to build a new animal health laboratory in Turlock, Stanislaus County to replace the aging existing facility in Turlock.

Additional Request

Sacred Lands File Search - *Required Information:*

USGS Quadrangle Name(s): Denair, Ceres

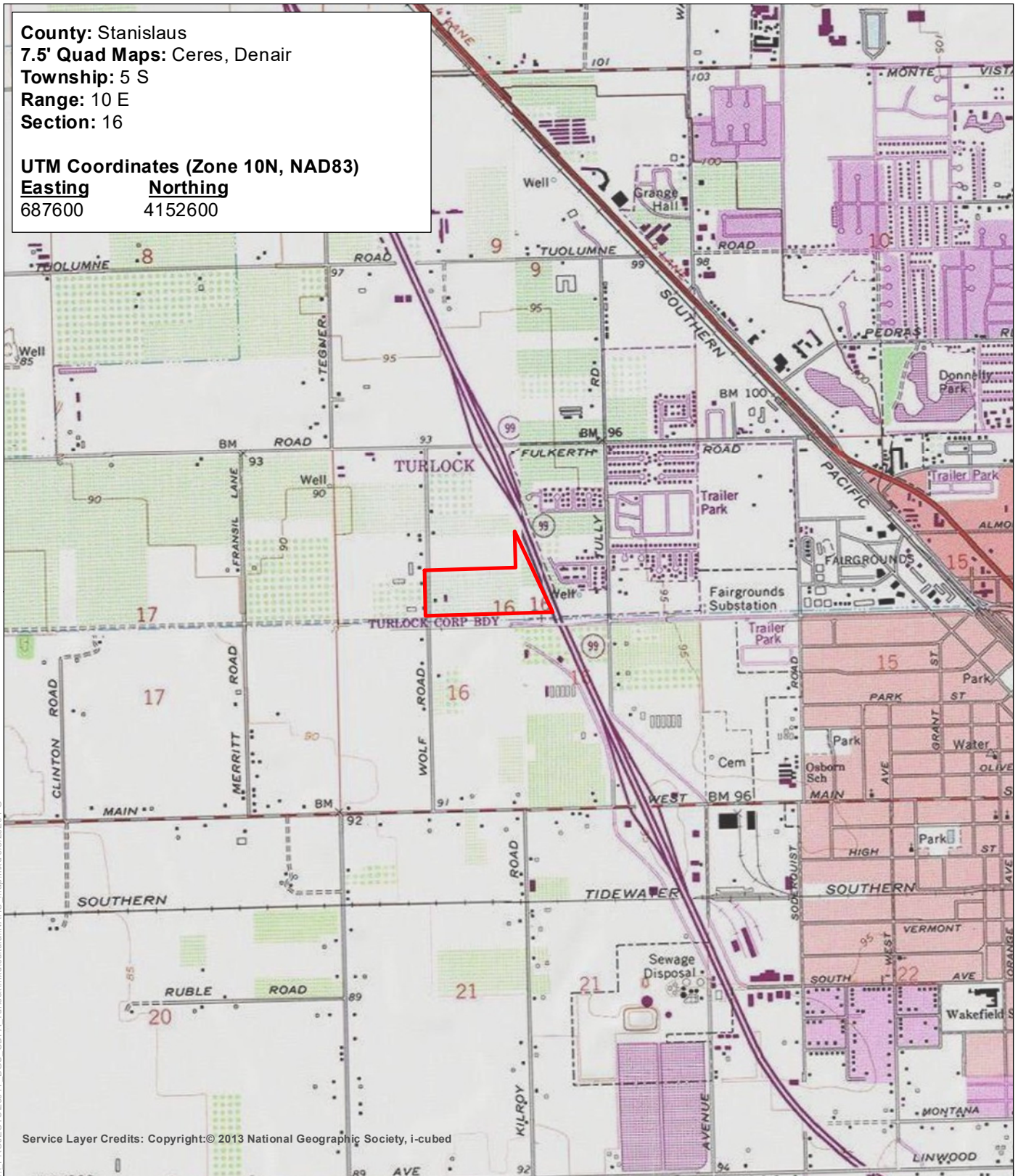
Township: 5S

Range: 10E

Section(s): 16

County: Stanislaus
7.5' Quad Maps: Ceres, Denair
Township: 5 S
Range: 10 E
Section: 16

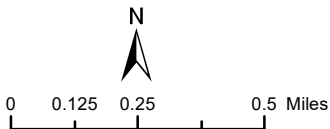
UTM Coordinates (Zone 10N, NAD83)
Easting **Northing**
 687600 4152600



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Project Area

 Project Area



Turlock North Valley Animal Health Laboratory Replacement

T:\PROJECTS\2017_DGS_CDEA_Turbokmxcultural\NAHC_map.mxd 6/8/2020 PG

NATIVE AMERICAN HERITAGE COMMISSION

June 9, 2020

Dakota Smith
Department of General Services

Via Email to: Daakota.Smith@dgs.ca.gov

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Turlock Valley North Animal Health Laboratory Replacement Project, Stanislaus County

Dear Ms. Smith:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment

**Native American Heritage Commission
Tribal Consultation List
Stanislaus County
6/9/2020**

North Valley Yokuts Tribe

Timothy Perez, MLD Contact
P.O. Box 717
Linden, CA, 95236
Phone: (209) 662 - 2788
huskanam@gmail.com

Costanoan
Northern Valley
Yokut

North Valley Yokuts Tribe

Katherine Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209) 887 - 3415
canutes@verizon.net

Costanoan
Northern Valley
Yokut

Southern Sierra Miwuk Nation

William Leonard, Chairperson
P.O. Box 186
Mariposa, CA, 95338
Phone: (209) 628 - 8603

Miwok
Northern Valley
Yokut
Paiute

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Turlock Valley North Animal Health Laboratory Replacement Project, Stanislaus County.

June 24, 2020

Katherine Perez, Chairperson
North Valley Yokuts Tribe
P.O. Box 717
Linden, CA, 95236

RE: CDFA Turlock North Valley Animal Health Laboratory Replacement Project

Dear Honorable Chairperson Perez:

The Department of General Services (DGS), on behalf of the California Department of Food and Agriculture (CDFA), is writing to notify you of a proposed project in order to coordinate with you and request any information about tribal cultural resources that may be present or affected. It is important to note that neither DGS nor CDFA has received a request from you for notification of projects under Assembly Bill 52 (AB52).

The CDFA currently operates the North Valley Animal Health Laboratory in Turlock. The facility was constructed in 1958 and is now outdated. As a result, CDFA proposes to build a new facility on 26 acres of undeveloped land at 830 Dianne Drive in west Turlock, west of State Highway 99 (see attached map). The proposed project would involve construction of a new laboratory building of approximately 35,000 square feet and a separate office space building for CDFA employees. The project would include laboratory equipment and casework, a mechanical loft, site work, utilities, walkways, curbs, gutters, signage, landscaping, irrigation, fencing, gates, trash enclosure, storage outbuilding, animal holding pens, site drainage, site lighting, communications (fire alarm, security, telecommunications/data), water tank, septic system, water retention system, and related items.

A search of the Sacred Lands Files at the Native American Heritage Commission (NAHC) did not identify previously recorded significant Native American resources in the project vicinity. However, the NAHC suggested that local tribes may have information that is not on file at the NAHC, and your contact information was provided on their List of Native American Contacts for the area as a traditionally and culturally affiliated California Native American tribal representative. We are requesting any information that you may have regarding tribal cultural resources (as defined by Public Resources Code 21074) within the project area so that this information can be incorporated into project planning and we can work with you to avoid impacts to tribal cultural resources. DGS is respectfully requesting input from you within 30 days of receipt of this letter.

Your comments and concerns are important to us and we look forward to hearing from you. If you have any questions or comments regarding the project, I can be contacted via email at Dakota.Smith@dgs.ca.gov or by phone at (916) 376-1604.

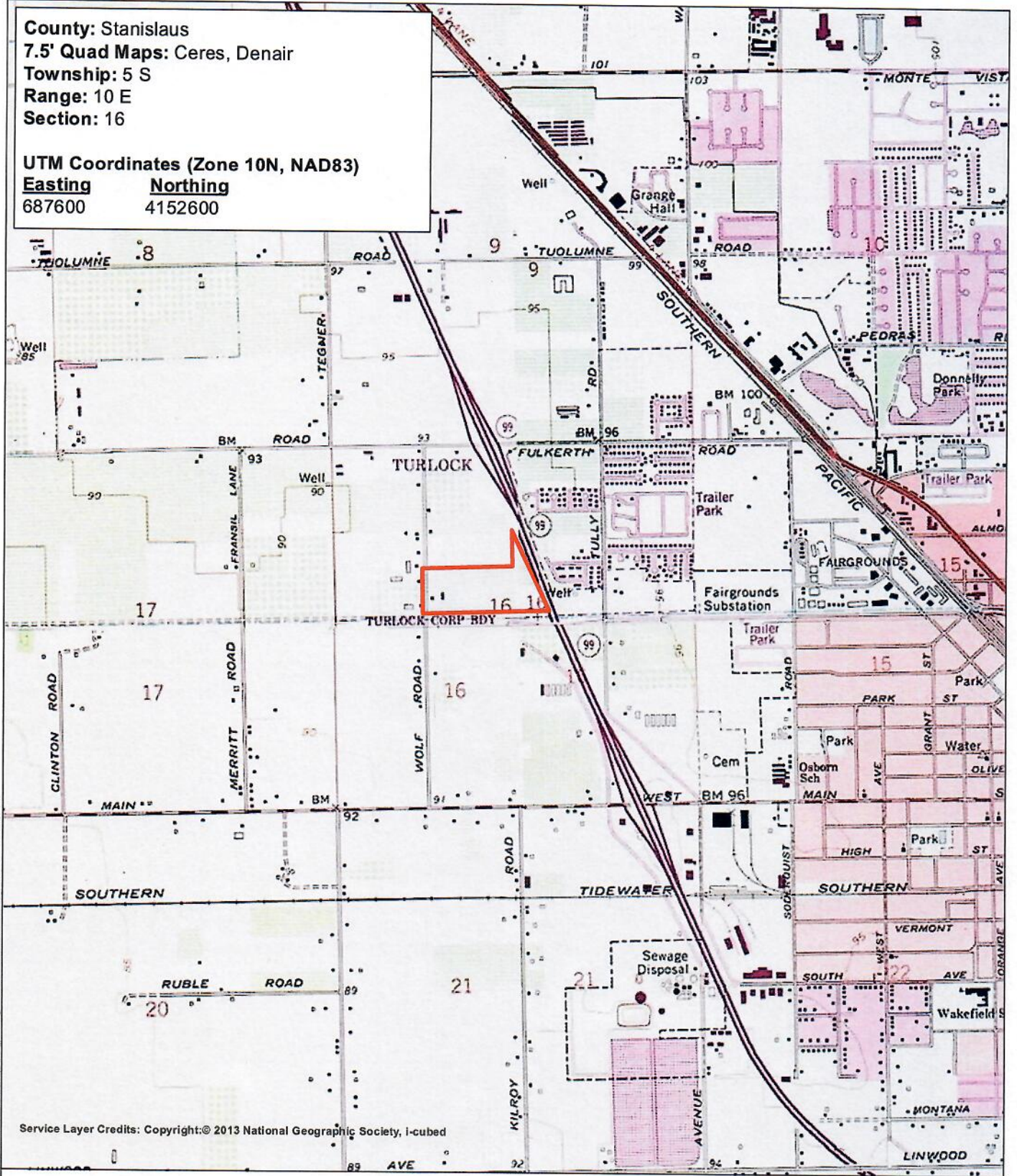
Sincerely,

Dakota Smith

Dakota Smith
Senior Environmental Planner

County: Stanislaus
7.5' Quad Maps: Ceres, Denair
Township: 5 S
Range: 10 E
Section: 16

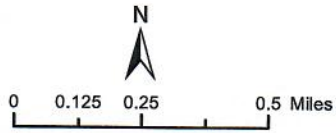
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Easting **Northing**
 687600 4152600



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Project Area

 Project Area



Turlock North Valley Animal
 Health Laboratory Replacement

June 24, 2020

Timothy Perez, MLD Contact
North Valley Yokuts Tribe
P.O. Box 717
Linden, CA, 95236

RE: CDFA Turlock North Valley Animal Health Laboratory Replacement Project

Dear Mr. Perez:

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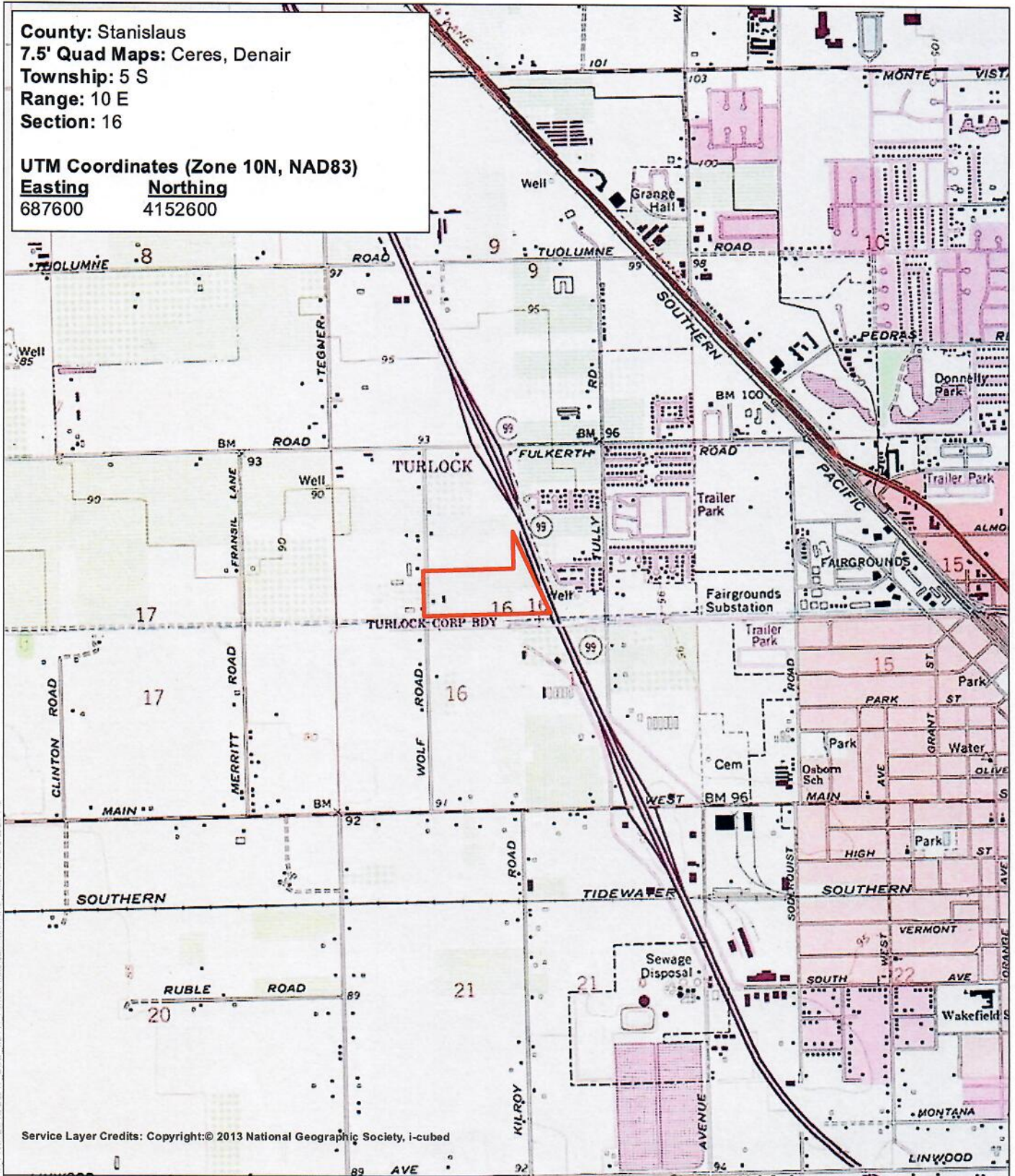
Sincerely,

Dakota Smith

Dakota Smith
Senior Environmental Planner

County: Stanislaus
7.5' Quad Maps: Ceres, Denair
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Section: 16

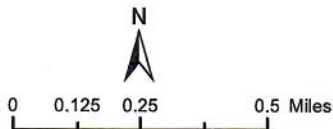
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Easting **Northing**
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Project Area

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Turlock North Valley Animal Health Laboratory Replacement

June 24, 2020

William Leonard, Chairperson
Southern Sierra Miwuk Nation
P.O. Box 186
Mariposa, CA, 95338

RE: CDFA Turlock North Valley Animal Health Laboratory Replacement Project

Dear Honorable Chairperson Leonard:

The Department of General Services (DGS), on behalf of the California Department of Food and Agriculture (CDFA), is writing to notify you of a proposed project in order to coordinate with you and request any information about tribal cultural resources that may be present or affected. It is important to note that neither DGS nor CDFA has received a request from you for notification of projects under Assembly Bill 52 (AB52).

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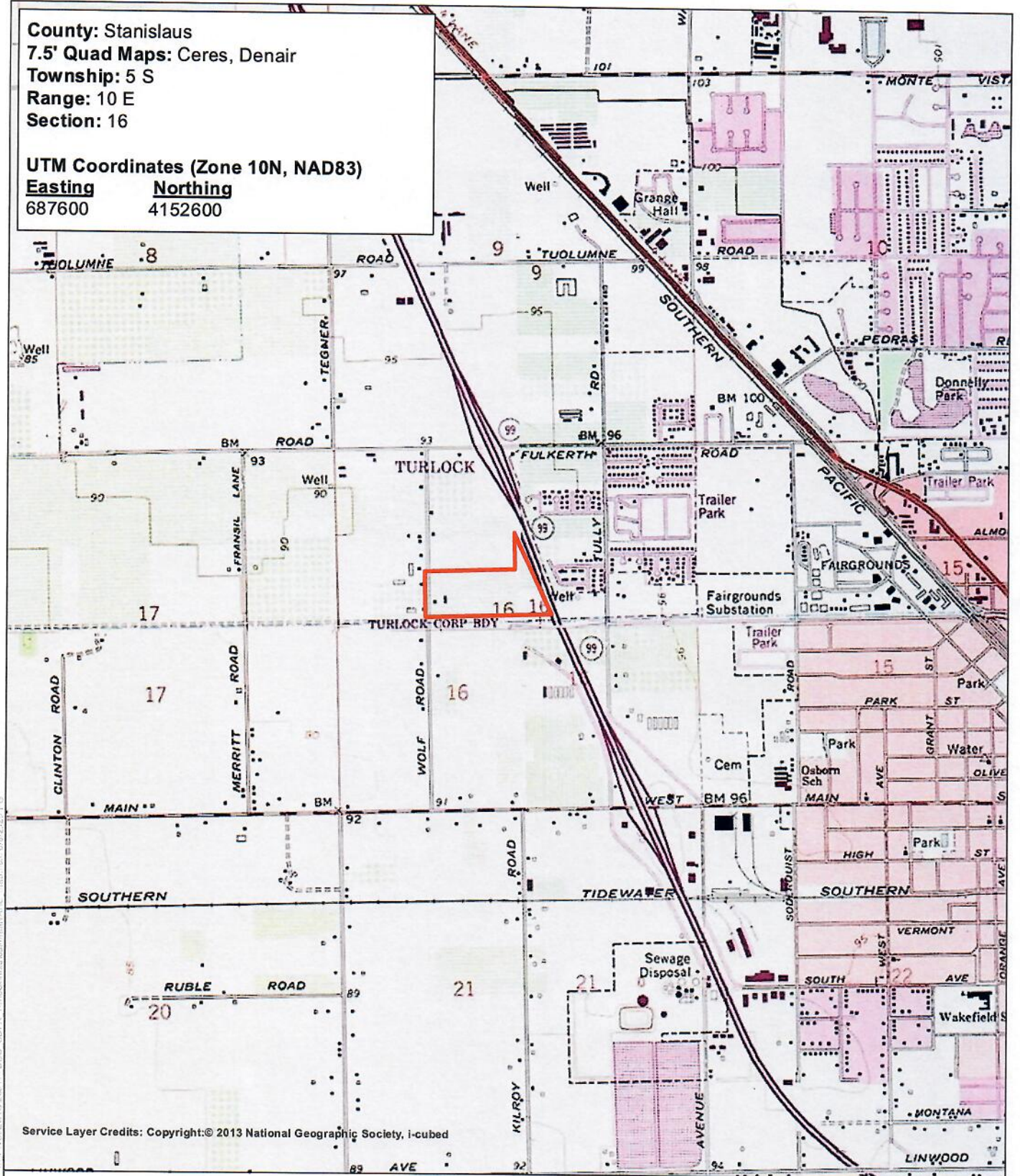
Sincerely,

Dakota Smith

Dakota Smith
Senior Environmental Planner

County: Stanislaus
7.5' Quad Maps: Ceres, Denair
Township: 5 S
Range: 10 E
Section: 16

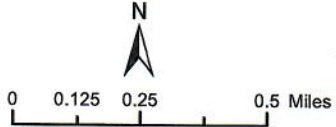
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Easting 687600
Northing 4152600



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Project Area

 Project Area



Turlock North Valley Animal Health Laboratory Replacement

From: Janis Offermann
To: "canutes@verizon.net"
Cc: "Smith, Dakota@DGS"; Tom Engels (tom@horizonh2o.com)
Subject: RE: CDFA Turlock North Valley Animal Health Laboratory Replacement Project
Date: Friday, July 24, 2020 3:32:00 PM
Attachments: KPerez_ AB52 letters_06242020.pdf

Dear Chairperson Perez,

On behalf of the California Department of General Services, I am following up with you to make sure that you received the attached letter through the U.S. mail, in case you would like to request consultation on this project under AB52.

Please feel free to contact me if you have any questions about the project.
Thank you for your time.

Janis Offermann
Cultural Resources Practice Leader
Horizon Water and Environment
400 Capitol Mall, Suite 2500
Sacramento, CA 95814
530.220.4918 – mobile

From: [Janis Offermann](#)
To: ["achuchumimt@yahoo.com"](mailto:achuchumimt@yahoo.com)
Cc: ["Smith, Dakota@DGS"](mailto:Smith,Dakota@DGS); [Tom Engels \(tom@horizonh2o.com\)](mailto:TomEngels@horizonh2o.com)
Subject: CDFA Turlock North Valley Animal Health Laboratory Replacement Project
Date: Friday, July 24, 2020 3:34:00 PM
Attachments: WLeonard_ AB52 letters_06242020.pdf

Dear Chairperson Leonard,

On behalf of the California Department of General Services, I am following up with you to make sure that you received the attached letter through the U.S. mail, in case you would like to request consultation on this project under AB52.

Please feel free to contact me if you have any questions about the project.
Thank you for your time.

Janis Offermann
Cultural Resources Practice Leader
Horizon Water and Environment
400 Capitol Mall, Suite 2500
Sacramento, CA 95814
530.220.4918 – mobile

From: [Janis Offermann](#)
To: "huskanam@gmail.com"
Subject: CDFA Turlock North Valley Animal Health Laboratory Replacement Project
Date: Friday, July 24, 2020 3:31:00 PM
Attachments: TPerez_AB52 letters_06242020.pdf

Dear Mr. Perez

On behalf of the California Department of General Services, I am following up with you to make sure that you received the attached letter through the U.S. mail, in case you would like to request consultation on this project under AB52.

Please feel free to contact me if you have any questions about the project.

Thank you for your time.

Janis Offermann

Cultural Resources Practice Leader

Horizon Water and Environment

400 Capitol Mall, Suite 2500

Sacramento, CA 95814

530.220.4918 – mobile