

ENVIRONMENTAL COLLABORATIVE

Consultation • Documentation • Restoration
1268 64th Street • Emeryville, CA 94608
Phone 510/654-4444 • FAX 510/655-4444

MEMORANDUM

TO: Mr. Paul Scheidegger
Scheidegger & Associates
201 North Civic Drive, Suite 115
Walnut Creek, California 94608

FROM: Jim Martin
ENVIRONMENTAL COLLABORATIVE

DATE: 3 August 2015

SUBJECT: Biological Resource Assessment
City of San Jose Digester and Thickener Upgrades Project
Santa Clara County, California

As you requested, I have conducted a Biological Resource Assessment (BRA) of the proposed City of San Jose Digesters and Thickener Upgrade Project (Project) at the City of San Jose/Santa Clara Regional Wastewater Facility (RWF). The RWF is located at 607 Los Esteros Road in the northernmost portion of the City of San Jose. The proposed Project is described in detail in Chapter 1, Project Description, of the Initial Study and includes upgrades and improvements to the anaerobic digesters, dissolved air flotation thickeners, and digester gas system; conversion of the current mesophilic digestion process to a temperature (thermophilic/mesophilic) phased anaerobic digestion process; odor control system; and replacement of existing flares.

The environmental documentation for the Clean Water State Revolving Fund Program administered by the State Water Resources Control Board, Division of Financial Assistance, requires completion of a BRA to confirm presence or absence of any federally-listed species and to ensure compliance with the federal Endangered Species Act, the Clean Water Act, the Migratory Bird Treaty Act, and the Magnuson-Stevens Fishery Conservation and Management Act, among other legislation. This BRA has been prepared to address potential effects of the proposed improvements on biological resources, based on the results of a background information review and field reconnaissance survey. This BRA provides a description of existing conditions in the area of potential affect (APE) at the site, and an assessment of potential effects on biological and wetland resources. **Appendix C-1** contains plans on an aerial base showing the APE. No additional field surveys are considered necessary based on the highly disturbed conditions of the APE.

SETTING

Background and Methods

Biological resources associated with the APE were identified through a review of available background information and a field reconnaissance survey. Available documentation was reviewed to provide information on general resources in the north Santa Clara County and south Alameda County areas, presence of sensitive natural communities, and the distribution and habitat requirements of special-status species which have been recorded from or are suspected to occur in the Project vicinity. Literature review included: *Initial Study on the San Jose/Santa Clara Regional Wastewater Facility Cogeneration Plant*¹; the occurrence records of the California Natural Diversity Data Base (CNDDDB) of the California Department of Fish and Wildlife (CDFW); the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants*; and a list of federally-listed and candidate species prepared by the U.S. Fish and Wildlife Service (USFWS) for Project site vicinity (dated May 13, 2015). A field reconnaissance survey was conducted by James Martin, a biologist and principal of Environmental Collaborative, on April 16, 2015 to determine the vegetation and wildlife resources, presence or absence of any sensitive resources such as potential jurisdictional wetlands, and the suitability of the APE to support populations of special-status species. The CNDDDB, USFWS and CNPS species list are contained in **Appendix C-2**.

Existing Vegetation and Wildlife Habitat Conditions

The APE has been developed with existing wastewater facilities with no remaining natural habitat. The APE is largely unvegetated, covered in pavement, structures, tanks, and graveled areas. Limited ornamental plantings of turf grass and a few scattered planted trees occur as landscaping in a few locations within the APE. Tree plantings include sapling valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), Chinese pistache (*Pistacia chinensis*), and a few scattered larger pines (*Pinus* sp.), olive (*Olea europaea*), and eucalyptus (*Eucalyptus* spp.). Ruderal (weedy) species occur in a recycling materials storage area at the southwestern edge of the APE, bordered by a row of densely planted eucalyptus on a berm that separates the APE from the nearby Santa Clara Valley Habitat Plan (SCVHP)² mitigation lands and Regional Wastewater Facility burrowing owl preserve about 750 feet further to the southwest. Ruderal plant species are scattered in the stacked pipes and other recycled materials, and include: bristly oxtongue (*Picris echioides*), wild oak (*Avenua fatua*), bromes (*Bromus* spp.), English plantain (*Plantago lanceolata*), and field bindweed (*Convolvulus arvensis*), among others.

The APE provides very little in terms of possible wildlife habitat given its developed condition, absence of vegetative cover and intensity of human disturbance. Species typical of ruderal and urban habitat occur in the vicinity, including: house finch (*Haemorrhous mexicanus*), house sparrow (*Passer domesticus*), northern mocking bird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), Canada goose (*Branta canadensis*), Botta's pocket gopher (*Thomomys bottae*), house mouse (*Mus musculus*), and Norway rat (*Rattus norvegicus*).

¹ City of San Jose, 2014, *San Jose/Santa Clara Regional Wastewater Facility Cogeneration Project, Initial Study*, File Number: PP14-005, April.

² ICF International, 2012, *Final Santa Clara Valley Habitat Plan*, prepared for City of Gilroy, City of Morgan Hill, City of San Jose, County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, August.

Numerous gulls were observed congregating in the vicinity of the clarifiers and some of the aeration basins within the wastewater facility. And a number of California ground squirrel (*Otospermophilus beecheyi*) burrows were observed along the south-facing slope of the berm at the southernwestern edge of the APE. No white wash, feathers, pellets or other indications of occupation by western burrowing owl (*Athene cunicularia hypugaea*) were observed at any of these ground squirrel burrows during an inspection performed during the field reconnaissance. Western burrowing owl is known to frequently occupy underground burrows of ground squirrel for nesting and retreat habitat. No evidence of nesting by any bird species was observed in any of the trees or structures in the vicinity of the APE during the field reconnaissance.

Special-Status Species

Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts³ or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts and other essential habitat. Species with legal protection under the Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" ⁴ of these species.

A record search conducted by the CNDDDB, together with review of lists from the USFWS and CNPS indicates that occurrences of numerous plant and animal species with special-status have been recorded from or are suspected to occur in the northern Santa Clara County and southern Alameda County area. **Figures C-1** and **C-2** show the known occurrences of special-status plants and animals, respectively, as mapped by the CNDDDB in an approximately three mile radius of the APE. The attached lists from the CNDDDB, USFWS, and CNPS (see **Appendix C-2**) show the broad list of special-status plants and animals known from a wide range of habitat types found in Santa Clara and Alameda Counties, none of which contain suitable habitat any longer within in the APE due to the extent of past and on-going development and disturbance . The following provides a summary of the plant and animal species suspected to occur in the surrounding area away from the APE where natural habitat remains.

Animal Species. Based on the review of CNDDDB data and the USFWS species list (see **Appendix C-2**), a total of 29 special-status mammal, birds, reptiles, amphibians, fish, and invertebrate species are known or suspected to occur in the vicinity of the APE. **Table C-1** located at the end of this BRA provides a summary of each of these species, their status, typical habitat characteristics, and conclusion regarding absence from the APE. Suitable habitat for all

³ The federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

⁴ "Take" as defined by the FESA means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" a threatened or endangered species. "Harm" is further defined by the U.S. Fish and Wildlife Service (USFWS) to include the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. The CDFW also considers the loss of listed species habitat as take, although this policy lacks statutory authority and case law support under the CESA.

of these species is absent from the APE. This includes absence of suitable aquatic habitat for fish, absence of coastal salt marsh for many of the mammal and bird species known from the Baylands, and suitable nesting habitat for special-status bird species as well as more common bird species protected under the federal Migratory Bird Treaty Act. No evidence of any bird nesting was observed during the field reconnaissance survey, including larger stick nests of raptors or for other species that would also be protected under the federal Migratory Bird Treaty Act. Very little well developed vegetation occurs within the APE that would support bird nesting.

As indicated in **Table C-1** marginal qualify foraging habitat for several special-status bird species occurs in the ruderal fields to the south of the APE. This includes possible foraging by northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), prairie falcon (*Falco mexicanus*), American peregrine falcon (*Falco peregrines anatum*), golden eagle (*Aquila chrysaetos*), and western burrowing owl. However, the lack of vegetative cover limits the suitability of the APE for even occasional foraging by most of these species, and suitable nesting habitat is absent.

There remains a remote potential for nesting by burrowing owl in the scattered ground squirrel burrows along the southern edge of the APE where it borders the ruderal fields known to support nesting colonies of this species. A number of ground squirrel burrows were observed along the landscaped berm just south of the storage yard used for recycling. The entire area was inspected for possible sign of burrowing owl (i.e. white wash, feathers, or pellets) during the field reconnaissance, but not evidence was observed and occupation for nesting would be unlikely given the frequency of vehicle and human activity in this area.

An approximately 200 acre burrowing owl mitigation area was established on the Regional Wastewater Facility property to the south of the APE in 2013, as part of the SCVHP (see **Figure C-3**). The SCVHP is a 50-year regional plan to protect special-status species and their habitat, while allowing for future development in Santa Clara County. The SCVHP was adopted in 2013 by all local participating agencies and incidental take permits were issued by the USFWS and CDFW. The APE is outside of the actual plan area for the SCVHP, but the burrowing owl mitigation area was established in fulfillment of the habitat protection goals of the SCVHP. The APE is separated from the boundary of the burrowing owl mitigation area by a distance of about 750 feet at its closest location. And the closest reported colonies are located over 650 feet from the closest portion of the APE (see **Figure C-3**). Known burrowing owl nesting colonies are carefully monitored as part of the SCVHP implementation and dense eucalyptus landscaping separates the APE from the open ruderal fields to the south.

Plant Species. Based on the review of CNDDDB data, the USFWS species list, and the CNPS Inventory (see **Appendix C-2**), a total of 14 special-status plant species were suspected to occur in the vicinity of the APE. **Table C-2** provides a summary of each of these species, their status, typical habitat characteristics, and conclusion regarding absence from the APE. These have varied status, and most are considered rare (list 1B) by the CNPS in their electronic *Inventory of Rare and Endangered Plants of California*. A few have legal protective status under the ESAs, such as the federally-endangered robust spineflower (*Chlorizanthe robusta var. robusta*), Contra Costa goldfields (*Lasthenia conjugens*), and California seablite (*Suaeda californica*). However, suitable habitat for special-status plant species known from the surrounding area is absent from the site, and none are expected to occur in the APE due to past development and on-going disturbance observed during the field reconnaissance. The entire APE has been completely disturbed by past grading, installation of wastewater treatment

facilities, roadways and other improvements, and on-going maintenance and other disturbance, which precludes the possibility of presence of any species-status plant species in the APE.

Jurisdictional Waters

Although definitions vary, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their inherent value to fish and wildlife, use as storage areas for storm and floodwaters, and water recharge, filtration and purification functions. Jurisdiction of the U.S. Army Corps of Engineers (Corps) is established through provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into "waters of the U.S." without a permit. The Regional Water Quality Control Board (RWQCB) jurisdiction is established through Section 401 of the Clean Water Act, which requires certification or waiver to control discharges in water quality whenever a Corps permit is required under Section 404 of the Clean Water Act, and State waters as regulated under the Porter-Cologne Act. Jurisdictional authority of the CDFW over wetland areas is established under Sections 1600-1607 of the State Fish and Wildlife Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed or bank of any lake, river or stream.

Based on a review of the National Wetland Inventory mapping and the observations made during the field reconnaissance survey, there are no potential jurisdictional wetlands or regulated unvegetated "other waters of the U.S." in the vicinity of the APE.

IMPACT ANALYSIS

Control Measures Incorporated by City

BIO-1. Ornamental trees removed during construction will be replaced by the City on-site or at other public project sites at a ratio specified below, or a fee will be paid to a non-profit organization that plants trees in San Jose. Final mitigation for impacts to protected trees will be determined by the City Planning Director.

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-native	Orchard	
18 inches or greater	5:1	4:1	3:1	24-inch box
12-18 inches	3:1	2:1	none	24-inch box
Less than 12 inches	1:1	1:1	none	15-gallon container

x : x = tree replacement to tree loss ratio

Notes: Trees greater than 18' diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

Significance Criteria

Resource Category/Significance Criteria	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
---	--------------------------------	--	------------------------------	-----------

BIOLOGICAL RESOURCES. Would the Project:

Resource Category/Significance Criteria	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

Discussion

1) **Less than Significant Impact with Mitigation Incorporated.**

Due to the extent of past development and absence of suitable habitat, no special-status species are believed to occur in the APE, and no effects are anticipated. Thus pursuant to CEQA-Plus requirements, no federally-listed species would be affected and there would be no impact relative to the federal ESA as a result of Project implementation.

No evidence of any nesting was observed in the trees in the vicinity of the APE, including burrowing owl and other raptors. The known burrowing owl nesting colonies in the burrowing

owl mitigation preserve are located over 750 feet to the south of the APE (see **Figure C-3**), and dense eucalyptus landscaping provides dense screening between the closest location where construction activities. Any burrowing owls in the nearby area are already acclimated to on-going activity at the RWF, and construction-related disturbance would not result in disturbance to these owls given the long distance, dense screening, and acclimation.

Although the limited habitat values and extent of on-going disturbance generally precludes the potential for nesting birds in the APE, there remains a remote possibility that new bird nests could be established in the few scattered trees and other vegetation in the APE, or that burrowing owl could establish a nesting colony in the few ground squirrel burrows located at the southern edge of the APE. Construction is currently scheduled to proceed in June of 2016, and if initiated during the bird nesting season (March 1 – August 31) construction-related disturbance could result in abandonment of the nests if any are present in the immediate vicinity. If construction-related noise and disturbance resulted in abandonment of a nest in active use and loss of any eggs or young in the nest, this would be a significant adverse impact and violation of the federal Migratory Bird Treaty Act and State Fish and Game Code sections. The mitigation measure below would serve to avoid this potential for violation of federal and state regulations conducting a preconstruction survey and implementing appropriate construction restrictions if any active nests are encountered until any young birds have successfully fledged.

Mitigation Measure BIO-1. Adequate measures shall be taken to avoid inadvertent take of bird nests protected under the federal Migratory Bird Treaty Act and State Fish and Game Code when in active use. This shall be accomplished by taking the following steps.

- *If initial construction is proposed during the nesting season (February 1 to August 31), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of construction in order to determine whether any active nests are present in the APE and surrounding area within 100 feet of proposed construction. The survey shall be reconducted any time construction has been delayed or curtailed for more than 7 days during the nesting season.*
- *If no active nests are identified during the construction survey period, or development is initiated during the non-breeding season (September 1 to January 31), construction may proceed with no restrictions.*
- *If bird nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the CDFW, and may vary depending on species and sensitivity to disturbance. As necessary, the no-disturbance zone shall be fenced with temporary orange construction fencing if construction is to be initiated elsewhere in the APE.*
- *A report of findings shall be prepared by the qualified biologist and submitted to the City for review and approval prior to initiation of construction during the nesting season (February 1 to August 31). The report shall either confirm absence of any active nests or should confirm that any young are located within a designated no-disturbance zone and construction can proceed. No report of findings is required if construction is initiated during the non-nesting season (September 1 to January 31) and continues uninterrupted according to the above criteria.*

Implementation of this mitigation measure would ensure that impacts on special-status species would be less-than-significant.

2) No Impact.

The APE does not contain any riparian habitat or other sensitive natural community types, and no effects are anticipated.

3) No Impact.

The APE does not contain any federally protected wetlands and no effects are anticipated. Thus, pursuant to CEQA-Plus requirements, the Project is consistent with Executive Order 11990 – Protection of Wetlands. Because California does not have a Coastal Barriers Resources System, no impacts relative to the Coastal Barriers Resources Act will occur. All drainage within the APE is returned to the plant headquarters and would not affect any surrounding wetlands or waters.

4) Less than Significant Impact.

The proposed Project would not have any significant adverse impacts on wildlife movement opportunities or adversely impact native wildlife nursery sites. Wildlife in the vicinity of the APE are already acclimated to human activity, and construction-related disturbance would not cause any significant impacts on possible bird nesting in the surrounding area. Species common to the area would continue to utilize the surrounding area, even during construction.

Pursuant to CEQA-Plus requirements, no essential fish habitat would be affected and the Project is consistent with the Magnuson-Stevens Fishery Conservation and Management Act.

5) Less than Significant Impact.

Goals and policies specified in the City of San Jose General Plan address the protection of sensitive biological and wetland resources. There are no sensitive resources in the vicinity of the APE and no conflicts with the City's General Plan are anticipated as a result of Project implementation.

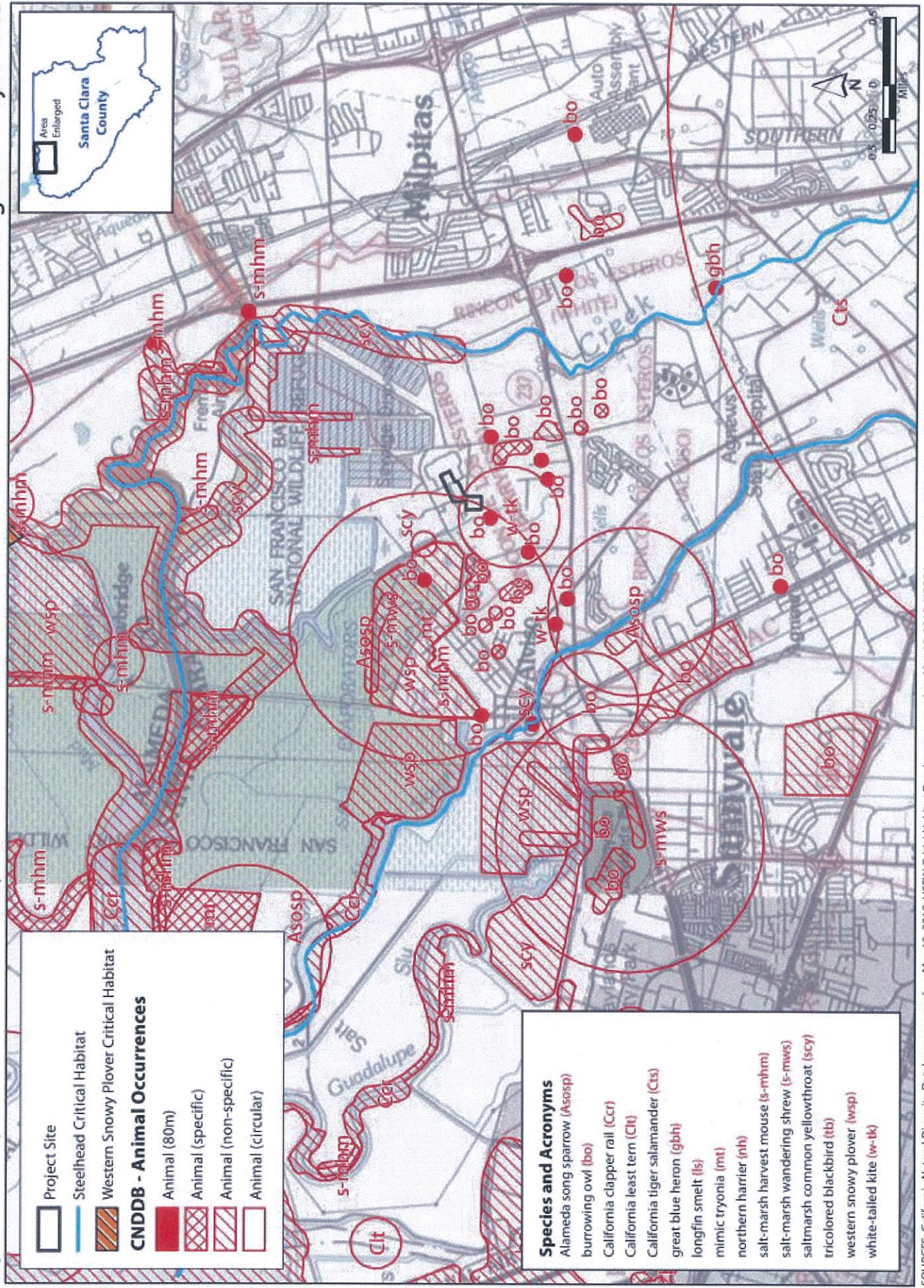
The City's Tree Ordinance requires a Tree Permit Adjustment for the removal of any tree on industrial properties, and offers additional protections to trees measuring 56 inches in circumference or greater at 2 feet above ground level. Trees protected under the ordinance are referred to as "Ordinance Trees". Based on current design, the Project may result in the removal of 10 sapling trees in the vicinity of Process Area 73 and possibly one in the vicinity of the replacement flare. These all have trunk circumferences well under 56 inches, consistent with City policy, **Control Measure BIO-1** provides that the trees will either be replaced on-site or at other public project sites at a 1:1 ratio using 15-gallon containers, or a fee would be paid to a non-profit organization that plants trees in San Jose. If other trees need to be removed, they would be replaced according to Control Measure BIO-1. Final mitigation for impacts to protected trees will be determined by the City Planning Director. The impact is less than significant.

6) No Impact.

No habitat conservation plans have been prepared addressing the APE, and the Project would therefore not conflict with any adopted habitat conservation plans. As a result, no impact would occur. The APE is located outside of the actual plan area for the SCVHP (see **Figure C-3**) and is not a covered activity subject to the provisions of the SCVHP. The burrowing owl mitigation lands secured as part of the SCVHP are located over 750 feet to the southwest, and would not be affected by proposed construction activities within the APE.

Figure C-2. Special-Status Animal Species Records

San Jose Digester Project Site



SOURCES: California Natural Diversity Database accessed on May 13, 2015; USFWS Critical Habitat Database accessed on May 15, 2015; USGS base map by ESRI. Map produced by www.digitalmappingsolutions.com on 2015-05-13.

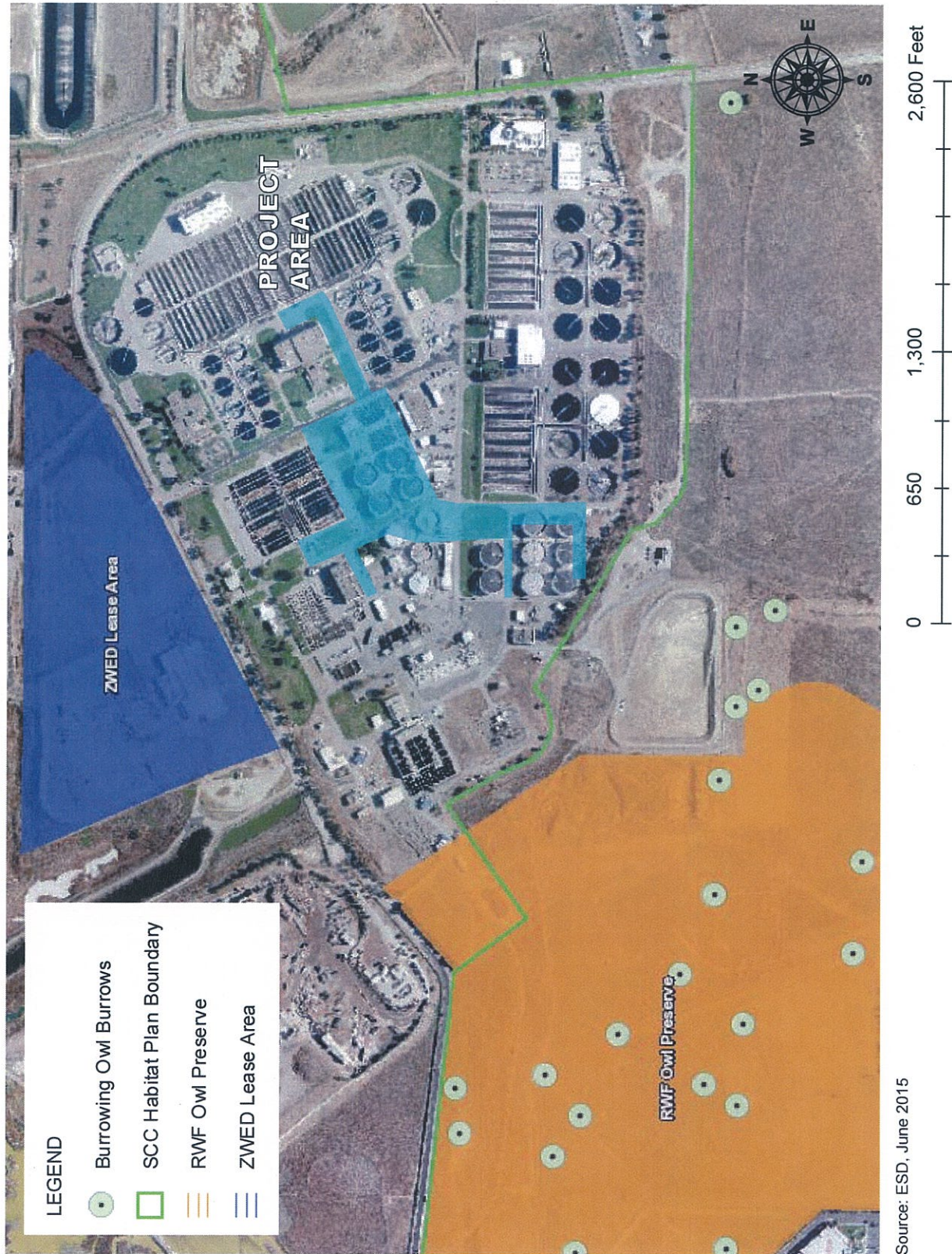


Figure C-3. Burrowing Owl Occurrences and SCVHP Boundary

TABLE C-1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in APE
Invertebrates				
<i>Bronchitheca conserratio</i> Conservancy fairy shrimp	E/--	Disjunct occurrences in Solano, Merced, Tehama, Ventura, Butte, and Glenn Counties	Large, deep vernal pools in annual grasslands	None—project area is outside of the species' known range.
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	T/--	Disjunct occurrences in San Mateo and Santa Clara Counties.	Associated with specific host plants that typically grow on serpentine soils.	None—no suitable habitat, as there are no serpentine soils in APE.
<i>Lepidurus packardii</i> Vernal pool tadpole shrimp	E/--	Shasta County south to Merced County.	Vernal pools and ephemeral stock ponds.	None—this species is not known to occur within Santa Clara County.
Fish				
<i>Hypomesus transpacificus</i> Delta smelt	T/T	Primarily in the Sacramento–San Joaquin Estuary, but has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay.	Occurs in estuary habitat in the Delta where fresh and brackish water mix in the salinity range of 2–7 parts per thousand.	None—outside of known range and there is no suitable habitat in APE.
<i>Oncorhynchus mykiss</i> Central California coast steelhead	T/--	Coastal drainages along the central California coast.	Cold, clear water with clean gravel of appropriate size for spawning. Most spawning occurs in headwater streams. Steelhead migrate to the ocean to feed and grow until sexually mature.	None—there is no suitable habitat in APE.
<i>Oncorhynchus mykiss</i> Central Valley steelhead	T/--	Sacramento and San Joaquin River and their tributaries.	Occurs in well-oxygenated, cool, riverine habitat with water temperatures from 7.8 to 18°C (Moyle 2002). Habitat types are riffles, runs, and pools.	None—there is no suitable habitat in APE.
<i>Oncorhynchus tshawytscha</i> Central Valley and Sacramento River Chinook salmon	T (spring run)/- E (winter run)/- C, SC (fall)/-	Sacramento and San Joaquin River and their tributaries.	Occurs in well-oxygenated, cool, riverine habitat with water temperatures from 8.0 to 12.5°C. Habitat types are riffles, runs, and pools. (Moyle 2002)	None—there is no suitable habitat in APE.
<i>Spirinchus thaleichthys</i> Longfin smelt	C/T	San Francisco Bay-Delta north to the Cook Inlet in Alaska	Pelagic portions of estuaries.	None—there is no suitable habitat in APE.

TABLE C-1 (CONTINUED)
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
Amphibians				
<i>Ambystoma californiense</i> California tiger salamander	T/I	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Sonoma County south to Santa Barbara County	Small ponds, lakes, or vernal pools in grasslands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.	None – there is no suitable habitat in APE.
<i>Rana draytonii</i> California red-legged frog	T/SSC	Found along the coast and coastal mountain ranges of California from Mendocino County to San Diego County and in the Sierra Nevada from Butte County to Stanislaus County.	Permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may aestivate in rodent burrows or cracks during dry periods	None – there is no suitable habitat in APE.
Reptiles				
<i>Emys marmorata</i> Western pond turtle	-/SSC	The western pond turtle is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries.	Occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests. Nests are typically constructed in upland habitat within 0.25 mile of aquatic habitat.	None – there is no suitable habitat in APE.
<i>Masticophis lateralis</i> euryxanthus Alameda whipsnake	T/I	Restricted to Alameda and Contra Costa Counties; fragmented into 5 disjunct populations throughout its range	Valleys, foothills, and low mountains associated with northern coastal scrub or chaparral habitat; requires rock outcrops for cover and foraging	None - There is currently no potential for Alameda whipsnake to occur in APE as there is no suitable habitat.
Mammals				
<i>Reithrodontomys raviventris</i> Salt marsh harvest mouse	E/E	The San Francisco Bay Estuary and Suisun Marsh.	Saline to brackish salt marsh habitat.	None – there is no suitable habitat in APE.
<i>Sorex vagrans halicoetes</i> Salt-marsh wandering shrew	-/SSC	Southern arm of the San Francisco Bay in San Mateo, Santa Clara, Alameda, and Contra Costa Counties.	Salt marshes from 6 to 9 feet above MSL.	None – there is no suitable habitat in APE.

TABLE C-1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in	
				APE	APE
<i>Vulpes macrotis nutica</i> San Joaquin kit fox	E/T	Principally occurs in the San Joaquin Valley and adjacent open foothills to the west; recent records from 17 counties extending from Kern County north to Contra Costa County	Saltbush scrub, grassland, oak, savanna, and freshwater scrub	None – outside of known range and there is no suitable habitat in APE.	
Birds					
<i>Agelaius tricolor</i> Tricolored blackbird	--/SSC	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County, and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields. Habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony	None – there is no suitable habitat in APE.	
<i>Aquila chrysaetos</i> Golden eagle	PR/FP	Foothills and mountains throughout California. Uncommon non-breeding visitor to lowlands such as the Central Valley	Nest on cliffs and escarpments or in tall trees overlooking open country. Forages in annual grasslands, chaparral, and oak woodlands with plentiful medium and large-sized mammals	Low (foraging only) – golden eagle has the potential to forage within the ruderal fields to south of APE. Since there is no nesting habitat within APE and no foraging habitat would be affected, no effects on this species are expected to occur.	
<i>Ardea herodias</i> Great blue heron (rookery)	--/--	Nests in suitable habitat throughout California except at higher elevations in Sierra Nevada and Cascade mountain ranges.	Widely distributed in freshwater and calm-water intertidal habitats.	None – there is no suitable habitat in APE.	
<i>Aluene cinicularia hypugraea</i> Western burrowing owl	--/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	Moderate – western burrowing owl is known to occur in the non-native grassland south of APE. No evidence of burrowing owl in ruderal habitat at southern edge of APE and known nesting locations over 500 feet to south separated by dense vegetation.	

TABLE C-1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in APE
<i>Charadrius alexandrinus nitosus</i> Western snowy plover	T/SSC	Population defined as those birds that nest adjacent to or near tidal waters, including all nests along the mainland coast, peninsulas, offshore islands, and adjacent bays and estuaries. Twenty breeding sites are known in California from Del Norte to Diego County	Coastal beaches above the normal high tide limit in flat, open areas with sandy or saline substrates; vegetation and driftwood are usually sparse or absent	None—there is no suitable habitat in APE.
<i>Circus cyaneus</i> Northern harrier	--/SSC	Occurs throughout lowland California. Has been recorded in fall at high elevations	Grasslands, meadows, marshes, and seasonal and agricultural wetlands	Low (foraging only) – suitable foraging in the ruderal fields to south of APE, Since no nesting habitat within APE and no foraging habitat would be affected, no effects on this species are expected to occur.
<i>Elanus leucurus</i> White-tailed kite	--/FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border.	Low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging	Low (foraging only) - suitable foraging in the ruderal fields to south of APE, Since no nesting habitat within APE and no foraging habitat would be affected, no effects on this species are expected to occur .
<i>Falco mexicanus</i> Prairie falcon	--/--	Permanent resident in the south Coast, Transverse, Peninsular, and northern Cascade Ranges, the southeastern deserts, Inyo-White Mountains, foothills surrounding the Central Valley, and in the Sierra Nevada in Modoc, Lassen, and Plumas Counties. Winters in the Central Valley, along the coast from Santa Barbara County to San Diego County, and in Marin.	Nests on cliffs or escarpments, usually overlooking dry, open terrain or uplands	Low (foraging only) – suitable foraging in the ruderal fields to south of APE, Since no nesting habitat within APE and no foraging habitat would be affected, no effects on this species are expected to occur .
<i>Falco peregrines anatum</i> American peregrine falcon	--/E, FP	Permanent resident along the north and south Coast Ranges. May summer in the Cascade and Klamath Ranges and through the Sierra Nevada to Madera County. Winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Range	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large prey populations	Low (foraging only) – suitable foraging in the ruderal fields to south of APE, Since no nesting habitat within APE and no foraging habitat would be affected, no effects on this species are expected to occur .

TABLE C-1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in APE	
<i>Geothlypis trichas sinuosa</i> Saltmarsh common yellowthroat	--/SSC	Found only in the San Francisco Bay Area in Marin, Napa, Sonoma, Solano, San Francisco, San Mateo, Santa Clara, and Alameda Counties	Freshwater marshes in summer and salt or brackish marshes in fall and winter; requires tall grasses, tules, and willow thickets for nesting and cover	None -- there is no suitable habitat in APE.	None -- there is no suitable habitat in APE.
<i>Melospiza melodia pusillula</i> Alameda song sparrow	--/SSC	Found only in marshes along the southern portion of the San Francisco Bay	Brackish marshes associated with pickleweed; may nest in tall vegetation or among the pickleweed	None -- there is no suitable habitat in APE.	None -- there is no suitable habitat in APE.
<i>Pelecanus occidentalis californicus</i> California brown pelican	D/E	The Pacific coast from Canada through Mexico.	Coastal areas. Nests on islands. Occasionally along Arizona's lakes and rivers.	None -- there is no suitable habitat in APE.	None -- there is no suitable habitat in APE.
<i>Rallus longirostris obsoletus</i> California clapper rail	E/FP	Found along the Pacific Coast in Monterey and San Luis Obispo Counties.	From tidal mudflats to tidal sloughs	None -- there is no suitable habitat in APE.	None -- there is no suitable habitat in APE.
<i>Sterna mitillarium brownii</i> California least tern	E/E	Found along the Pacific Coast of California from San Francisco to Baja California	Nest on open beaches kept free of vegetation by natural scouring from tidal action	None -- there is no suitable habitat in APE.	None -- there is no suitable habitat in APE.

TABLE C-1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN APE VICINITY

Scientific and Common Names	Status Federal/State	Geographic Distribution	Habitat Requirements	Potential Occurrence in APE
Notes:				
Status explanations:				
Federal				
E	=	listed as endangered under the ESA		
T	=	listed as threatened under the ESA		
PT	=	proposed for federal listing as threatened under the ESA		
C	=	species for which USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded		
D	=	delisted		
SC	=	species of concern		
-	=	no listing		
State				
E	=	listed as endangered under CESA		
T	=	listed as threatened under CESA		
FP	=	fully protected under the California Fish and Game Code		
SSC	=	species of special concern in California		
D	=	delisted		
-	=	no listing		
Potential Occurrence in the Study Area				
High:	Known occurrences of the species within APE, or CNDDB, or other documents, records the occurrence of the species within a 2-mile radius of APE and suitable habitat is present			
Moderate:	CNDDB, or other documents, records the known occurrence of the species within a 2-mile radius of APE and poor quality suitable habitat is present			
Low:	CNDDB, or other documents, does not record the occurrence of the species within a 2-mile radius of APE but suitable habitat is present in vicinity			

TABLE C-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN REGION OF APE

Scientific and Common Names	Status Federal/State/ CNPS	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	--/--/IB.2	Southern Sacramento Valley, northern San Joaquin Valley, east San Francisco Bay Area	Alkali playas, on adobe clay in valley and foothill grassland, vernal pools on alkaline soils; below 60 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Atriplex depressa</i> Brittlescale	--/--/IB.2	Western and eastern Central Valley and adjacent foothills on west side of Central Valley	Alkaline clay soils in chenopod scrub, playas, valley and foothill grasslands, meadows and seeps and vernal pools on alkaline, clay soils; below 320 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Atriplex joaquiniana</i> San Joaquin spearscale	--/--/IB.2	West edge of Central Valley from Glenn County to Tulare County. Also reported from Monterey and San Luis Obispo Counties	Alkaline soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland; below 835 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Atriplex minuscula</i> Lesser saltscale	--/--/IB.1	Sacramento and San Joaquin Valley, Butte County and from Merced County to Kern County. Also recorded from Don Edwards NWR in Alameda County.	Sandy alkaline soils in chenopod scrub, playas, valley and foothill grassland; 15-200 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.

TABLE C-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN REGION OF APE

Scientific and Common Names	Status Federal/State/ CNPS	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<i>Centronadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	--/--/IB.2	East San Francisco Bay Area, Salinas Valley, Los Osos Valley	Alkaline soils in annual grassland, on lower slopes, flats, and swales, sometimes on saline soils; below 230 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Chlorizanthus robusta</i> var. <i>robusta</i> Robust spineflower	E/--/IB.1	Coastal central California, from San Mateo to Monterey County	Coastal bluff scrub, coastal dunes openings in cismontane woodland, on sandy soil	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Chloropyron maritimum</i> ssp. <i>palustre</i> (<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>) Point Reyes bird's-beak	--/--/IB.2	Coastal northern California, from Humboldt to Santa Clara County	Coastal salt marsh, tidal salt marsh; below 10 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Erygium aristulatum</i> var. <i>hooveri</i> Hoover's button-celery	--/--/IB.1	South San Francisco Bay area, South Coast Ranges in Alameda, San Benito, Santa Clara, and San Luis Obispo Counties	Vernal pools; 3-45 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.

TABLE C-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN REGION OF APE

Scientific and Common Names	Status Federal/State/ CNPS	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<i>Lasthonia conjugens</i> Contra Costa goldfields	E/-/IB.1	Scattered occurrences in Coast Range valleys and southwest edge of Sacramento Valley, Alameda, Contra Costa, Monterey, Marin, Napa, Solano and Sonoma Counties. Presumed extirpated in Mendocino, Santa Barbara and Santa Clara Counties	Wet areas in cismontane woodland, valley and foothill grassland, vernal pools, alkaline playas or saline vernal pools and swales; seasonal wetlands below 470 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Malacothamnus acruatus</i> Acruate bush mallow	-/-/IB.2	Santa Clara, Santa Cruz, and San Mateo Counties	Chaparral, between 15-355 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Malacothamnus hallii</i> Hall's bush mallow	-/-/IB.2	Alameda, Contra Costa, Merced, Santa Clara, and Stanislaus Counties	Chaparral and coastal scrub between 30-2,500'	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.
<i>Navarrelia prostrata</i> Prostrate vernal pool navarretia	-/-/IB.1	Western San Joaquin Valley, interior South Coast Ranges, central South Coast, Peninsular Ranges: Alameda, Los Angeles, Merced, Monterey, Orange, Riverside, San Diego, and San Luis Obispo Counties.	Vernal pools and mesic areas in coastal scrub and alkali grasslands, seasonal wetlands in alkaline soils; between 15-700 meters above MSL	None - there is no suitable habitat within APE. Additionally, APE has been heavily disturbed (vehicle traffic, construction of existing facilities) and continually disturbed by maintenance activities.

TABLE C-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN REGION OF APE

Scientific and Common Names	Status Federal/State/ CNPS	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
<i>Stueda californica</i> California seablite	E/--/IB.1	Morro Bay, San Luis Obispo County, and San Francisco and Contra Costa Counties; historically found in the south San Francisco Bay.	Margins of tidal salt marsh; below 15 meters above MSL	None; there is no suitable habitat within the project area. Additionally, the project area has been heavily disturbed (vehicle traffic, construction of existing facilities) in 2007 and earlier, and continually disturbed by maintenance activities (e.g., mowing).
<i>Trifolium hydrophilum</i> (<i>T. depauperatum</i> var. <i>hydrophilum</i>) Saline clover	--/--/IB.2	Sacramento Valley, central western California.	Salt marsh, mesic alkaline areas in Valley and foothill grasslands, vernal pools, marshes and swamps; below 300 meters above MSL	None; there is no suitable habitat within the project area. Additionally, the project area has been heavily disturbed (vehicle traffic, construction of existing facilities) in 2007 and earlier, and continually disturbed by maintenance activities (e.g., mowing).

**TABLE C-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR IN REGION OF APE**

Scientific and Common Names	Status Federal/State/ CNPS	Geographic Distribution	Habitat Requirements	Potential Occurrence in Project Area
Notes:				
Status explanations:				
Federal				
E	=	listed as endangered under the ESA		
T	=	listed as threatened under the ESA		
-	=	no listing		
State				
E	=	listed as endangered under CESA		
T	=	listed as threatened under CESA		
-	=	no listing		
CNPS				
1A – presumed 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				

Potential Occurrence in the Study Area

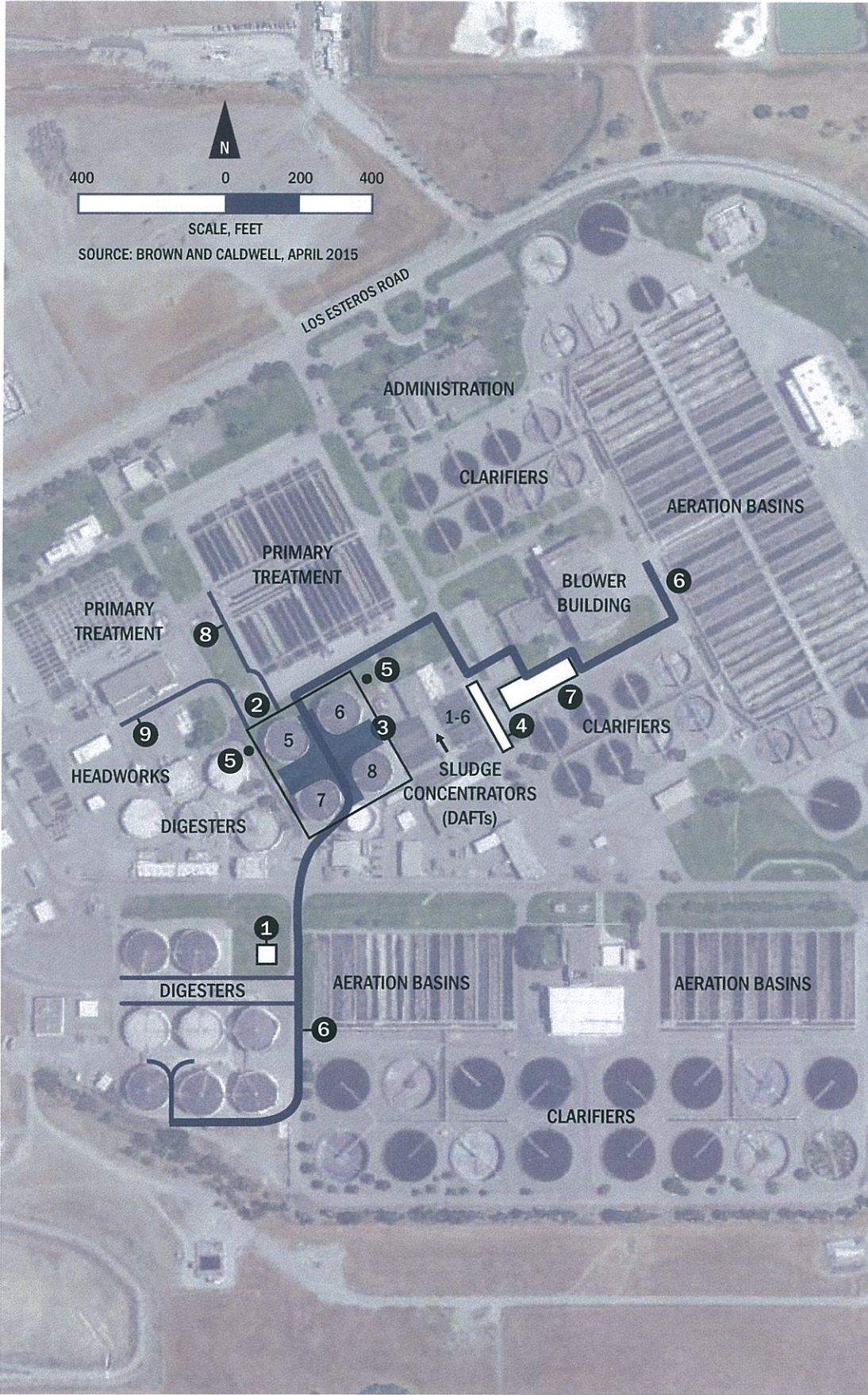
High: Known occurrences of the species within the APE, or CNDDDB, or other documents, records the occurrence of the species within a 2-mile radius of APE and suitable habitat is present within APE

Moderate: CNDDDB, or other documents, records the known occurrence of the species within a 2-mile radius of APE and suitable habitat is present

Low: CNDDDB, or other documents, may record the occurrence of the species within a 2-mile radius of APE, but only marginal or poor quality suitable habitat is present, or species is believed to be extirpated from vicinity of APE

APPENDIX C-1

Aerial of APE



Areas of Disturbance

- 1** New Flares, Replacement Slab on Grade
40' L x 40' W x 2' D
- 2** Structural Reinforcement Around Digesters 5 - 8
345' L x 8' W x 10' D per Digester
- 3** Digesters 5-8
New Equipment Pads, Multiple Pads, Slab on Grade 2'D
- 4** New Pump Station Area Along East Side of DAFTs 1 - 6
130' L x 25' W x 5 - 6' D
- 5** New Electrical Buildings
50' L x 20' W with Spread Footings/Piers 2' D
- 6** New Exterior Gas and Process Pipe Rack
Numerous (100) Spread Footings/Piers
5' L x 5' W x 5' D
- 7** Area 73 - 200'L x 100'W, Includes:
 - Primary Sludge Screening Building
Slab on Grade
70' L x 65' W x 2' D
 - 2 New Tanks Total
65' L x 20' W x 10 - 12' D
 - New Polymer Storage Area
Slab on Grade
75' L x 50' W x 2' D
 - New Odor Control Facilities
Slab on Grade
100' L x 50' W x 2' D
- 8** New Emergency Overflow Pipe Trench
350' x 3' W x 3' D
- 9** New Pipe Connection to Existing Utility Water Network Trench
400' x 3' W x 3' D

Notes:
All areas of disturbance, depths, and numbers of spread footings/piers are approximate and dependent on Final Design.

Some minor utility relocation and shallow trenching will be required due to conflicts with excavation.

Staging areas to be identified later with input from contractor.
No grading required, possible crushed rock overlay.

**Area of Potential Effects Map
Digester and Thickener Facilities Upgrade Project**

APPENDIX C-2

Species Lists from USFWS, CNDDB and CNPS

CNDDDB Occurrence Data

San Jose Digester Project APE and 2 Mile Radius Vicinity
May 13, 2015

Species	Common Name	Federal Status	State Status	Global Rank	State Rank	CNPS Rank
Agelaius tricolor	tricolored blackbird	None	Endangered	G2G3	S1S2	
Ambystoma californiense	California tiger salamander	Threatened	Threatened	G2G3	S2S3	
Ardea herodias	great blue heron	None	None	G5	S4	
Astragalus tener var. tener	alkali milk-vetch	None	None	G2T2	S2	1B.2
Athene cunicularia	burrowing owl	None	None	G4	S3	
Centromadia parryi ssp. congdonii	Congdon's tarplant	None	None	G3T2	S2	1B.1
Charadrius alexandrinus nivosus	western snowy plover	Threatened	None	G3T3	S2	
Chloropyron maritimum ssp. palustre	Point Reyes salty bird's-beak	None	None	G4?T2	S2	1B.2
Chorizanthe robusta var. robusta	robust spineflower	Endangered	None	G2T1	S1	1B.1
Circus cyaneus	northern harrier	None	None	G5	S3	
Elanus leucurus	white-tailed kite	None	None	G5	S3S4	
Eryngium aristulatum var. hooveri	Hoover's button-celery	None	None	G5T1	S1	1B.1
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	None	None	G5T3	S3	
Malacothamnus hallii	Hall's bush-mallow	None	None	G2Q	S2	1B.2
Melospiza melodia pusillula	Alameda song sparrow	None	None	G5T2?	S2?	
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	None	None	G3	S3.2	
Rallus longirostris obsoletus	California clapper rail	Endangered	Endangered	G5T1	S1	
Reithrodontomys raviventris	salt-marsh harvest mouse	Endangered	Endangered	G1G2	S1S2	
Sorex vagrans halicoetes	salt-marsh wandering shrew	None	None	G5T1	S1	
Spirinchus thaleichthys	longfin smelt	Candidate	Threatened	G5	S1	
Sternula antillarum browni	California least tern	Endangered	Endangered	G4T2T3Q	S2	
Suaeda californica	California seablite	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum	saline clover	None	None	G2	S2	1B.2
Tryonia imitator	mimic tryonia (=California brackishwater snail)	None	None	G2	S2	

San Jose Water Pollution Center Plant - Digester and Thickener Upgrades

IPaC Trust Resource Report

Generated May 13, 2015 11:19 AM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

San Jose Water Pollution Center Plant
- Digester and Thickener Upgrades

PROJECT CODE

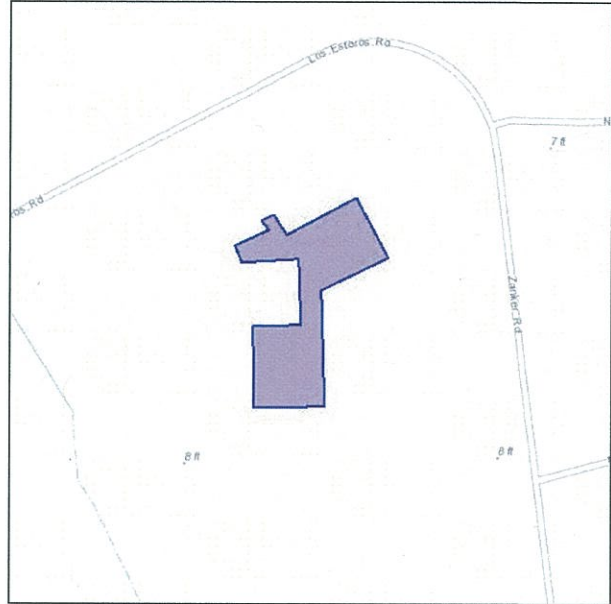
H2E2K-6VOIZ-GYDD5-LENHQ-XOGCWM

LOCATION

Santa Clara County, California

DESCRIPTION

Upgrade of various facilities at the San Jose Water Pollution Center Plant related to the existing digesters and thickeners.



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Sacramento Fish And Wildlife Office

Federal Building

2800 COTTAGE WAY, ROOM W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

Amphibians

California Red-legged Frog *Rana draytonii* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=D02D>

California Tiger Salamander *Ambystoma californiense* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=D01T>

Birds

California Clapper Rail *Rallus longirostris obsoletus* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B04A>

California Least Tern *Sterna antillarum browni* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B03X>

Western Snowy Plover *Charadrius alexandrinus nivosus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B07C>

Crustaceans

Conservancy Fairy Shrimp *Branchinecta conservatio* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=K03D>

Vernal Pool Tadpole Shrimp *Lepidurus packardii* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=K048>

Fishes

Delta Smelt *Hypomesus transpacificus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=E070>

Steelhead *Oncorhynchus (=Salmo) mykiss* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=E08D>

Flowering Plants

California Seablite *Suaeda californica* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=Q3AF>

Contra Costa Goldfields *Lasthenia conjugens* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=Q122>

Insects

Bay Checkerspot Butterfly *Euphydryas editha bayensis* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=I021>

Mammals

Salt Marsh Harvest Mouse *Reithrodontomys raviventris* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=A03Y>

San Joaquin Kit Fox *Vulpes macrotis mutica* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=A006>

Reptiles

Alameda Whipsnake (=striped Racer) *Masticophis lateralis euryxanthus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=C04A>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

<p>Allen's Hummingbird <i>Selasphorus sasin</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0LI</p>	Bird of conservation concern
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B008</p>	Bird of conservation concern
<p>Bell's Sparrow <i>Amphispiza belli</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HE</p>	Bird of conservation concern
<p>Black-chinned Sparrow <i>Spizella atrogularis</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0IR</p>	Bird of conservation concern
<p>Burrowing Owl <i>Athene cucularia</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0NC</p>	Bird of conservation concern
<p>California Spotted Owl <i>Strix occidentalis occidentalis</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B08L</p>	Bird of conservation concern
<p>Costa's Hummingbird <i>Calypte costae</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0JE</p>	Bird of conservation concern
<p>Fox Sparrow <i>Passerella iliaca</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0NE</p>	Bird of conservation concern
<p>Lawrence's Goldfinch <i>Carduelis lawrencei</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0J8</p>	Bird of conservation concern
<p>Least Bittern <i>Ixobrychus exilis</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0JW</p>	Bird of conservation concern

Lesser Yellowlegs <i>Tringa flavipes</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0MD	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HQ	Bird of conservation concern
Loggerhead Shrike <i>Lanius ludovicianus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FY	Bird of conservation concern
Long-billed Curlew <i>Numenius americanus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B06S	Bird of conservation concern
Marbled Godwit <i>Limosa fedoa</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0JL	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HT	Bird of conservation concern
Oak Titmouse <i>Baeolophus inornatus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0MJ	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0FU	Bird of conservation concern
Short-billed Dowitcher <i>Limnodromus griseus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0JK	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B0HD	Bird of conservation concern
Swainson's Hawk <i>Buteo swainsoni</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B070	Bird of conservation concern
Tricolored Blackbird <i>Agelaius tricolor</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?sPCODE=B06P	Bird of conservation concern

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

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

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

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.

Wetland data is unavailable at this time.



Inventory of Rare and Endangered Plants - 7th edition interface

v7-15jun 6-9-15

Status: search results - Thu, Jun. 18, 2015 14:16 ET c

Tip: Terms prefixed by "+" are required, and by "-" excluded. [\[all tips and help.\]](#) [\[search history\]](#)

Your Quad Selection: Milpitas (427B) 3712148, Niles (446C) 3712158, La Costa Valley (446D) 3712157, Mountain View (428A) 3712241, Cupertino (428D) 3712231, Newark (447D) 3712251, Calaveras Reservoir (427A) 3712147, San Jose West (427C) 3712138, San Jose East (427D) 3712137

Hits 1 to 36 of 36
 Requests that specify topo quads will return only Lists 1-3.

To save selected records for later study, click the ADD button.

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	<input type="checkbox"/>	1	<u>Astragalus tener</u> var. <u>tener</u>	alkali milk-vetch	Fabaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Atriplex depressa</u>	brittlescale	Chenopodiaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Atriplex minuscula</u>	lesser saltscale	Chenopodiaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Balsamorhiza macrolepis</u>	big-scale balsamroot	Asteraceae	List 1B.2
	<input type="checkbox"/>	1	<u>California macrophylla</u>	round-leaved filaree	Geraniaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Campanula exigua</u>	chaparral harebell	Campanulaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Centromadia parryi</u> ssp. <u>congdonii</u>	Congdon's tarplant	Asteraceae	List 1B.1
	<input type="checkbox"/>	1	<u>Chloropyron maritimum</u> ssp. <u>palustre</u>	Point Reyes bird's-beak	Orobanchaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Chorizanthe robusta</u> var. <u>robusta</u>	robust spineflower	Polygonaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Cirsium fontinale</u> var. <u>campylon</u>	Mt. Hamilton fountain thistle	Asteraceae	List 1B.2
	<input type="checkbox"/>	1	<u>Collinsia multicolor</u>	San Francisco collinsia	Plantaginaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Delphinium californicum</u> ssp. <u>interius</u>	Hospital Canyon larkspur	Ranunculaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Dirca occidentalis</u>	western leatherwood	Thymelaeaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Dudleya abramsii</u> ssp. <u>setchellii</u>	Santa Clara Valley dudleya	Crassulaceae	List 1B.1
	<input type="checkbox"/>	1			Apiaceae	

			<u>Eryngium aristulatum</u> var. <u>hooveri</u>	Hoover's button-celery		List 1B.1
	<input type="checkbox"/>	1	<u>Extriplex joaquinana</u>	San Joaquin spearscale	Chenopodiaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Fritillaria liliacea</u>	fragrant fritillary	Liliaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Helianthella castanea</u> 	Diablo helianthella	Asteraceae	List 1B.2
	<input type="checkbox"/>	1	<u>Hoita strobilina</u>	Loma Prieta hoita	Fabaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Lasthenia conjugens</u> 	Contra Costa goldfields	Asteraceae	List 1B.1
	<input type="checkbox"/>	1	<u>Lessingia hololeuca</u> 	woolly-headed lessingia	Asteraceae	List 3
	<input type="checkbox"/>	1	<u>Lessingia micradenia</u> var. <u>glabrata</u>	smooth lessingia	Asteraceae	List 1B.2
	<input type="checkbox"/>	1	<u>Malacothamnus arcuatus</u>	arcuate bush-mallow	Malvaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Malacothamnus hallii</u> 	Hall's bush-mallow	Malvaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Micropus amphibolus</u> 	Mt. Diablo cottonweed	Asteraceae	List 3.2
	<input type="checkbox"/>	1	<u>Monardella antonina</u> ssp. <u>antonina</u>	San Antonio Hills monardella	Lamiaceae	List 3
	<input type="checkbox"/>	1	<u>Monolopia gracilens</u> 	woodland woolythreads	Asteraceae	List 1B.2
	<input type="checkbox"/>	1	<u>Navarretia prostrata</u> 	prostrate vernal pool navarretia	Polemoniaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Plagiobothrys glaber</u>	hairless popcorn-flower	Boraginaceae	List 1A
	<input type="checkbox"/>	1	<u>Senecio aphanactis</u> 	chaparral ragwort	Asteraceae	List 2B.2
	<input type="checkbox"/>	1	<u>Streptanthus albidus</u> ssp. <u>albidus</u>	Metcalf Canyon jewel-flower	Brassicaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Streptanthus albidus</u> ssp. <u>peramoenus</u>	most beautiful jewel-flower	Brassicaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Stuckenia filiformis</u> ssp. <u>alpina</u>	slender-leaved pondweed	Potamogetonaceae	List 2B.2
	<input type="checkbox"/>	1	<u>Suaeda californica</u>	California seablite	Chenopodiaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Trifolium hydrophilum</u>	saline clover	Fabaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Tropidocarpum capparideum</u>	caper-fruited tropidocarpum	Brassicaceae	List 1B.1

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press check all check none

Selections will appear in a new window.

No more hits.

